



westonandsampson.com

WESTON & SAMPSON ENGINEERS, INC.
98 South Main Street, Suite 2
Waterbury, VT 05676
tel: 802.244.5051

REPORT

October 13, 2023

PFAS Summary Report
Bennington, Vermont

Prepared for:

Vermont Department of Environmental
Conservation

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	ES-1
TABLE OF CONTENTS	i
LIST OF FIGURES	ii
LIST OF TABLES	ii
LIST OF APPENDICES	ii
1.0 INTRODUCTION	1-2
1.1 Site Description	1-2
1.2 Site Investigation Activities	1-2
1.3 Contaminants of Concern	1-3
2.0 WATER SUPPLY WELL DATA PRESENTATION	2-1
2.1 Drinking Water Supply Well Quality Data	2-1
2.1.1 Sample Collection Methods	2-1
2.1.2 Water Quality Results	2-1
2.1.3 Quality Assurance and Quality Control Results	2-2
3.0 CONCEPTUAL SITE MODEL	3-1
3.1 Surficial Geology	3-1
3.2 Bedrock Geology	3-1
3.3 Hydrology	3-1
3.4 Potential Contaminant Sources and Release Mechanisms	3-2
3.5 Summary of PFAS Fate and Transport	3-3
4.0 CONCLUSIONS AND RECOMMENDATIONS	4-1
5.0 LIMITATIONS	5-1
6.0 REFERENCES	6-1

LIST OF FIGURES

Figure 1a Area of Concern #1 Site Plan
 Figure 1b Area of Concern #2 Site Plan
 Figure 2 Area Wide Plan

LIST OF TABLES

Table 1PFAS Concentration Summary
 Table 2.....Water Supply Well Sampling Database

LIST OF APPENDICES

Appendix A Laboratory Reports
 Appendix B Multivariate Plots

\\wse03.local\WSE\Projects\VT\VTDEC MASTER CONTRACT 2023\Bennington PFAS\2. Deliverables\2023_09 Water Supply Results\Report Parts\Bennington PFAS Report.docx

.....

EXECUTIVE SUMMARY

Weston & Sampson, on behalf of the Vermont Department of Environmental Conservation (VTDEC) performed private water supply sampling within two residential areas of Bennington, Vermont. Water supply sampling was in response to the discovery of per- and polyfluoroalkyl substances (PFAS) contamination in three private water supplies in Bennington, Vermont in 2023. The two residential areas have been designated as Area of Concern (AOC) #1, which includes Stonehedge Drive, Southshire Drive, and North Terrace Drive located in the southwestern portion of Bennington, and AOC #2, which focuses on Hickory Hill Road located in the western portion of Bennington. PFAS concentrations exceeded Vermont's Maximum Contaminant Level (MCL) in six (6) of twenty (20) private water supplies in AOC #1 and all six (6) water supplies sampled to date within AOC #2. Perfluorooctanoic acid (PFOA) was observed as the highest concentration PFAS compound observed in all samples with detections.

Extensive environmental investigations related to the presence of PFAS in drinking water wells have been conducted in North Bennington and Bennington, Vermont since 2016. The former Chemfab fabric coating facility in North Bennington has been identified as the primary source of the PFAS compounds perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) detected in environmental media in these areas including shallow soil, shallow and bedrock water supply wells, and surface waters. Previous investigations of the extent of Chemfab related PFAS impacts did not gather data in AOC #1 or AOC #2.

Initial review of surficial conditions and current uses in the area surrounding AOC #1 did not identify other potential PFAS sources apart from potential aerial deposition related to the former Chemfab operations.

The Burgess Brothers Landfill Superfund Site and the Burgess Brothers C&D Landfill appear to be potential sources of PFAS contamination observed in the AOC #2 water supplies. The Burgess Brothers Sites are located approximately ¾-mile east of Hickory Hill Road and PFAS, specifically PFOA and perfluoroheptanoic acid (PFHpA), have been detected at elevated levels in groundwater at both Burgess Brothers Sites and influent of the Superfund Site water treatment system designed to remediate chlorinated solvents in groundwater.

Based on the findings of recent water supply sampling, the following is recommended:

- All previously sampled private water supplies should be resampled.
- Sampling should be expanded to additional private water supplies.
- Three public water supplies near AOC #1 should be sampled.
- Review files related to the Burgess Brothers Landfill Superfund site and Burgess Brother C&D Landfill to determine appropriate next steps in evaluating these properties as potential sources of PFAS to AOC #2.
- Additional research into past property uses in the AOC #1 area should be performed to identify any potential PFAS sources in the area.

1.0 INTRODUCTION

Weston & Sampson Engineers, Inc. (Weston & Sampson) on behalf of the Vermont Department of Environmental Conservation (VTDEC) has prepared this summary report detailing the investigation into per- and polyfluoroalkyl substances (PFAS) in private water supplies within two residential areas of Bennington, Vermont. A summary of drinking water supply sampling and conceptual site model (CSM) of PFAS release, fate, and transport are presented. Recommendations for additional data collection to fill data gaps are included.

1.1 Site Description

The Town of Bennington is in Bennington County, Vermont. Water supply samples were collected from two areas of concern (AOCs) based on results of previous PFAS results. AOC #1 is shown on **Figure 1a** and includes residential water supplies on Stonehedge Drive, Southshire Drive, and North Terrace Drive located in the southwestern portion of Bennington. AOC #2 is shown on **Figure 1b** and includes residential water supplies on Hickory Hill Road located in the western portion of Bennington. Bennington is in the narrow Vermont Valley located between the Green Mountains to the east and the Taconic Mountains to the west.

In 2020 (the last census) Bennington had a population of approximately 8,540. The main population is centered around the village core located centrally within the Town of Bennington and the village core of North Bennington; an incorporated village located in the northwest portion of the Bennington. The Walloomsac River flows west-northwest through the northern portion of Bennington. The Bennington and North Bennington Water Departments provide water to most properties within the village centers. However, there are several areas on the periphery of and outside village centers served by individual shallow dug or drilled bedrock water supply wells. The service area of the Bennington Water Department is shown on **Figure 2**.

Residences within AOC #1 and AOC #2 are primarily served by individual soil based on-site septic systems. The Bennington municipal sanitary sewer service area relative to AOCs is shown on **Figures 1a, 1b, and 2**.

1.2 Site Investigation Activities

The VTDEC requested PFAS analysis of private water supplies in the two AOCs following recent discovery of PFAS concentrations at or above the Vermont drinking water Maximum Contaminant Level (MCL) in three (3) residential water supplies at 510 Southshire Drive, 14 Stonehedge Drive, and 359 Hickory Hill Road. On August 31, 2023, Weston & Sampson collected drinking water samples from nineteen (19) private water supplies within AOC #1 and five (5) private water supplies within AOC #2. One additional water supply sample in AOC #1 (116 North Terrace Drive) was collected on September 13, 2023.

Extensive environmental investigations related to the presence of PFAS in drinking water wells have been conducted in Bennington, Vermont, and surrounding communities since 2016. The former Chemfab fabric coating facility in North Bennington has been identified as a primary source of the PFAS compounds perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) releases to the environment. Expansion of the Bennington public drinking water system began in 2016 due to the

widespread PFAS contamination in private drinking water supplies. To date, public water supply service has been extended to several hundred residences and businesses. Point of entry treatment (POET) systems have been installed and/or bottled water supplied to other impacted properties where water line extension is not feasible. The impacted properties listed above and other private water supplies within AOC #1 and AOC #2 were not previously assessed as part of the Chemfab-related response actions.

1.3 Contaminants of Concern

The contaminants of concern in the AOCs are PFAS, primarily PFOA and PFOS. PFAS are class of fluorochemicals manufactured for their unique chemical stability and surface-tension lowering properties. Following several decades of commercial use, PFAS have been discovered to be globally distributed, persistent environmental contaminants. Evidence of in vivo toxicity, and the occurrence of PFAS in the blood of general populations, has created public health concern.

PFOA was used to manufacture products that resist heat and chemical reactions, and repel oil, stains, grease, and water. PFAS are used as an aqueous dispersant agent for Gore-Tex®, Teflon® and stain resistant coating of materials. PFOS was a primary component of aqueous film forming foams (AFFF) used in firefighting and as odor suppressants. The carbon fluoride bonds in these compounds are the strongest in nature. As such, PFAS are extremely resistant to chemical and biologic degradation. PFAS are also formed through the abiotic and biotic degradation of fluorotelomer alcohols.

PFOA and PFOS are solids which are extremely water soluble. They bond weakly with organic carbon. Adsorption to clay and iron minerals of the soil skeleton is reported at suitable pH. Overall, the PFAS sorption capacity of non-carbon rich soils are minimal. Our experience indicates that soils reporting non-detectable concentrations of PFAS via standard isotope dilution analyses routinely yield Synthetic Precipitation Leaching Procedure (SPLP) extract concentrations of PFAS above Vermont's Maximum Contaminant Level (MCL) of the 20 parts per trillion (ppt) for the sum of five regulated PFAS, including PFOA, PFOS, perfluorohexane sulfonic acid (PFHxS), perfluoroheptanoic acid (PFHpA), and perfluorononanoic acid (PFNA).

For fate and transport in the environment analyses, the majority of fully fluorinated PFAS including PFOS and PFOA are considered to be completely stable and flow unimpeded with advective groundwater flow. This resiliency has led to the presence of PFAS throughout water globally.

PFOA and PFOS are considered potential carcinogens and bioaccumulate in the blood serum of humans. Inhalation of dusts and ingestion of contaminated water and food are the primary exposure routes to humans. Accumulation in the liver, kidneys, and blood serum occur. Increased incidents of testicular and bladder cancers are also reported. After ceasing exposure, the PFAS are slowly excreted without being degraded.

2.0 WATER SUPPLY WELL DATA PRESENTATION

2.1 Drinking Water Supply Well Quality Data

2.1.1 Sample Collection Methods

Drinking water samples were collected by running a tap, typically the kitchen sink, for a minimum of ten minutes prior to filling sample containers from a location prior to any water treatment, typically the pressure tank spigot.

The details of the residence location, owner contact information, sampling times, materials inventory and use in the sampling area, well construction details (if available), global positioning system (gps) location of the well, and water treatment system details were entered into a digital data collection form on a tablet for downloading into a database.

Blind field duplicates were collected from 14 Stonehedge Drive and 21 Stonehedge Drive by filling additional sample containers. One field blank was collected on August 31, 2023.

All samples were submitted to Alpha Analytical of Mansfield, Massachusetts (Alpha) for PFAS analysis by EPA Method 533.

Private Water Supply Samples – AOC #1			
Address	Address	Address	Address
78 NORTH TERRACE DRIVE	18 STONEHEDGE DRIVE	109 SOUTHSHIRE DRIVE	409 SOUTHSHIRE DRIVE
127 NORTH TERRACE DRIVE	21 STONEHEDGE DRIVE	117 SOUTHSHIRE DRIVE	457 SOUTHSHIRE DRIVE
12 STONEHEDGE DRIVE	23 STONEHEDGE DRIVE	311 SOUTHSHIRE DRIVE	466 SOUTHSHIRE DRIVE
14 STONEHEDGE DRIVE	106 SOUTHSHIRE DRIVE	323 SOUTHSHIRE DRIVE	510 SOUTHSHIRE DRIVE
17 STONEHEDGE DRIVE	107 SOUTHSHIRE DRIVE	377 SOUTHSHIRE DRIVE	116 North Terrace Drive

Private Water Supply Samples – AOC #2				
Address	Address	Address	Address	Address
186 HICKORY HILL ROAD	221 HICKORY HILL ROAD	254 HICKORY HILL ROAD	294 HICKORY HILL ROAD	295 HICKORY HILL ROAD

2.1.2 Water Quality Results

A summary of all PFAS results for each 911 address sampled is included as **Table 1**. This table presents the summed reported concentrations of the five compounds regulated in Vermont drinking water. Laboratory reports and tabulated data have been presented to the VTDEC previously as the data was received. The laboratory reports are included as **Appendix A**. Digitally collected field sampling data including residence owner contact information have been compiled with the laboratory results into an Excel spreadsheet included as **Table 2**.

The sum concentration of PFOA, PFOS, PFHxS, PFHpA, and PFNA (VT5) exceed 20 ppt at six (6) residences in AOC #1 and all five (5) residences sampled at AOC #2. The maximum concentrations reported in AOC #1 was approximately 54 ppt (17 Stonehedge Drive). The water supply for 359 Hickory Hill Road was sampled on July 27, 2023, by VTDEC and contained 41.7 ppt of the VT5 PFAS. Concentrations between the detection limit and 20 ppt are reported at ten (10) locations in AOC #1. Non-detect readings were reported at three (3) AOC #1 sample locations.

Multivariate plots for each AOC and individual water supplies are provided as **Appendix B** and include the eight most commonly detected PFAS compounds including:

- Perfluorobutanoic acid (PFBA)
- Perfluorobutanesulfonic acid (PFBS)
- Perfluoropentanoic Acid (PFPeA)
- Perfluorohexanoic acid (PFHxA)
- PFHxS
- PFHpA
- PFOA
- PFOS

The dominant PFAS quantified in all water supplies is PFOA. 17 Stonehedge Drive water had more variability in PFAS compounds relative to other AOC #1 water supplies with relatively higher concentrations of PFBA, PFPeA, PFHxA, and PFHpA observed compared to other water supplies. AOC #2 wells generally contained low concentrations of all the PFAS compounds listed above, except for PFOS, which was not detected in two of the wells (186 and 221 Hickory Hill Road). PFOS is reported at six (6) locations at concentrations ranging from approximately 2 ppt (466 Southshire Drive) to 7.5 (510 Southshire Drive) in AOC #1 and at three locations in AOC #2 ranging from 2.06 ppt (254 Hickory Hill Road) to 11 ppt (295 Hickory Hill Road). PFHpA is reported in five locations in AOC #1 and all five AOC #2 locations at concentrations of 6 ppt or less. PFHxS was non detect for all AOC #1 locations but was detected in four of six AOC #2 locations. PFNA was non detect in all locations in both AOCs.

The VTDEC provided a water supply result collected on June 31, 2023, from 1253 Morgan Street that contained 16.85 ppt of the VT5 PFAS. While not within either AOC, this result is shown on Figure 2 and included in Table 1.

The areal distribution of the sum of the five regulated PFAS concentrations in all water supply wells sampled are shown on **Figures 1a and 1b**. Exceedances of the MCL were generally observed in the northwest portion of AOC #1 on Stonehedge Drive and one location on the north end of Southshire Drive, which is in proximity to Stonehedge Drive. The maximum concentrations reported in AOC #2 was approximately 53 ppt (295 Hickory Hill Road).

2.1.3 Quality Assurance and Quality Control Results

A summary of QA/QC sample analysis results and comparison to the primary samples at each location is included in **Table 1**. The relative percent difference (%RPD) has been calculated for each of the primary-duplicate sample pairs. The %RPD is a measure of the precision of reproducibility of sampling and analysis technique. Acceptable %RPD for water is <30%. The %RPD for parent-duplicate sample

pairs for PFAS compounds detected above reporting limits were all within the acceptance criteria except for PFOS in the parent-duplicate sample pair collected from 14 Stonehedge Drive. This sample reported an RPD of 40%. This is likely due to the presence of PFOS at low concentrations close to the method detection limit in the sample pair. The PFAS data collected is suitably precise to support the conclusion of this report.

No PFAS compounds were detected at concentrations above laboratory reporting limits in the field blank sample.

\\\\wse03.local\\WSE\\Projects\\VT\\VTDEC MASTER CONTRACT 2023\\Bennington PFAS\\2. Deliverables\\2023_09 Water Supply Results\\Report Parts\\Bennington PFAS Report.docx

3.0 CONCEPTUAL SITE MODEL

The following conceptual site model (CSM) has been developed for Bennington AOC #1 and AOC #2 to present our understanding of potential source(s), release mechanisms and processes controlling the fate and transport of the PFAS identified to date. The CSM incorporates information collected from numerous sources regarding the geology, hydrogeology, geomorphologic history, and PFAS use and presence throughout the area of interest. Sources for the information utilized to develop the CSM are included in the Section 6. In addition to these specific sources, we have utilized our experiential knowledge developed over more than 30 years of investigating contaminated sites in New England and our direct experience with PFAS sites in southwestern Vermont and Massachusetts.

3.1 Surficial Geology

Surficial materials in Bennington are primarily deposited by glacial processes and more recent fluvial processes. Further description of each AOC is provided below and based on the Surficial Geologic Map of Vermont (Stewart and McClintock, 1970). Surficial materials were likely reworked and engineered fills imported as residential development occurred. Surficial materials in AOC #1 are mapped as bedrock exposures and till mantling bedrock. Surficial materials in AOC #2 are mapped as glacial outwash deposits further described as horizontally bedded glaciofluvial gravel that may include postglacial alluvium.

3.2 Bedrock Geology

According to the Bedrock Geologic Map of Vermont (Ratcliffe, 2011), bedrock underlying the Stonehedge Drive area of AOC #1 is mapped as the Lower Ordovician-aged Shelburne Marble locally containing dolostone beds. Bedrock underlying Southshire Drive and North Terrace Drive portion of AOC#1 is mapped as a dolostone member of the Clarendon Springs Formation, an Upper-Cambrian aged dolostone containing quartz knots. Several dolostone bedrock outcrops were observed throughout AOC #1 during sampling activities.

Bedrock underlying AOC #2 is primarily mapped as the Cambrian-aged Dunham Dolostone. In the western extent of AOC #2 is mapped as the Middle Cambrian-aged sandstone (Monkton Quartzite) containing dolostone beds. No bedrock outcrops were observed during water supply sampling on August 31, 2023.

Regionally, bedrock has been faulted and folded by structural events, primarily during the Taconic and Acadian Orogenies. A preliminary bedrock Geologic Map of the Bennington Area was developed by the Vermont Geological Survey (Kim, 2017). While this map does not extend to either AOC, the occurrence of thrust faults, lineations, and folding structures illustrates the complex structural setting of the region which likely extends into each of the current AOCs.

3.3 Hydrology

Groundwater flow in bedrock is primarily through and controlled by secondary porosity features including fractures and voids that are formed by the dissolution of carbonate minerals common to the marble and dolostone underlying much of the study area. All the private water supplies sampled to date are drilled bedrock wells. Barr (2017) inferred regional groundwater flow directions in bedrock material towards the Walloomsac River. Locally, groundwater flow in bedrock and unconsolidated deposits was inferred towards smaller tributaries of the Walloomsac River. In AOC #1, groundwater discharge from

the unconsolidated and bedrock aquifers is likely to Jewett Brook, located approximately ¼-mile east of Southshire Drive. In AOC #2, groundwater may discharge from bedrock and unconsolidated aquifers to Barney Brook, which adjoins residential properties on the south side of Hickory Hill Road.

3.4 Potential Contaminant Sources and Release Mechanisms

Previous environmental investigations related to two former Chemfab facilities in Bennington and North Bennington have identified numerous potential PFAS contaminant sources in the area. Chemfab applied polytetrafluoroethylene (PTFE) coatings to fiberglass fabrics, which likely resulted in emissions of PFOA from the facilities' stacks. Area-wide sampling of drinking water supplies in 2016 identified PFAS above regulatory criteria in over 330 wells, primarily residential water supplies, within Bennington, North Bennington, and Shaftsbury. Response actions have included installation of point-of-entry treatment systems, extensions of the municipal waterline, and area-wide groundwater reclassification to Class IV.

Other potential PFAS sources previously identified that may have impacted drinking water supplies in Bennington, North Bennington and Shaftsbury include the Bennington landfill and Kocher Drive landfill, wastewater treatment plant sludge disposal areas, and numerous industrial users (Barr, 2017). Bennington and Kocher Drive landfills are both located north of Walloomsac River and are expected to be hydraulically isolated from both AOCs. Both AOCs are residential, and the historical land application of wastewater treatment plant sludge is unlikely. Industrial sites listed by Barr as potential PFAS sources are generally located in areas not expected to be hydraulically connected to either AOC based on their distance and inferred direction of groundwater flow. However, air emissions from other industrial uses could have contributed to PFAS groundwater contamination in the AOCs.

The Burgess Brothers Landfill Superfund Site is located approximately ¾-mile east of AOC#2 (Figure 2). The landfill is approximately 12-acres that operated as a gravel quarry in the 1940s and began operating as a metal salvage and disposal facility by the early 1950s. The site accepted metals, sludge, small appliances, military specialty batteries, and newspaper and building demolition debris. Two unlined lagoons received liquid wastes and sludge from approximately 1967 to 1976. Liquid and sludge waste reportedly consisted of lead sludge, lead-contaminated wastewater, spent solvents, and battery wastes. Waste disposal practices were terminated by the State of Vermont in 1976. Landfill operations resulted in the release of chlorinated volatile organic compounds (VOCs), methylene chloride, benzene, and several metals to the environment (EPA, 2020). Groundwater samples collected at the landfill in 2016 identified PFAS in four (4) groundwater monitoring wells at concentrations up to 64 ppt. Two influent samples collected from the groundwater treatment system contained approximately 58 ppt and 52 ppt for the sum of PFOA and PFHpA. Based on the wastes accepted at the landfill and occurrence of PFAS in groundwater, the Burgess Brothers Landfill Superfund Site is a potential source of PFAS contamination in AOC #2 water supplies.

The Burgess Brothers Construction & Demolition Debris Landfills (the C&D Landfills) are located approximately 0.9-miles southeast of Hickory Hill Road. The C&D Landfills are comprised of the Phase I Landfill, which was closed and capped in 2006, and the Phase II Landfill, which reportedly opened in 2007 but is no longer active (WHEM, 2022). The operational history and types of debris accepted at this site were not described in the Vermont Solid Waste Management Program (SWMP) files readily available for review. However, the occurrence of elevated PFAS concentrations in groundwater indicate that wastes accepted at the C&D Landfills likely included PFAS-containing materials. Specifically, the sum of the VT5 PFAS have been detected in groundwater located downgradient of the Phase I Landfill at

concentrations ranging between 113 ppt and 1,737 ppt. PFOA appears to be the primary PFAS compound associated with the C&D Landfills, however, groundwater samples also contained significant concentrations of PFOS, PFHxS, PFHpA, PFNA, perfluorobutanoic acid (PFBA), and perfluoropentanoic acid (PFPeA). Multi-variate plots for four C&D Landfill monitoring wells are provided in Appendix B. Groundwater samples associated with the Phase II Landfill and surface water samples collected from Barney Brook have not been analyzed for PFAS. Based on proximity to AOC #2, PFAS concentrations and similarity of PFAS compounds between the C&D Landfills and AOC #2, the C&D Landfills are potential sources of PFAS contamination in AOC #2 water supplies.

3.5 Summary of PFAS Fate and Transport

The PFAS present at both AOC #1 and AOC #2 appear to be dominated by PFOA. For both AOCs, PFOA may have been released to the environment as air emissions from PTFE coating operations at the former Bennington Chemfab facilities. Following deposition, PFAS in surface soil was likely transported vertically downward to groundwater by infiltrating precipitation with little to no retardation or sorption to soil. In AOC #2, discharge of landfill leachate may be a continuing source of PFOA to groundwater. It is unlikely that the groundwater treatment system at the Burgess Brothers Landfill is preventing all PFAS contaminated groundwater and/or leachate from migrating off-site. The extent of PFAS contaminated groundwater associated with the C&D Landfills has not been defined. Once they enter groundwater, PFAS contaminants flow advectively with groundwater. The pathway from the overburden aquifers, if present, and the bedrock aquifers in each AOC are not adequately understood to determine the source or migration pathways of PFAS.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are based upon our current understanding of the PFAS water supply sampling recently and previously conducted in Bennington, Vermont:

- 1) Six (6) water supplies in each AOC have PFAS concentrations exceeding Vermont's MCL for the VT5 regulated PFAS. PFOA is the primary PFAS that occurs in both AOCs.
- 2) Several PFAS sources have previously been identified in Bennington that have resulted in widespread PFAS contamination of water supplies, primarily by PFOA. The primary source of PFAS in AOC #1 water supplies is likely aerial deposition via stack emissions from the former Chemfab facilities. No new or previously identified potential sources are known in this residential area of town. In addition to stack emissions, the discharge of PFAS contaminated leachate from the Burgess Brothers Landfill and potentially the Burgess Brothers C&D Landfill are potential contaminant sources in AOC #2. However, there is not adequate data to confidently identify sources of PFAS in either AOC.
- 3) The extent of PFAS contamination in private water supplies in both AOCs are unknown. The Bennington public water system serves the area north of AOC #1 and many of the residences surrounding AOC #2.

Based on these conclusions, we make the following recommendations:

- 1) All twenty-six (26) private water supplies should be resampled to confirm PFAS results and evaluate temporal trends in PFAS concentrations.
- 2) The presence of private water supplies should be confirmed at the E911 addresses listed below for each AOC. If water supplies are present, samples should be collected from each for PFAS analysis.

Proposed Additional Private Water Supply Samples – AOC #1

Address	Address	Address	Address
10 Blackberry Lane	45 Garden Lane	54 Meadowbrook Drive	220 Meadowbrook Drive
54 Blackberry Lane	1704 Monument Avenue	75 Meadowbrook Drive	179 Southshire Drive
121 Blackberry Lane	1730 Monument Avenue	88 Meadowbrook Drive	235 US Route 7
140 Blackberry Lane	1779 Monument Avenue	177 Meadowbrook Drive	597 US Route 7
142 Blackberry Lane	1785 Monument Avenue	190 Meadowbrook Drive	604 US Route 7
143 Blackberry Lane	1819 Monument Avenue	197 Meadowbrook Drive	657 US Route 7
18 Garden Lane	1944 Monument Avenue	218 Meadowbrook Drive	811 US Route 7

Proposed Additional Private Water Supply Samples – AOC #1			
Address	Address	Address	Address
21 Garden Lane	1946 Monument Avenue	219 Meadowbrook Drive	841 US Route 7
Proposed Additional Private Water Supply Samples – AOC #2			
Address	Address	Address	Address
White Birches Mobile Home Park	93 Earls Drive	34 Arthurs Drive	160 Brambley Lane
41 Earls Drive	40 Tori Lane	38 Arthurs Drive	170 Brambley Lane
42 Earls Drive	50 Tori Lane	46 Arthurs Drive	200 Brambley Lane
52 Earls Drive	60 Tori Lane	131 Quiet Acres Road	239 Brambley Lane
54 Earls Drive	64 Tori Lane	133 Quiet Acres Road	272 Brambley Lane
56 Earls Drive	1236 Burgess Road	134 Quiet Acres Road	49 East Street
58 Earls Drive	109/111 Shawmut Street	136 Quiet Acres Road	

- 3) We recommend sampling the following public water systems, which PFAS data was not available for:
- VT0004550: Starlight Inn
 - VT0004479: South Gate Motel
 - VT0004307: Fife N Drum Motel
 - VT0005741: Gore Road MHP
- 4) We recommend reviewing Burgess Brothers Landfill Superfund site and Burgess Brother C&D Landfill files to identify PFAS-containing waste streams potentially accepted at the landfills, further evaluate PFAS data not available at the time this report was drafted and identify data gaps associated with PFAS fate and transport from the landfills.
- 5) Additional sources of historical development related documentation should be reviewed to assist in identification of potential PFAS sources in each AOC. Orthographic photographs, listers records, historical society records, and Mannings telephone indexes.

5.0 LIMITATIONS

This PFAS Summary Report was prepared exclusively for the use of the Vermont Department of Environmental Conservation. The conclusions provided by Weston & Sampson in this report are based solely on the information reported in this document. Future investigations, and/or information that were not available to Weston & Sampson at the time of this investigation may result in a modification of the conclusions stated in this report.

Should additional information become available concerning the areas of concern or nearby properties that could directly impact the areas of concern in the future; that information should be made available to Weston & Sampson for review so, if necessary, conclusions presented in this report may be modified. The conclusions of this report are based on area of concern conditions observed by Weston & Sampson personnel at the time of the investigation, information provided by the users and information provided by federal, state, and local agencies. This report has been prepared in general accordance with accepted engineering and environmental assessment practices. No other warranty, expressed or implied, is made.

6.0 REFERENCES

Barr, June 2017. DRAFT Conceptual Modeling of PFOA Fate and Transport: North Bennington, Vermont. Prepared for Saint-Gobain Performance Plastics.

Kim, Jonathan, 2017, Vermont Geological Survey. Preliminary Bedrock Geologic Map of the Bennington Area, Vermont. 1:12,000.

Ratcliffe, NM, Stanley, RS, Gale, MH, Thompson, PJ, and Walsh, GJ, 2011, Bedrock Geologic Map of Vermont: USGS Scientific Investigations Series Map 3184. 3 sheets, scale 1:100,000. Accessed Via the VT ANR Natural Resources Atlas website <http://anrmaps.vermont.gov/websites/anra5/>.

Stewart, David P. and McClintock, Paul, Surficial Geologic Map of Vermont, 1970, Charles G. Doll, ed., State of Vermont Geologic Survey, 1 sheet, scale 1:100. Accessed Via the VT ANR Natural Resources Atlas website <http://anrmaps.vermont.gov/websites/anra5/>.

United States Environmental Protection Agency, 2020. Fourth Five-Year Review Report for Burgess Brothers Landfill Superfund Site, Bennington County, Vermont.

Waite Heindel Environmental Management (WHEM), April 3, 2023. November 2022 Water Quality Sampling; and Analysis of Trends and Standards Exceedances, Burgess Brothers C&DD Closed Phase I & Closed Phase II Landfills, Bennington and Woodford, Vermont.

FIGURES

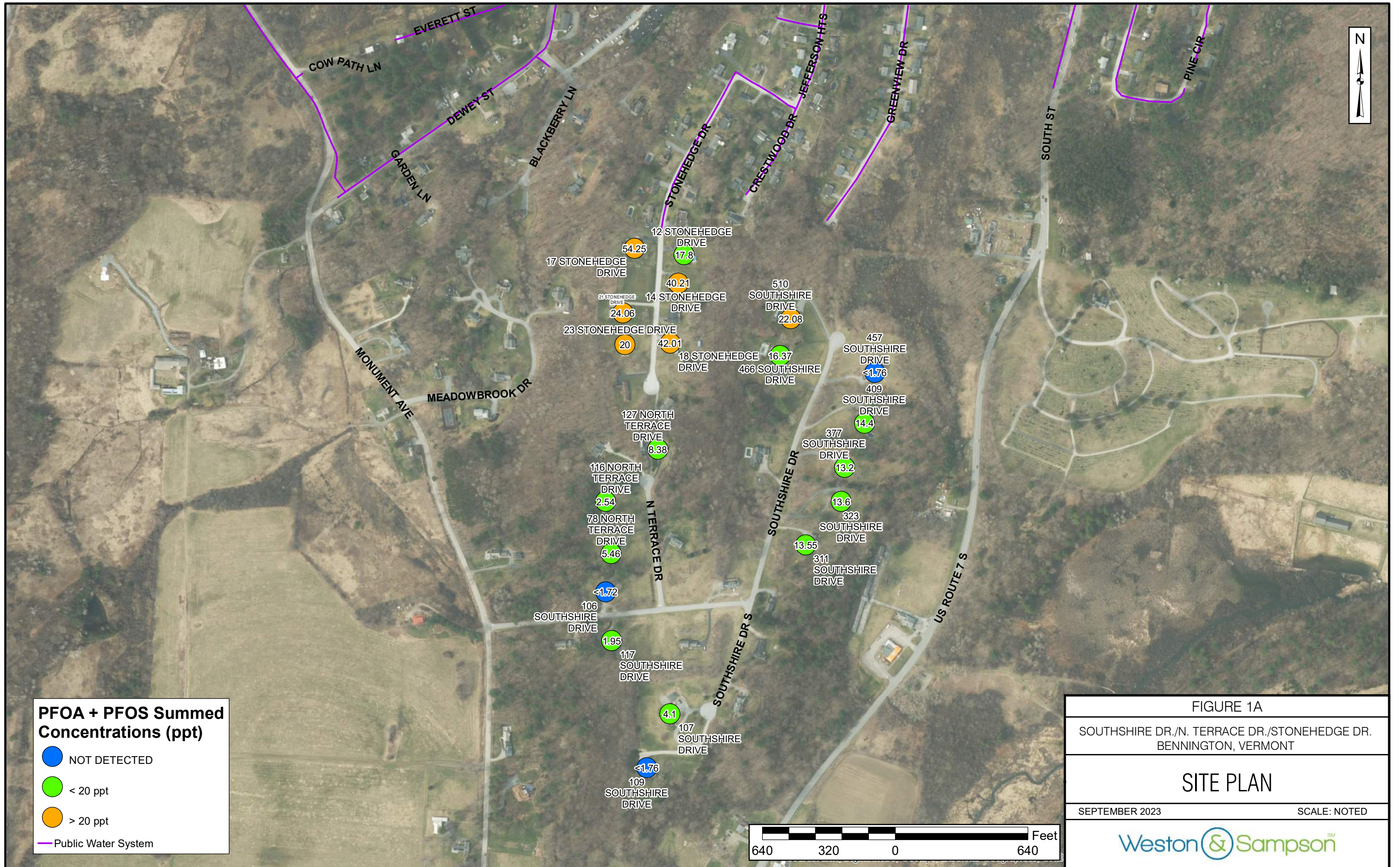


FIGURE 1A
 SOUTSHIRE DR./N. TERRACE DR./STONEHEDGE DR.
 BENNINGTON, VERMONT

SITE PLAN

SEPTEMBER 2023 SCALE: NOTED

Weston & SampsonSM



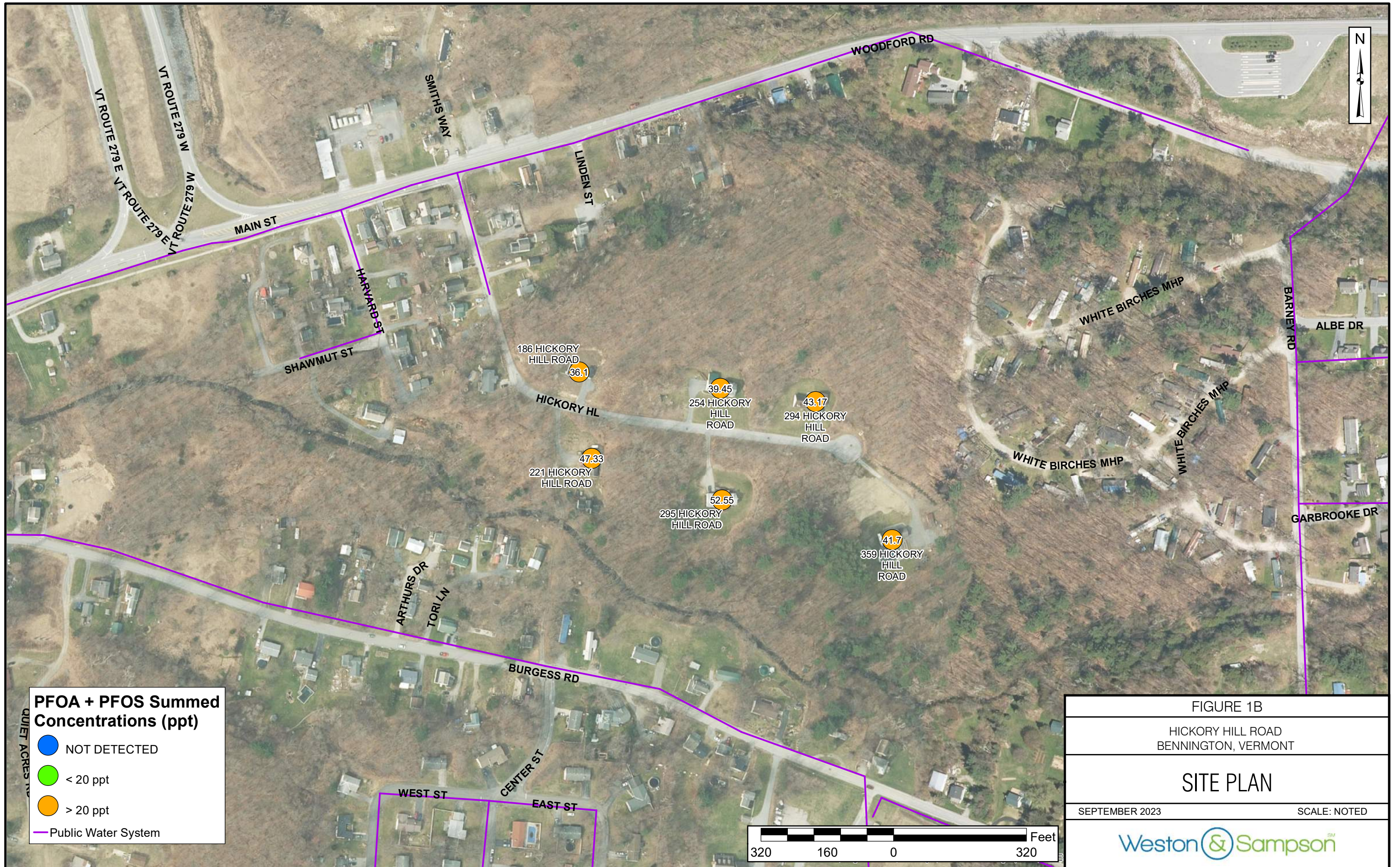
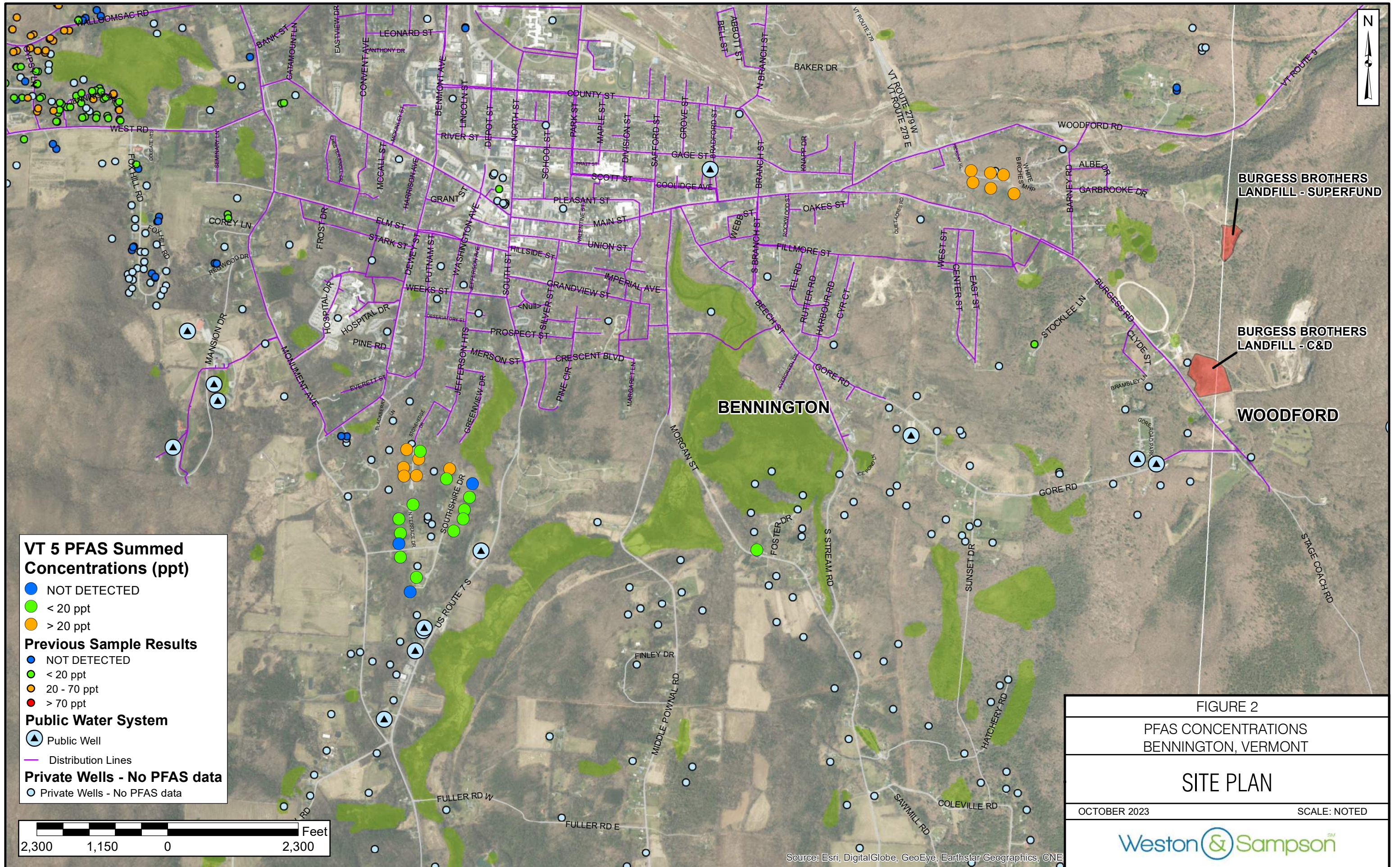


FIGURE 1B
 HICKORY HILL ROAD
 BENNINGTON, VERMONT

SITE PLAN

SEPTEMBER 2023 SCALE: NOTED

Weston & SampsonSM



VT 5 PFAS Summed Concentrations (ppt)

- NOT DETECTED
- < 20 ppt
- > 20 ppt

Previous Sample Results

- NOT DETECTED
- < 20 ppt
- 20 - 70 ppt
- > 70 ppt

Public Water System

- ▲ Public Well
- Distribution Lines

Private Wells - No PFAS data

- Private Wells - No PFAS data

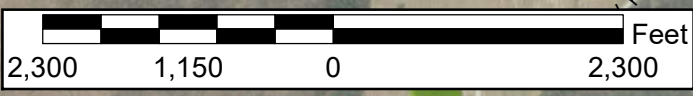


FIGURE 2

PFAS CONCENTRATIONS
BENNINGTON, VERMONT

SITE PLAN

OCTOBER 2023 SCALE: NOTED

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNE

TABLES

Table 2: Water Supply Well Sampling Database
Bennington, Vermont

Street	Street Number	Station Name	Water Softener	Water Softener Type	Water Softener Discharge Location	Water Filter	Water Filter Type	Odor	Odor of?	Color	Color of?	Sample Area Inventory /Use	Temperature (F)	General Comments
Hickory Hill Road	186	186 Hickory Hill Road	no			yes	Sediment	no	no			Basement	72	Town Sewer
Hickory Hill Road	221	221 Hickory Hill Road	no			yes	Sediment	no	no			Basement	72	Shallow well on property, old septic system, paints near spigot
Hickory Hill Road	254	254 Hickory Hill Road	yes	MacClean	Other	yes	Sediment	no	yes	Iron occasionally		Basement	67	On municipal sewer
Hickory Hill Road	294	294 Hickory Hill Road	yes	Watersoft inc	Other	yes	Sediment	no	no			Basement	72	Unlined landfill at top of hill. Town sewer.
Hickory Hill Road	295	295 Hickory Hill Road	yes	MacClean	Other	yes	Carbon and Sediment	no		yes	Rusty	Basement	72	Town sewer
North Terrace Drive	78	78 North Terrace Drive	yes	Kenmore Ultrasoft 200	Septic	yes	Sediment	no		no		Basement	70	Ecoli and choliform found in water after neighbor built house and installed septic system upgradient west. Septic in front yard.
North Terrace Drive	116	116 N Terrace Drive Bennington, VT	yes	Kineticco water systems	Septic	yes	Sediment	no	no					UV treatment.
North Terrace Drive	127	127 North Terrace Drive	yes	WWS Water	Septic	no	no	no	yes	Rust looking		Basement	65	Septic tank and leechfield in backyard. UV treatment
Southshire Drive	106	106 Southshire Drive	yes	SpringWell	Septic	no	no	No				Basement	65	Unable to ask water supply questions. Will follow up by phone.
Southshire Drive	107	107 Southshire Drive	yes	Not Labeled	Septic	yes	Sediment	no		no		Basement	65	
Southshire Drive	109	109 Southshire Drive	yes	Myers	Septic	yes	Sediment	no	no			Basement	65	5-gal wood preservative stored next to softener. On-Site sewer on opposite side of house from well. Leachfield downslope from home
Southshire Drive	117	117 Southshire Drive	yes	Best Water Conditioning	Septic	no	no	no	no			Basement	65	Homeowner says well has been fracked twice. Most recently 5 years ago, chlorine taste since. Septic system tank on east side under deck, leach field downslope in yard
Southshire Drive	311	311 Southshire Drive	yes	WaterBoss	Septic	no	no	no	no			Basement	72	Homeowner mentions Salty silty water Septic in backyard Pump changed 18 years ago Cleaners near sample location
Southshire Drive	323	323 Southshire Drive	yes	Watersoft	Septic	no	no	no	no			Basement	75	Septic tank in backyard
Southshire Drive	377	377 Southshire Drive	yes	General electric	Septic	yes	Sediment	no	no			Basement	72	Septic in backyard
Southshire Drive	457	457 Southshire Drive	yes	Culligan	Septic	yes	Sediment	no	no			Basement	63	Homeowner indicated carbon sediment filter.
Southshire Drive	466	466 Southshire Drive	yes	Watersoft	Other	no	no	no	no			Basement	63	Well report number 11127. Softener discharge into sewer pipe
Southshire Drive	510	510 Southshire Drive	yes	Watersoft	Septic	yes	Sediment	no	yes	Iron staining		Basement	72	Town Sewer
Southshire Drive	409	409 Southshire Drive	yes	Culligan	Septic	no	Sediment	no	no			Basement	63	
Stonehedge Drive	12	12 Stonehedge Drive	yes	Kenmore	Other	no	no	no	no			Basement	72	Town Sewer
Stonehedge Road	14	14 Stonehedge Road	yes	MacClean	Other	yes	Sediment	no	no			Basement	72	Town Sewer
Stonehedge Drive	17	17 Stonehedge Drive	yes	Watersoft	Other	yes	Sediment	no	Disgusting but doesnt remember	no		Basement	72	New pump 2 years ago Town wastewater Collected from larger pressure tank Two wells, one for house one for sink, sampled one for house
Stonehedge Drive	18	18 Stonehedge Drive	yes	Best Water Conditioning	Other	yes	Sediment	yes				Basement	72	UV light Town Sewer
Stonehedge Drive	21	21 Stonehedge Drive	yes	Amtrol Watersoft	Other	yes	Sediment	no	no			Basement	72	Town Sewer
Stonehedge Drive	23	23 Stonehedge Drive	yes	Not Recorded	Septic	no	no	no	no			Side yard	72	Spare tires stored next to pressure tank

APPENDIX A



ANALYTICAL REPORT

Lab Number:	L2351548
Client:	Weston & Sampson 98 South Main Street Suite 2 Waterbury, VT 05676
ATTN:	Lee Rosberg
Phone:	(802) 613-4106
Project Name:	BENNINGTON PFAS
Project Number:	ENG23-2810
Report Date:	10/05/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (99110), NJ (MA015), NY (11627), NC (685), OH (CL106), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2351548-01	109 SOUTSHIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 10:48	09/06/23
L2351548-02	107 SOUTSHIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 10:54	09/06/23
L2351548-03	311 SOUTSHIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 13:05	09/06/23
L2351548-04	14 STONEHEDGE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 18:12	09/06/23
L2351548-05	409 SOUTSHIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 09:47	09/06/23
L2351548-06	18 STONEHEDGE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 15:40	09/06/23
L2351548-07	FIELD BLANK	DW	BENNINGTON, VT	08/31/23 18:08	09/06/23
L2351548-08	377 SOUTSHIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 14:55	09/06/23
L2351548-09	117 SOUTSHIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 11:22	09/06/23
L2351548-10	78 NORTH TERRACE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 13:45	09/06/23
L2351548-11	23 STONEHEDGE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 14:20	09/06/23
L2351548-12	127 NORTH TERRACE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 12:43	09/06/23
L2351548-13	323 SOUTSHIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 13:28	09/06/23
L2351548-14	466 SOUTSHIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 10:32	09/06/23
L2351548-15	457 SOUTSHIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 10:12	09/06/23
L2351548-16	106 SOUTSHIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 11:43	09/06/23
L2351548-17	295 HICKORY HILL ROAD 230831	DW	BENNINGTON, VT	08/31/23 16:50	09/06/23
L2351548-18	254 HICKORY HILL ROAD	DW	BENNINGTON, VT	08/31/23 12:10	09/06/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
	230831				
L2351548-19	12 STONEHEDGE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 15:21	09/06/23
L2351548-20	DUP2 230831	DW	BENNINGTON, VT	08/31/23 00:00	09/06/23
L2351548-21	186 HICKORY HILL ROAD 230831	DW	BENNINGTON, VT	08/31/23 17:47	09/06/23
L2351548-22	17 STONEHEDGE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 16:18	09/06/23
L2351548-23	294 HICKORY HILL ROAD 230831	DW	BENNINGTON, VT	08/31/23 17:27	09/06/23
L2351548-24	510 SOUTHSIRE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 18:33	09/06/23
L2351548-25	21 STONEHEDGE DRIVE 230831	DW	BENNINGTON, VT	08/31/23 15:57	09/06/23
L2351548-26	DUP1 230831	DW	BENNINGTON, VT	08/31/23 00:00	09/06/23
L2351548-27	221 HICKORY HILL ROAD 230831	DW	BENNINGTON, VT	08/31/23 17:10	09/06/23

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Case Narrative (continued)

Report Revision

October 05, 2023: All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Perfluorinated Alkyl Acids by EPA 533

WG1826263-1R: The sample was re-analyzed due to QC failures in the original analysis. The results of the re-analysis are reported.

The WG1826263-3 MS recovery, performed on L2351548-01, is outside the acceptance criteria for perfluorooctanoic acid (pfoa) (197%).

WG1826263-3: The Matrix Spike level is at the Reporting Limit (RL); any detections below the RL in the native sample are not included in the % Recovery calculation.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michael Chang Michael Chang

Title: Technical Director/Representative

Date: 10/05/23

ORGANICS

SEMIVOLATILES

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-01
 Client ID: 109 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 10:48
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/12/23 19:06
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/12/23 07:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.76	0.588	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.76	0.588	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.76	0.588	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.76	0.588	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.76	0.588	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.76	0.588	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.76	0.588	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.76	0.588	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.76	0.588	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.76	0.588	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.76	0.588	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.76	0.588	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.76	0.588	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.76	0.588	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.76	0.588	1
Perfluorooctanoic Acid (PFOA)	1.24	J	ng/l	1.76	0.588	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.76	0.588	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.76	0.588	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.76	0.588	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.76	0.588	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.76	0.588	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.76	0.588	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.76	0.588	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.76	0.588	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.76	0.588	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-01
 Client ID: 109 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 10:48
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			78		50-200	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			72		50-200	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			94		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)			100		50-200	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			62		50-200	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)			54		50-200	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			93		50-200	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			51		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			103		50-200	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			54		50-200	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			92		50-200	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			61		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			119		50-200	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			65		50-200	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			71		50-200	
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)			55		50-200	

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-02
Client ID: 107 SOUTHSIRE DRIVE 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 10:54
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/12/23 19:41
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 07:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.773	J	ng/l	1.84	0.615	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.84	0.615	1
Perfluoropentanoic Acid (PFPeA)	0.747	J	ng/l	1.84	0.615	1
Perfluorobutanesulfonic Acid (PFBS)	1.64	J	ng/l	1.84	0.615	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.84	0.615	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.84	0.615	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.84	0.615	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.84	0.615	1
Perfluorohexanoic Acid (PFHxA)	0.714	J	ng/l	1.84	0.615	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.84	0.615	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.84	0.615	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.84	0.615	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.84	0.615	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.84	0.615	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.84	0.615	1
Perfluorooctanoic Acid (PFOA)	4.10		ng/l	1.84	0.615	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.615	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.84	0.615	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.84	0.615	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.84	0.615	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	0.615	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.84	0.615	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.84	0.615	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.84	0.615	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.84	0.615	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-02
 Client ID: 107 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 10:54
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	98		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	103		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	99		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	102		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	108		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	100		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	116		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	95		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	97		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-03
Client ID: 311 SOUTHSIRE DRIVE 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 13:05
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/12/23 19:59
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 07:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.902	J	ng/l	1.79	0.598	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.79	0.598	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.79	0.598	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.79	0.598	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.79	0.598	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.79	0.598	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.79	0.598	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.79	0.598	1
Perfluorohexanoic Acid (PFHxA)	0.781	J	ng/l	1.79	0.598	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.79	0.598	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.79	0.598	1
Perfluoroheptanoic Acid (PFHpA)	0.784	J	ng/l	1.79	0.598	1
Perfluorohexanesulfonic Acid (PFHxS)	0.738	J	ng/l	1.79	0.598	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.79	0.598	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.79	0.598	1
Perfluorooctanoic Acid (PFOA)	10.7		ng/l	1.79	0.598	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.79	0.598	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.79	0.598	1
Perfluorooctanesulfonic Acid (PFOS)	2.85		ng/l	1.79	0.598	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.79	0.598	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.79	0.598	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.79	0.598	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.79	0.598	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.79	0.598	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.79	0.598	1

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-03
 Client ID: 311 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 13:05
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	94		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	93		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	110		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	96		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	98		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	113		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	101		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	120		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	91		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	92		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-04
 Client ID: 14 STONEHEDGE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 18:12
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/12/23 20:08
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/12/23 07:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.48		ng/l	1.75	0.586	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.75	0.586	1
Perfluoropentanoic Acid (PFPeA)	1.73	J	ng/l	1.75	0.586	1
Perfluorobutanesulfonic Acid (PFBS)	1.46	J	ng/l	1.75	0.586	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.75	0.586	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.75	0.586	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.75	0.586	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.75	0.586	1
Perfluorohexanoic Acid (PFHxA)	2.36		ng/l	1.75	0.586	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.75	0.586	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.75	0.586	1
Perfluoroheptanoic Acid (PFHpA)	2.28		ng/l	1.75	0.586	1
Perfluorohexanesulfonic Acid (PFHxS)	0.818	J	ng/l	1.75	0.586	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.75	0.586	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.75	0.586	1
Perfluorooctanoic Acid (PFOA)	33.8		ng/l	1.75	0.586	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.75	0.586	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.75	0.586	1
Perfluorooctanesulfonic Acid (PFOS)	4.13		ng/l	1.75	0.586	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.75	0.586	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.75	0.586	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.75	0.586	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.75	0.586	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.75	0.586	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.75	0.586	1

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-04
 Client ID: 14 STONEHEDGE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 18:12
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	100		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	94		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	109		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	95		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	81		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	107		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	104		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	122		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	89		50-200

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-05
 Client ID: 409 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 09:47
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/12/23 20:16
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/12/23 07:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.25	J	ng/l	1.92	0.642	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.92	0.642	1
Perfluoropentanoic Acid (PFPeA)	1.02	J	ng/l	1.92	0.642	1
Perfluorobutanesulfonic Acid (PFBS)	0.657	J	ng/l	1.92	0.642	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.92	0.642	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.92	0.642	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.92	0.642	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.92	0.642	1
Perfluorohexanoic Acid (PFHxA)	1.15	J	ng/l	1.92	0.642	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.92	0.642	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.92	0.642	1
Perfluoroheptanoic Acid (PFHpA)	1.12	J	ng/l	1.92	0.642	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.92	0.642	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.92	0.642	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.92	0.642	1
Perfluorooctanoic Acid (PFOA)	14.4		ng/l	1.92	0.642	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.92	0.642	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.92	0.642	1
Perfluorooctanesulfonic Acid (PFOS)	0.707	J	ng/l	1.92	0.642	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.92	0.642	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.92	0.642	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.92	0.642	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.92	0.642	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.92	0.642	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.92	0.642	1

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-05
 Client ID: 409 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 09:47
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	99		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	96		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	109		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	103		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	107		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	113		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	105		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	138		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	103		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	90		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-06
Client ID: 18 STONEHEDGE DRIVE 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 15:40
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/12/23 20:25
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 07:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	3.24		ng/l	1.76	0.590	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.76	0.590	1
Perfluoropentanoic Acid (PFPeA)	2.00		ng/l	1.76	0.590	1
Perfluorobutanesulfonic Acid (PFBS)	1.51	J	ng/l	1.76	0.590	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.76	0.590	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.76	0.590	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.76	0.590	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.76	0.590	1
Perfluorohexanoic Acid (PFHxA)	2.14		ng/l	1.76	0.590	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.76	0.590	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.76	0.590	1
Perfluoroheptanoic Acid (PFHpA)	2.55		ng/l	1.76	0.590	1
Perfluorohexanesulfonic Acid (PFHxS)	0.625	J	ng/l	1.76	0.590	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.76	0.590	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.76	0.590	1
Perfluorooctanoic Acid (PFOA)	37.0		ng/l	1.76	0.590	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.76	0.590	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.76	0.590	1
Perfluorooctanesulfonic Acid (PFOS)	2.46		ng/l	1.76	0.590	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.76	0.590	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.76	0.590	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.76	0.590	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.76	0.590	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.76	0.590	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.76	0.590	1

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-06
 Client ID: 18 STONEHEDGE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 15:40
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	97		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	117		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	94		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	104		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	106		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	116		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	103		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	105		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	107		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	146		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	99		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	105		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	92		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-07
Client ID: FIELD BLANK
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 18:08
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/13/23 10:43
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.88	0.627	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.88	0.627	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.88	0.627	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.88	0.627	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.88	0.627	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.88	0.627	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.88	0.627	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.88	0.627	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.88	0.627	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.88	0.627	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.88	0.627	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.88	0.627	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.88	0.627	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.88	0.627	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.88	0.627	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.88	0.627	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.88	0.627	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.88	0.627	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.88	0.627	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.88	0.627	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.88	0.627	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.88	0.627	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.88	0.627	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.88	0.627	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.88	0.627	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-07
 Client ID: FIELD BLANK
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 18:08
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	98		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	99		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	105		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	109		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	102		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	94		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	105		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	98		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	104		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	99		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	88		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	89		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	99		50-200

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-08
 Client ID: 377 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 14:55
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/13/23 10:52
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.08	J	ng/l	1.75	0.585	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.75	0.585	1
Perfluoropentanoic Acid (PFPeA)	0.841	J	ng/l	1.75	0.585	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.75	0.585	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.75	0.585	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.75	0.585	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.75	0.585	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.75	0.585	1
Perfluorohexanoic Acid (PFHxA)	0.981	J	ng/l	1.75	0.585	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.75	0.585	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.75	0.585	1
Perfluoroheptanoic Acid (PFHpA)	0.974	J	ng/l	1.75	0.585	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.75	0.585	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.75	0.585	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	2.32		ng/l	1.75	0.585	1
Perfluorooctanoic Acid (PFOA)	13.2		ng/l	1.75	0.585	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.75	0.585	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.75	0.585	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.75	0.585	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.75	0.585	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.75	0.585	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.75	0.585	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.75	0.585	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.75	0.585	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.75	0.585	1

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-08
 Client ID: 377 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 14:55
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	100		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	94		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	96		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	99		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	94		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	106		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	90		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	89		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	88		50-200

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-09
 Client ID: 117 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 11:22
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/13/23 11:01
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.76	0.589	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.76	0.589	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.76	0.589	1
Perfluorobutanesulfonic Acid (PFBS)	0.712	J	ng/l	1.76	0.589	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.76	0.589	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.76	0.589	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.76	0.589	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.76	0.589	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.76	0.589	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.76	0.589	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.76	0.589	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.76	0.589	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.76	0.589	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.76	0.589	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.76	0.589	1
Perfluorooctanoic Acid (PFOA)	1.95		ng/l	1.76	0.589	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.913	J	ng/l	1.76	0.589	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.76	0.589	1
Perfluorooctanesulfonic Acid (PFOS)	1.41	J	ng/l	1.76	0.589	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.76	0.589	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.76	0.589	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.76	0.589	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.76	0.589	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.76	0.589	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.76	0.589	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-09
 Client ID: 117 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 11:22
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	107		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	102		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	83		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	115		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	83		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	94		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	121		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	84		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-10
Client ID: 78 NORTH TERRACE DRIVE 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 13:45
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/13/23 11:09
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.80	0.600	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.80	0.600	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.80	0.600	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.80	0.600	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.80	0.600	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.80	0.600	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.80	0.600	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.80	0.600	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.80	0.600	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.80	0.600	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.80	0.600	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.80	0.600	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.80	0.600	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.80	0.600	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.80	0.600	1
Perfluorooctanoic Acid (PFOA)	5.46		ng/l	1.80	0.600	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.80	0.600	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.80	0.600	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.80	0.600	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.80	0.600	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.80	0.600	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.80	0.600	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.80	0.600	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.80	0.600	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.80	0.600	1

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-10
 Client ID: 78 NORTH TERRACE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 13:45
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	83		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	102		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	105		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	90		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	93		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	100		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	87		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	107		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	110		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	83		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	84		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	84		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-11
Client ID: 23 STONEHEDGE DRIVE 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 14:20
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/13/23 11:36
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.88		ng/l	1.79	0.599	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.79	0.599	1
Perfluoropentanoic Acid (PFPeA)	1.21	J	ng/l	1.79	0.599	1
Perfluorobutanesulfonic Acid (PFBS)	4.84		ng/l	1.79	0.599	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.79	0.599	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.79	0.599	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.79	0.599	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.79	0.599	1
Perfluorohexanoic Acid (PFHxA)	1.79		ng/l	1.79	0.599	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.79	0.599	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.79	0.599	1
Perfluoroheptanoic Acid (PFHpA)	1.46	J	ng/l	1.79	0.599	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.79	0.599	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.79	0.599	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.79	0.599	1
Perfluorooctanoic Acid (PFOA)	20.0		ng/l	1.79	0.599	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.79	0.599	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.79	0.599	1
Perfluorooctanesulfonic Acid (PFOS)	0.908	J	ng/l	1.79	0.599	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.79	0.599	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.79	0.599	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.79	0.599	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.79	0.599	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.79	0.599	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.79	0.599	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-11
 Client ID: 23 STONEHEDGE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 14:20
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	87		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	108		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	97		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	94		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	102		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	100		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	93		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	91		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-12
Client ID: 127 NORTH TERRACE DRIVE 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 12:43
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/13/23 11:53
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.06	J	ng/l	1.86	0.620	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.86	0.620	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.86	0.620	1
Perfluorobutanesulfonic Acid (PFBS)	1.18	J	ng/l	1.86	0.620	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.86	0.620	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.86	0.620	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.86	0.620	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.86	0.620	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.86	0.620	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.86	0.620	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.86	0.620	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.86	0.620	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.86	0.620	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.86	0.620	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.86	0.620	1
Perfluorooctanoic Acid (PFOA)	8.38		ng/l	1.86	0.620	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.86	0.620	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.86	0.620	1
Perfluorooctanesulfonic Acid (PFOS)	0.724	J	ng/l	1.86	0.620	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.86	0.620	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.86	0.620	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.86	0.620	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.86	0.620	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.86	0.620	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.86	0.620	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-12
 Client ID: 127 NORTH TERRACE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 12:43
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	96		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	91		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	107		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	92		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	101		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	87		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	106		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	89		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	115		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	92		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	91		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	95		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-13
Client ID: 323 SOUTHSIRE DRIVE 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 13:28
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/13/23 12:02
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.836	J	ng/l	1.74	0.581	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.74	0.581	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.74	0.581	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.74	0.581	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.74	0.581	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.74	0.581	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.74	0.581	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.74	0.581	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.74	0.581	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.74	0.581	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.74	0.581	1
Perfluoroheptanoic Acid (PFHpA)	0.804	J	ng/l	1.74	0.581	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.74	0.581	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.74	0.581	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.11	J	ng/l	1.74	0.581	1
Perfluorooctanoic Acid (PFOA)	13.6		ng/l	1.74	0.581	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.74	0.581	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.74	0.581	1
Perfluorooctanesulfonic Acid (PFOS)	0.999	J	ng/l	1.74	0.581	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.74	0.581	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.74	0.581	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.74	0.581	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.74	0.581	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.74	0.581	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.74	0.581	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-13
 Client ID: 323 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 13:28
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	91		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	100		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	94		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	95		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	90		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	93		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	90		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	100		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	87		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	92		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-14
 Client ID: 466 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 10:32
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/13/23 12:10
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.05		ng/l	1.83	0.610	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.83	0.610	1
Perfluoropentanoic Acid (PFPeA)	1.73	J	ng/l	1.83	0.610	1
Perfluorobutanesulfonic Acid (PFBS)	1.88		ng/l	1.83	0.610	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.83	0.610	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.83	0.610	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.83	0.610	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.83	0.610	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.83	0.610	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.83	0.610	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.83	0.610	1
Perfluoroheptanoic Acid (PFHpA)	1.52	J	ng/l	1.83	0.610	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.83	0.610	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.83	0.610	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.83	0.610	1
Perfluorooctanoic Acid (PFOA)	14.4		ng/l	1.83	0.610	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.83	0.610	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.83	0.610	1
Perfluorooctanesulfonic Acid (PFOS)	1.97		ng/l	1.83	0.610	1
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.83	0.610	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.83	0.610	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.83	0.610	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.83	0.610	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.83	0.610	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.83	0.610	1

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-14
 Client ID: 466 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 10:32
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	94		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	92		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	96		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	96		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	87		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	95		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	99		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	93		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	93		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-15
 Client ID: 457 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 10:12
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/13/23 12:19
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.76	0.589	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.76	0.589	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.76	0.589	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.76	0.589	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.76	0.589	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.76	0.589	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.76	0.589	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.76	0.589	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.76	0.589	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.76	0.589	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.76	0.589	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.76	0.589	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.76	0.589	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.76	0.589	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.76	0.589	1
Perfluorooctanoic Acid (PFOA)	0.659	J	ng/l	1.76	0.589	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.76	0.589	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.76	0.589	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.76	0.589	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.76	0.589	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.76	0.589	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.76	0.589	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.76	0.589	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.76	0.589	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.76	0.589	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-15
 Client ID: 457 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 10:12
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	108		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	90		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	103		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	111		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	79		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-16
 Client ID: 106 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 11:43
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/13/23 12:28
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.72	0.574	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.72	0.574	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.72	0.574	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.72	0.574	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.72	0.574	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.72	0.574	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.72	0.574	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.72	0.574	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.72	0.574	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.72	0.574	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.72	0.574	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.72	0.574	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.72	0.574	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.72	0.574	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.72	0.574	1
Perfluorooctanoic Acid (PFOA)	1.42	J	ng/l	1.72	0.574	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.72	0.574	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.72	0.574	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.72	0.574	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.72	0.574	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.72	0.574	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.72	0.574	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.72	0.574	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.72	0.574	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.72	0.574	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-16
 Client ID: 106 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 11:43
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	94		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	93		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	101		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	104		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	110		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	102		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	100		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	102		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	106		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	102		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-17
Client ID: 295 HICKORY HILL ROAD 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 16:50
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/13/23 12:37
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 20:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.35		ng/l	1.81	0.605	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.81	0.605	1
Perfluoropentanoic Acid (PFPeA)	2.28		ng/l	1.81	0.605	1
Perfluorobutanesulfonic Acid (PFBS)	1.74	J	ng/l	1.81	0.605	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.81	0.605	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.81	0.605	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.81	0.605	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.81	0.605	1
Perfluorohexanoic Acid (PFHxA)	2.82		ng/l	1.81	0.605	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.81	0.605	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.81	0.605	1
Perfluoroheptanoic Acid (PFHpA)	3.45		ng/l	1.81	0.605	1
Perfluorohexanesulfonic Acid (PFHxS)	1.67	J	ng/l	1.81	0.605	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.81	0.605	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.81	0.605	1
Perfluorooctanoic Acid (PFOA)	38.0		ng/l	1.81	0.605	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.81	0.605	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.81	0.605	1
Perfluorooctanesulfonic Acid (PFOS)	11.1		ng/l	1.81	0.605	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.81	0.605	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.81	0.605	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.81	0.605	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.81	0.605	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.81	0.605	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.81	0.605	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-17
 Client ID: 295 HICKORY HILL ROAD 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 16:50
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			89		50-200	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			79		50-200	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			98		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)			111		50-200	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			86		50-200	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)			91		50-200	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			100		50-200	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			90		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			119		50-200	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			99		50-200	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			101		50-200	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			85		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			124		50-200	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			88		50-200	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			89		50-200	
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)			79		50-200	

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-18
Client ID: 254 HICKORY HILL ROAD 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 12:10
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/14/23 15:12
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.83		ng/l	1.83	0.611	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.83	0.611	1
Perfluoropentanoic Acid (PFPeA)	1.73	J	ng/l	1.83	0.611	1
Perfluorobutanesulfonic Acid (PFBS)	2.21		ng/l	1.83	0.611	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.83	0.611	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.83	0.611	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.83	0.611	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.83	0.611	1
Perfluorohexanoic Acid (PFHxA)	1.95		ng/l	1.83	0.611	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.83	0.611	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.83	0.611	1
Perfluoroheptanoic Acid (PFHpA)	2.14		ng/l	1.83	0.611	1
Perfluorohexanesulfonic Acid (PFHxS)	2.45		ng/l	1.83	0.611	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.83	0.611	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.83	0.611	1
Perfluorooctanoic Acid (PFOA)	32.8		ng/l	1.83	0.611	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.83	0.611	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.83	0.611	1
Perfluorooctanesulfonic Acid (PFOS)	2.06		ng/l	1.83	0.611	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.83	0.611	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.83	0.611	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.83	0.611	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.83	0.611	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.83	0.611	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.83	0.611	1

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-18
 Client ID: 254 HICKORY HILL ROAD 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 12:10
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	75		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	71		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	96		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	94		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	72		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	71		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	92		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	72		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	95		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	70		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	79		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	112		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	80		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	84		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	59		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-19
 Client ID: 12 STONEHEDGE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 15:21
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/14/23 15:21
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.53	J	ng/l	1.81	0.605	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.81	0.605	1
Perfluoropentanoic Acid (PFPeA)	0.866	J	ng/l	1.81	0.605	1
Perfluorobutanesulfonic Acid (PFBS)	1.14	J	ng/l	1.81	0.605	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.81	0.605	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.81	0.605	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.81	0.605	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.81	0.605	1
Perfluorohexanoic Acid (PFHxA)	1.04	J	ng/l	1.81	0.605	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.81	0.605	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.81	0.605	1
Perfluoroheptanoic Acid (PFHpA)	1.30	J	ng/l	1.81	0.605	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.81	0.605	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.81	0.605	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.81	0.605	1
Perfluorooctanoic Acid (PFOA)	17.8		ng/l	1.81	0.605	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.81	0.605	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.81	0.605	1
Perfluorooctanesulfonic Acid (PFOS)	1.19	J	ng/l	1.81	0.605	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.81	0.605	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.81	0.605	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.81	0.605	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.81	0.605	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.81	0.605	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.81	0.605	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-19
 Client ID: 12 STONEHEDGE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 15:21
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			71		50-200	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			79		50-200	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			97		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)			98		50-200	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			69		50-200	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)			70		50-200	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			94		50-200	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			67		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			93		50-200	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			66		50-200	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			98		50-200	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			71		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			105		50-200	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			71		50-200	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			71		50-200	
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)			55		50-200	

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-20
Client ID: DUP2 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 00:00
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/14/23 15:38
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.50		ng/l	1.81	0.605	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.81	0.605	1
Perfluoropentanoic Acid (PFPeA)	1.65	J	ng/l	1.81	0.605	1
Perfluorobutanesulfonic Acid (PFBS)	1.37	J	ng/l	1.81	0.605	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.81	0.605	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.81	0.605	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.81	0.605	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.81	0.605	1
Perfluorohexanoic Acid (PFHxA)	2.10		ng/l	1.81	0.605	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.81	0.605	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.81	0.605	1
Perfluoroheptanoic Acid (PFHpA)	2.54		ng/l	1.81	0.605	1
Perfluorohexanesulfonic Acid (PFHxS)	0.620	J	ng/l	1.81	0.605	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.81	0.605	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.81	0.605	1
Perfluorooctanoic Acid (PFOA)	29.2		ng/l	1.81	0.605	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.81	0.605	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.81	0.605	1
Perfluorooctanesulfonic Acid (PFOS)	2.74		ng/l	1.81	0.605	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.81	0.605	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.81	0.605	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.81	0.605	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.81	0.605	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.81	0.605	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.81	0.605	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-20
 Client ID: DUP2 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 00:00
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			89		50-200	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			82		50-200	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			92		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)			99		50-200	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			77		50-200	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)			79		50-200	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			92		50-200	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			75		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			92		50-200	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			78		50-200	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			92		50-200	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			77		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			109		50-200	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			74		50-200	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			78		50-200	
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)			75		50-200	

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-21
Client ID: 186 HICKORY HILL ROAD 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 17:47
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/14/23 16:04
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.46	J	ng/l	1.88	0.627	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.88	0.627	1
Perfluoropentanoic Acid (PFPeA)	1.42	J	ng/l	1.88	0.627	1
Perfluorobutanesulfonic Acid (PFBS)	1.81	J	ng/l	1.88	0.627	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.88	0.627	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.88	0.627	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.88	0.627	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.88	0.627	1
Perfluorohexanoic Acid (PFHxA)	1.62	J	ng/l	1.88	0.627	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.88	0.627	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.88	0.627	1
Perfluoroheptanoic Acid (PFHpA)	2.14		ng/l	1.88	0.627	1
Perfluorohexanesulfonic Acid (PFHxS)	2.16		ng/l	1.88	0.627	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.88	0.627	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.88	0.627	1
Perfluorooctanoic Acid (PFOA)	31.8		ng/l	1.88	0.627	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.88	0.627	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.88	0.627	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.88	0.627	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.88	0.627	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.88	0.627	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.88	0.627	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.88	0.627	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.88	0.627	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.88	0.627	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-21
 Client ID: 186 HICKORY HILL ROAD 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 17:47
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	69		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	119		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	84		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	90		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	126		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	143		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	92		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	80		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-22
 Client ID: 17 STONEHEDGE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 16:18
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/14/23 16:13
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	5.57		ng/l	1.85	0.618	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.85	0.618	1
Perfluoropentanoic Acid (PFPeA)	9.12		ng/l	1.85	0.618	1
Perfluorobutanesulfonic Acid (PFBS)	2.03		ng/l	1.85	0.618	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.85	0.618	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.85	0.618	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.85	0.618	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.85	0.618	1
Perfluorohexanoic Acid (PFHxA)	9.38		ng/l	1.85	0.618	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.85	0.618	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.85	0.618	1
Perfluoroheptanoic Acid (PFHpA)	6.02		ng/l	1.85	0.618	1
Perfluorohexanesulfonic Acid (PFHxS)	1.41	J	ng/l	1.85	0.618	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.85	0.618	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.85	0.618	1
Perfluorooctanoic Acid (PFOA)	42.6		ng/l	1.85	0.618	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.85	0.618	1
Perfluorononanoic Acid (PFNA)	1.44	J	ng/l	1.85	0.618	1
Perfluorooctanesulfonic Acid (PFOS)	5.63		ng/l	1.85	0.618	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.85	0.618	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.85	0.618	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.85	0.618	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.85	0.618	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.85	0.618	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.85	0.618	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-22
 Client ID: 17 STONEHEDGE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 16:18
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			80		50-200	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			78		50-200	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			87		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)			88		50-200	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			74		50-200	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)			79		50-200	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			84		50-200	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			68		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			90		50-200	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			78		50-200	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			91		50-200	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			76		50-200	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			106		50-200	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			78		50-200	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			76		50-200	
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)			68		50-200	

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-23
Client ID: 294 HICKORY HILL ROAD 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 17:27
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/14/23 16:22
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.60		ng/l	1.78	0.594	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.78	0.594	1
Perfluoropentanoic Acid (PFPeA)	2.96		ng/l	1.78	0.594	1
Perfluorobutanesulfonic Acid (PFBS)	4.44		ng/l	1.78	0.594	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.78	0.594	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.78	0.594	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.78	0.594	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.78	0.594	1
Perfluorohexanoic Acid (PFHxA)	3.02		ng/l	1.78	0.594	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.78	0.594	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.78	0.594	1
Perfluoroheptanoic Acid (PFHpA)	2.25		ng/l	1.78	0.594	1
Perfluorohexanesulfonic Acid (PFHxS)	7.24		ng/l	1.78	0.594	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.78	0.594	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.78	0.594	1
Perfluorooctanoic Acid (PFOA)	29.4		ng/l	1.78	0.594	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.78	0.594	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.78	0.594	1
Perfluorooctanesulfonic Acid (PFOS)	4.28		ng/l	1.78	0.594	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.78	0.594	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.78	0.594	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.78	0.594	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.78	0.594	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.78	0.594	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.78	0.594	1

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-23
 Client ID: 294 HICKORY HILL ROAD 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 17:27
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	76		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	72		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	105		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	71		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	76		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	75		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	97		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	76		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	87		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	80		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	122		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	81		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	64		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-24
 Client ID: 510 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 18:33
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/14/23 16:30
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.59		ng/l	1.88	0.628	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.88	0.628	1
Perfluoropentanoic Acid (PFPeA)	2.11		ng/l	1.88	0.628	1
Perfluorobutanesulfonic Acid (PFBS)	2.10		ng/l	1.88	0.628	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.88	0.628	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.88	0.628	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.88	0.628	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.88	0.628	1
Perfluorohexanoic Acid (PFHxA)	2.15		ng/l	1.88	0.628	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.88	0.628	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.88	0.628	1
Perfluoroheptanoic Acid (PFHpA)	1.84	J	ng/l	1.88	0.628	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.88	0.628	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.88	0.628	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.88	0.628	1
Perfluorooctanoic Acid (PFOA)	14.6		ng/l	1.88	0.628	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.88	0.628	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.88	0.628	1
Perfluorooctanesulfonic Acid (PFOS)	7.48		ng/l	1.88	0.628	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.88	0.628	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.88	0.628	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.88	0.628	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.88	0.628	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.88	0.628	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.88	0.628	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-24
 Client ID: 510 SOUTHSIRE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 18:33
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	76		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	75		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	94		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	77		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	79		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	85		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	80		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	91		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	103		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	90		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	72		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-25
 Client ID: 21 STONEHEDGE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 15:57
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/14/23 16:39
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.66		ng/l	1.84	0.616	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.84	0.616	1
Perfluoropentanoic Acid (PFPeA)	2.19		ng/l	1.84	0.616	1
Perfluorobutanesulfonic Acid (PFBS)	1.89		ng/l	1.84	0.616	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.84	0.616	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.84	0.616	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.84	0.616	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.84	0.616	1
Perfluorohexanoic Acid (PFHxA)	1.92		ng/l	1.84	0.616	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.84	0.616	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.84	0.616	1
Perfluoroheptanoic Acid (PFHpA)	2.06		ng/l	1.84	0.616	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.84	0.616	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.84	0.616	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.84	0.616	1
Perfluorooctanoic Acid (PFOA)	22.0		ng/l	1.84	0.616	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.616	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.84	0.616	1
Perfluorooctanesulfonic Acid (PFOS)	1.74	J	ng/l	1.84	0.616	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.84	0.616	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	0.616	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.84	0.616	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.84	0.616	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.84	0.616	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.84	0.616	1

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2351548-25
 Client ID: 21 STONEHEDGE DRIVE 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 15:57
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	91		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	69		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	114		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	90		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	91		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	90		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	123		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	141		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	93		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	81		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-26
Client ID: DUP1 230831
Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 00:00
Date Received: 09/06/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/14/23 16:48
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.63		ng/l	1.85	0.619	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.85	0.619	1
Perfluoropentanoic Acid (PFPeA)	2.08		ng/l	1.85	0.619	1
Perfluorobutanesulfonic Acid (PFBS)	2.06		ng/l	1.85	0.619	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.85	0.619	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.85	0.619	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.85	0.619	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.85	0.619	1
Perfluorohexanoic Acid (PFHxA)	2.01		ng/l	1.85	0.619	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.85	0.619	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.85	0.619	1
Perfluoroheptanoic Acid (PFHpA)	2.35		ng/l	1.85	0.619	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.85	0.619	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.85	0.619	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.85	0.619	1
Perfluorooctanoic Acid (PFOA)	22.4		ng/l	1.85	0.619	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.85	0.619	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.85	0.619	1
Perfluorooctanesulfonic Acid (PFOS)	1.69	J	ng/l	1.85	0.619	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.85	0.619	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.85	0.619	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.85	0.619	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.85	0.619	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.85	0.619	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.85	0.619	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-26
 Client ID: DUP1 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 00:00
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	83		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	80		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	92		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	78		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	76		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	88		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	83		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	81		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	102		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	80		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-27
 Client ID: 221 HICKORY HILL ROAD 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 17:10
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 136,533
 Analytical Date: 09/14/23 16:57
 Analyst: CAP

Extraction Method: EPA 533
 Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.72	J	ng/l	1.85	0.619	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.85	0.619	1
Perfluoropentanoic Acid (PFPeA)	0.734	J	ng/l	1.85	0.619	1
Perfluorobutanesulfonic Acid (PFBS)	1.08	J	ng/l	1.85	0.619	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.85	0.619	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.85	0.619	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.85	0.619	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.85	0.619	1
Perfluorohexanoic Acid (PFHxA)	1.39	J	ng/l	1.85	0.619	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.85	0.619	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.85	0.619	1
Perfluoroheptanoic Acid (PFHpA)	3.13		ng/l	1.85	0.619	1
Perfluorohexanesulfonic Acid (PFHxS)	1.09	J	ng/l	1.85	0.619	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.85	0.619	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.85	0.619	1
Perfluorooctanoic Acid (PFOA)	44.2		ng/l	1.85	0.619	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.85	0.619	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.85	0.619	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.85	0.619	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.85	0.619	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.85	0.619	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.85	0.619	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.85	0.619	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.85	0.619	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.85	0.619	1

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2351548-27
 Client ID: 221 HICKORY HILL ROAD 230831
 Sample Location: BENNINGTON, VT

Date Collected: 08/31/23 17:10
 Date Received: 09/06/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	88		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	90		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	95		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	90		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	102		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	105		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	104		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	101		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	97		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	108		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	99		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	89		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 136,533
Analytical Date: 09/13/23 10:17
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 07:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 01-06 Batch: WG1826263-1 R					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.668
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.00	0.668
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.668
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.668
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.00	0.668
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	2.00	0.668
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	2.00	0.668
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.668
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	2.00	0.668
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	2.00	0.668
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.668
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.668
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	0.668
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.668
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.668
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.668
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.668
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.668
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.668
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.668
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	2.00	0.668
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.668

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 136,533
Analytical Date: 09/13/23 10:17
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 07:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 01-06 Batch: WG1826263-1 R					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	87		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	94		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	104		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	105		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	100		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	114		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	99		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	115		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	104		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	108		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	94		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	101		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 136,533
Analytical Date: 09/13/23 09:51
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 17:59

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 07-17 Batch: WG1826678-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.668
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.00	0.668
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.668
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.668
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.00	0.668
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	2.00	0.668
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	2.00	0.668
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.668
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	2.00	0.668
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	2.00	0.668
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.668
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.668
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	0.668
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.668
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.668
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.668
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.668
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.668
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.668
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.668
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	2.00	0.668
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.668

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 136,533
Analytical Date: 09/13/23 09:51
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/12/23 17:59

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 07-17 Batch: WG1826678-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	101		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	105		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	98		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	105		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	109		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	105		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	100		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	105		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	91		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	101		50-200

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 136,533
Analytical Date: 09/14/23 14:02
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 18-27 Batch: WG1827290-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.668
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.00	0.668
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.668
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.668
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.00	0.668
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	2.00	0.668
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	2.00	0.668
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.668
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	2.00	0.668
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	2.00	0.668
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.668
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.668
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	0.668
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.668
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.668
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.668
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.668
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.668
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.668
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.668
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	2.00	0.668
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.668

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 136,533
Analytical Date: 09/14/23 14:02
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/14/23 06:50

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 18-27 Batch: WG1827290-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	99		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	103		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	96		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	105		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	106		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	92		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	100		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	87		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	103		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	102		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	102		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	95		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	108		50-200

Lab Control Sample Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-06 Batch: WG1826263-2								
Perfluorobutanoic Acid (PFBA)	103		-		50-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	120		-		50-150	-		30
Perfluoropentanoic Acid (PFPeA)	99		-		50-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	98		-		50-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	93		-		50-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	89		-		50-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	78		-		50-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	108		-		50-150	-		30
Perfluorohexanoic Acid (PFHxA)	86		-		50-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	84		-		50-150	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	124		-		50-150	-		30
Perfluoroheptanoic Acid (PFHpA)	89		-		50-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	90		-		50-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	101		-		50-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	99		-		50-150	-		30
Perfluorooctanoic Acid (PFOA)	106		-		50-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	103		-		50-150	-		30
Perfluorononanoic Acid (PFNA)	106		-		50-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	88		-		50-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	88		-		50-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	125		-		50-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-06 Batch: WG1826263-2								
Perfluorodecanoic Acid (PFDA)	109		-		50-150	-		30
Perfluoroundecanoic Acid (PFUnA)	105		-		50-150	-		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	90		-		50-150	-		30
Perfluorododecanoic Acid (PFDoA)	98		-		50-150	-		30

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	97				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	134				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	96				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	110				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	102				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	108				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99				50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	114				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	108				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	103				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	105				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	122				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	99				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	97				50-200

Lab Control Sample Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 07-17 Batch: WG1826678-2								
Perfluorobutanoic Acid (PFBA)	93		-		70-130	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	87		-		70-130	-		30
Perfluoropentanoic Acid (PFPeA)	88		-		70-130	-		30
Perfluorobutanesulfonic Acid (PFBS)	94		-		70-130	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	86		-		70-130	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	87		-		70-130	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	94		-		70-130	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	104		-		70-130	-		30
Perfluorohexanoic Acid (PFHxA)	94		-		70-130	-		30
Perfluoropentanesulfonic Acid (PFPeS)	94		-		70-130	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	87		-		70-130	-		30
Perfluoroheptanoic Acid (PFHpA)	87		-		70-130	-		30
Perfluorohexanesulfonic Acid (PFHxS)	95		-		70-130	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	98		-		70-130	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	98		-		70-130	-		30
Perfluorooctanoic Acid (PFOA)	97		-		70-130	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	92		-		70-130	-		30
Perfluorononanoic Acid (PFNA)	94		-		70-130	-		30
Perfluorooctanesulfonic Acid (PFOS)	86		-		70-130	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	93		-		70-130	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	101		-		70-130	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 07-17 Batch: WG1826678-2								
Perfluorodecanoic Acid (PFDA)	98		-		70-130	-		30
Perfluoroundecanoic Acid (PFUnA)	99		-		70-130	-		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	92		-		70-130	-		30
Perfluorododecanoic Acid (PFDoA)	95		-		70-130	-		30

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	104				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	103				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	101				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	104				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99				50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	103				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	106				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	101				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	104				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	107				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	101				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	109				50-200

Lab Control Sample Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 18-27 Batch: WG1827290-2								
Perfluorobutanoic Acid (PFBA)	98		-		70-130	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	97		-		70-130	-		30
Perfluoropentanoic Acid (PFPeA)	91		-		70-130	-		30
Perfluorobutanesulfonic Acid (PFBS)	96		-		70-130	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	89		-		70-130	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	93		-		70-130	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	99		-		70-130	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	110		-		70-130	-		30
Perfluorohexanoic Acid (PFHxA)	97		-		70-130	-		30
Perfluoropentanesulfonic Acid (PFPeS)	93		-		70-130	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	87		-		70-130	-		30
Perfluoroheptanoic Acid (PFHpA)	96		-		70-130	-		30
Perfluorohexanesulfonic Acid (PFHxS)	98		-		70-130	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	100		-		70-130	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	102		-		70-130	-		30
Perfluorooctanoic Acid (PFOA)	100		-		70-130	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	98		-		70-130	-		30
Perfluorononanoic Acid (PFNA)	100		-		70-130	-		30
Perfluorooctanesulfonic Acid (PFOS)	94		-		70-130	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	92		-		70-130	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	105		-		70-130	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 18-27 Batch: WG1827290-2									
Perfluorodecanoic Acid (PFDA)	105		-		70-130		-		30
Perfluoroundecanoic Acid (PFUnA)	103		-		70-130		-		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	97		-		70-130		-		30
Perfluorododecanoic Acid (PFDoA)	100		-		70-130		-		30

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	97				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	101				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	100				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	100				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99				50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	98				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	99				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	96				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	101				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	109				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	90				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	100				50-200

Matrix Spike Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab SOUTHSHIRE DRIVE 230831												
Associated sample(s): 01-06 QC Batch ID: WG1826263-3 QC Sample: L2351548-01 Client ID: 109												
Perfluorobutanoic Acid (PFBA)	ND	1.84	2.24	122		-	-		50-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	1.84	2.03	110		-	-		50-150	-		30
Perfluoropentanoic Acid (PFPeA)	ND	1.84	2.06	112		-	-		50-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	ND	1.64	2.04	125		-	-		50-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	1.84	1.82J	99		-	-		50-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND	1.64	1.67J	102		-	-		50-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	1.84	1.75J	95		-	-		50-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	1.73	1.72J	100		-	-		50-150	-		30
Perfluorohexanoic Acid (PFHxA)	ND	1.84	2.11	114		-	-		50-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	1.73	1.82J	105		-	-		50-150	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	1.84	1.74J	94		-	-		50-150	-		30
Perfluoroheptanoic Acid (PFHpA)	ND	1.84	2.07	112		-	-		50-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	1.68	1.88	112		-	-		50-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	1.74	1.80J	103		-	-		50-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.75	1.92	109		-	-		50-150	-		30
Perfluorooctanoic Acid (PFOA)	1.24J	1.84	3.63	197	Q	-	-		50-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.76	2.03	115		-	-		50-150	-		30
Perfluorononanoic Acid (PFNA)	ND	1.84	2.09	113		-	-		50-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	ND	1.71	2.05	120		-	-		50-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	1.72	1.55J	90		-	-		50-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.77	1.83J	103		-	-		50-150	-		30

Matrix Spike Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab SOUTHSHIRE DRIVE 230831												
Associated sample(s): 01-06 QC Batch ID: WG1826263-3 QC Sample: L2351548-01 Client ID: 109												
Perfluorodecanoic Acid (PFDA)	ND	1.84	1.99	108		-	-		50-150	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	1.84	2.20	119		-	-		50-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	1.74	1.63J	94		-	-		50-150	-		30
Perfluorododecanoic Acid (PFDoA)	ND	1.84	1.95	106		-	-		50-150	-		30

<i>Surrogate (Extracted Internal Standard)</i>	<i>MS % Recovery</i>	<i>MS Qualifier</i>	<i>MSD % Recovery</i>	<i>MSD Qualifier</i>	<i>Acceptance Criteria</i>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	115				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	106				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	108				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	95				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	99				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	97				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	93				50-200
Perfluoro[13C4]Butanoic Acid (MPFBA)	90				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	100				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95				50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	94				50-200

Matrix Spike Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 07-17 QC Batch ID: WG1826678-3 QC Sample: L2351548-10 Client ID: 78 NORTH TERRACE DRIVE 230831												
Perfluorobutanoic Acid (PFBA)	ND	37.6	37.6	100		-	-		70-130	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	37.6	31.4	84		-	-		70-130	-		30
Perfluoropentanoic Acid (PFPeA)	ND	37.6	37.2	99		-	-		70-130	-		30
Perfluorobutanesulfonic Acid (PFBS)	ND	33.4	32.2	96		-	-		70-130	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	37.6	36.5	97		-	-		70-130	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	33.5	31.0	92		-	-		70-130	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	37.6	38.3	102		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	35.2	37.2	106		-	-		70-130	-		30
Perfluorohexanoic Acid (PFHxA)	ND	37.6	37.8	101		-	-		70-130	-		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	35.3	32.5	92		-	-		70-130	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	37.6	34.2	91		-	-		70-130	-		30
Perfluoroheptanoic Acid (PFHpA)	ND	37.6	34.1	91		-	-		70-130	-		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	34.3	36.0	105		-	-		70-130	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	35.5	32.2	91		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	35.8	37.4	105		-	-		70-130	-		30
Perfluorooctanoic Acid (PFOA)	5.46	37.6	43.2	100		-	-		70-130	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	35.8	37.4	104		-	-		70-130	-		30
Perfluorononanoic Acid (PFNA)	ND	37.6	36.5	97		-	-		70-130	-		30
Perfluorooctanesulfonic Acid (PFOS)	ND	34.9	30.9	89		-	-		70-130	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	35.1	32.2	92		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:2FTS)	ND	36.1	35.6	99		-	-		70-130	-		30

Matrix Spike Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 07-17 QC Batch ID: WG1826678-3 QC Sample: L2351548-10 Client ID: 78 NORTH TERRACE DRIVE 230831												
Perfluorodecanoic Acid (PFDA)	ND	37.6	38.3	102		-	-		70-130	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	37.6	40.6	108		-	-		70-130	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	35.5	33.5	94		-	-		70-130	-		30
Perfluorododecanoic Acid (PFDoA)	ND	37.6	37.5	100		-	-		70-130	-		30

<i>Surrogate (Extracted Internal Standard)</i>	<i>MS % Recovery</i>	<i>Qualifier</i>	<i>MSD % Recovery</i>	<i>Qualifier</i>	<i>Acceptance Criteria</i>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	104				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	100				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	98				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	79				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	83				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	81				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	80				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	83				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	84				50-200
Perfluoro[13C4]Butanoic Acid (MPFBA)	90				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	79				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97				50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	78				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	84				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98				50-200

Matrix Spike Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 18-27 QC Batch ID: WG1827290-3 QC Sample: L2351548-19 Client ID: 12 STONEHEDGE DRIVE 230831												
Perfluorobutanoic Acid (PFBA)	1.53J	38.1	38.0	100		-	-		70-130	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	38.1	32.5	85		-	-		70-130	-		30
Perfluoropentanoic Acid (PFPeA)	0.866J	38.1	37.4	98		-	-		70-130	-		30
Perfluorobutanesulfonic Acid (PFBS)	1.14J	33.8	33.6	99		-	-		70-130	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	38.1	33.8	89		-	-		70-130	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	34	30.7	90		-	-		70-130	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	38.1	34.7	91		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	35.8	36.9	103		-	-		70-130	-		30
Perfluorohexanoic Acid (PFHxA)	1.04J	38.1	36.5	96		-	-		70-130	-		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	35.8	37.1	104		-	-		70-130	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	38.1	35.2	92		-	-		70-130	-		30
Perfluoroheptanoic Acid (PFHpA)	1.30J	38.1	34.4	90		-	-		70-130	-		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	34.8	34.4	99		-	-		70-130	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	36	35.6	99		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	36.3	38.0	105		-	-		70-130	-		30
Perfluorooctanoic Acid (PFOA)	17.8	38.1	57.3	104		-	-		70-130	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	36.4	34.2	94		-	-		70-130	-		30
Perfluorononanoic Acid (PFNA)	ND	38.1	37.1	97		-	-		70-130	-		30
Perfluorooctanesulfonic Acid (PFOS)	1.19J	35.4	33.4	94		-	-		70-130	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	35.6	33.6	94		-	-		70-130	-		30
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:2FTS)	ND	36.6	39.4	108		-	-		70-130	-		30

Matrix Spike Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Lab Number: L2351548

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 18-27 QC Batch ID: WG1827290-3 QC Sample: L2351548-19 Client ID: 12 STONEHEDGE DRIVE 230831												
Perfluorodecanoic Acid (PFDA)	ND	38.1	40.0	105		-	-		70-130	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	38.1	39.4	103		-	-		70-130	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	36	34.4	96		-	-		70-130	-		30
Perfluorododecanoic Acid (PFDoA)	ND	38.1	38.0	100		-	-		70-130	-		30

Surrogate (Extracted Internal Standard)	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	109				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	104				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	95				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	81				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	85				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	92				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82				50-200
Perfluoro[13C4]Butanoic Acid (MPFBA)	83				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	79				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95				50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	80				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	81				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92				50-200

Lab Duplicate Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Project Number: ENG23-2810

Lab Number: L2351548

Report Date: 10/05/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1826263-4 QC Sample: L2351548-02 Client ID: 107 SOUTHSHIRE DRIVE 230831						
Perfluorobutanoic Acid (PFBA)	0.773J	0.749J	ng/l	NC		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	ND	ng/l	NC		30
Perfluoropentanoic Acid (PFPeA)	0.747J	0.756J	ng/l	NC		30
Perfluorobutanesulfonic Acid (PFBS)	1.64J	1.67J	ng/l	NC		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	ND	ng/l	NC		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	ND	ng/l	NC		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/l	NC		30
Perfluorohexanoic Acid (PFHxA)	0.714J	0.734J	ng/l	NC		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/l	NC		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	ND	ng/l	NC		30
Perfluoroheptanoic Acid (PFHpA)	ND	ND	ng/l	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ng/l	NC		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluorooctanoic Acid (PFOA)	4.10	4.45	ng/l	8		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonic Acid (PFOS)	ND	ND	ng/l	NC		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	ND	ng/l	NC		30

Lab Duplicate Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1826263-4 QC Sample: L2351548-02 Client ID: 107 SOUTHSHIRE DRIVE 230831						
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/l	NC		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	98		101		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		109		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95		93		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	103		103		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	99		103		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	102		110		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95		100		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		96		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	108		98		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	100		105		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97		97		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		106		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	116		118		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100		97		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	95		96		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	97		105		50-200

Lab Duplicate Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS

Project Number: ENG23-2810

Lab Number: L2351548

Report Date: 10/05/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 07-17 QC Batch ID: WG1826678-4 QC Sample: L2351548-11 Client ID: 23 STONEHEDGE DRIVE 230831						
Perfluorobutanoic Acid (PFBA)	1.88	1.86	ng/l	1		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	ND	ng/l	NC		30
Perfluoropentanoic Acid (PFPeA)	1.21J	1.19J	ng/l	NC		30
Perfluorobutanesulfonic Acid (PFBS)	4.84	4.58	ng/l	6		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	ND	ng/l	NC		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	ND	ng/l	NC		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/l	NC		30
Perfluorohexanoic Acid (PFHxA)	1.79	1.63J	ng/l	NC		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/l	NC		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	ND	ng/l	NC		30
Perfluoroheptanoic Acid (PFHpA)	1.46J	1.73J	ng/l	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ng/l	NC		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluorooctanoic Acid (PFOA)	20.0	17.2	ng/l	15		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonic Acid (PFOS)	0.908J	0.826J	ng/l	NC		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	ND	ng/l	NC		30

Lab Duplicate Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 07-17 QC Batch ID: WG1826678-4 QC Sample: L2351548-11 Client ID: 23 STONEHEDGE DRIVE 230831						
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/l	NC		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		95		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	87		86		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99		103		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	108		105		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		97		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	97		91		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100		98		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		106		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	94		105		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	102		87		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		100		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	100		98		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113		111		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97		91		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	93		93		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	91		93		50-200

Lab Duplicate Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 18-27 QC Batch ID: WG1827290-4 QC Sample: L2351548-20 Client ID: DUP2 230831						
Perfluorobutanoic Acid (PFBA)	2.50	2.42	ng/l	3		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	ND	ng/l	NC		30
Perfluoropentanoic Acid (PFPeA)	1.65J	1.65J	ng/l	NC		30
Perfluorobutanesulfonic Acid (PFBS)	1.37J	1.31J	ng/l	NC		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	ND	ng/l	NC		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	ND	ng/l	NC		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/l	NC		30
Perfluorohexanoic Acid (PFHxA)	2.10	1.96	ng/l	7		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/l	NC		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	ND	ng/l	NC		30
Perfluoroheptanoic Acid (PFHpA)	2.54	2.48	ng/l	2		30
Perfluorohexanesulfonic Acid (PFHxS)	0.620J	0.655J	ng/l	NC		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluorooctanoic Acid (PFOA)	29.2	29.9	ng/l	2		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonic Acid (PFOS)	2.74	2.35	ng/l	15		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	ND	ng/l	NC		30

Lab Duplicate Analysis

Batch Quality Control

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 18-27 QC Batch ID: WG1827290-4 QC Sample: L2351548-20 Client ID: DUP2 230831						
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/l	NC		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		91		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	82		86		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		94		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	99		102		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	77		87		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	79		84		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	92		90		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	75		83		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	92		98		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	78		84		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		97		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	77		83		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	109		106		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	74		75		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	78		72		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	75		85		50-200

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2351548-01A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-01B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-02A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-02B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-03A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-03B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-04A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-04B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-05A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-05B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-06A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-06B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-07A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-08A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-08B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-09A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-09B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-10A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-10B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-11A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-11B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-12A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2351548-12B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-13A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-13B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-14A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-14B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-15A	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-15B	Plastic 250ml Ammonium Acetate preserved	B	NA		5.6	Y	Absent		A2-533(28)
L2351548-16A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-16B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-17A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-17B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-18A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-18B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-19A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-19B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-20A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-20B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-21A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-21B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-22A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-22B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-23A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-23B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-24A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-24B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-25A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-25B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-26A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)

Project Name: BENNINGTON PFAS**Lab Number:** L2351548**Project Number:** ENG23-2810**Report Date:** 10/05/23**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2351548-26B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-27A	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)
L2351548-27B	Plastic 250ml Ammonium Acetate preserved	A	NA		5.4	Y	Absent		A2-533(28)

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Serial_No:10052316:32
Lab Number: L2351548
Report Date: 10/05/23

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
PERFLUOROETHER SULFONIC ACIDS (PFESAs)		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Serial_No:10052316:32
Lab Number: L2351548
Report Date: 10/05/23

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: BENNINGTON PFAS
Project Number: ENG23-2810

Lab Number: L2351548
Report Date: 10/05/23

REFERENCES

- 136 Determination of Per- and Polyfluoroalkyl Substances in Drinking Water by Isotope Dilution Anion Exchange Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 533, EPA Document 815-B-19-020, November 2019.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



CHAIN OF CUSTODY

PAGE 2 OF 3

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Project Information

Project Name: Bewington PFAS
 Project Location: Bewington, VT
 Project #: ENG23-2810
 Project Manager: Lee Rosberg
 ALPHA Quote #:

Date Rec'd in Lab: 9-6-23

ALPHA Job #: L2351548

Report Information - Data Deliverables

FAX EMAIL
 ADEX Add'l Deliverables *see notes*

Billing Information

Same as Client info PO #: ENG23-2810
invoices@wseinc.com

Client Information

Client: Weston and Sampson
 Address: 98 South Main Street Ste #2
Waterbury, VT 05676
 Phone: 802-613-4106
 Fax:
 Email: Rosberg.Lee@wseinc.com

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)
 Date Due: Time:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
<u>VT</u>	<u>VT PFAS MCLs - Drinking water</u>

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:
Envirodata EDD

ANALYSIS

TOTAL # BOTTLES

SAMPLE HANDLING

Filtration _____

Done

Not needed

Lab to do

Lab to do

(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS	SAMPLE HANDLING	Sample Specific Comments	TOTAL # BOTTLES
		Date	Time						
51548-11	23 Stowhedge Drive ²³⁰⁸³¹	8/31/23	14:20	DW	LSR	PFAS-533			2
12	127 North Terrace Drive 230831		12:43						
13	323 Southshire Drive 230831		13:28						
14	466 Southshire Drive 230831		10:32						
15	457 Southshire Drive 230831		10:12						
16	106 Southshire Drive 230831		11:43						
17	295 Hickory Hill Road 230831		16:50						
18	254 Hickory Hill Road 230831		12:10						
19	12 Stowhedge Drive 230831		15:21						
20	DUPA 230831								

Container Type: 20L Plastic
 Preservative: Ammonia Acetate

Relinquished By: <u>SR via FedEx</u> <u>FEDEx</u>	Date/Time: <u>9/5/23 15:00</u> <u>9/6/23 11/4</u>	Received By: <u>FEDEx</u> <u>W L O</u>	Date/Time: <u>9/6/23 11/4</u>
---	---	--	----------------------------------

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

SHIP DATE: OSSEP23
ACTWG: 41.71 LB
CAD: 25435558/4SX13600
DIM3: 25x14x14 IN

BILL SENDER

(802) 560-4111

ORIGIN ID: MULA
SHIPPING MANAGER
SHIP TO SEND PLUS
PACK & MAIN ST
38 THE ROUNDABOUT
MONTPELIER, VT 05676
UNITED STATES US

TO **SAMPLE RECEIVING**
ALPHA ANALYTICAL INC.
320 FORBES BLVD

MANSFIELD MA 02048

REF: LEE ROSSBERG
DEPT: 1

81 31 898 - 9220
UNIT PAG 13: 48344
501

FedEx
Express



WED - 06 SEP 10:30A
PRIORITY OVERNIGHT
DSR
02048
MA - US BOS

TEL: 7833 6041 9513
CEL:

XE PYMA



5M313/TT3/95F3

#1010202210101



ANALYTICAL REPORT

Lab Number:	L2354136
Client:	Weston & Sampson 98 South Main Street Suite 2 Waterbury, VT 05676
ATTN:	Lee Rosberg
Phone:	(802) 613-4106
Project Name:	VTDEC-BENNINGTON
Project Number:	ENG23-2810
Report Date:	10/05/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (99110), NJ (MA015), NY (11627), NC (685), OH (CL106), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Lab Number: L2354136
Report Date: 10/05/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2354136-01	116 NORTH TERRACE ROAD 230913	DW	BENNINGTON, VERMONT	09/13/23 09:22	09/15/23

Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Lab Number: L2354136
Report Date: 10/05/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Lab Number: L2354136
Report Date: 10/05/23

Case Narrative (continued)

Report Revision

October 05, 2023: All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Michael Chang Michael Chang

Title: Technical Director/Representative

Date: 10/05/23

ORGANICS

SEMIVOLATILES

Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Lab Number: L2354136
Report Date: 10/05/23

SAMPLE RESULTS

Lab ID: L2354136-01
Client ID: 116 NORTH TERRACE ROAD 230913
Sample Location: BENNINGTON, VERMONT

Date Collected: 09/13/23 09:22
Date Received: 09/15/23
Field Prep: Not Specified

Sample Depth:

Matrix: Dw
Analytical Method: 136,533
Analytical Date: 09/22/23 00:56
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/21/23 00:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.87	0.625	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	1.87	0.625	1
Perfluoropentanoic Acid (PFPeA)	0.809	J	ng/l	1.87	0.625	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.87	0.625	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	1.87	0.625	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	1.87	0.625	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	1.87	0.625	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.87	0.625	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.87	0.625	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.87	0.625	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	1.87	0.625	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.87	0.625	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.87	0.625	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.87	0.625	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.87	0.625	1
Perfluorooctanoic Acid (PFOA)	2.54		ng/l	1.87	0.625	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.87	0.625	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.87	0.625	1
Perfluorooctanesulfonic Acid (PFOS)	1.76	J	ng/l	1.87	0.625	1
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	1.87	0.625	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.87	0.625	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.87	0.625	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.87	0.625	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	1.87	0.625	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.87	0.625	1

Project Name: VTDEC-BENNINGTON**Lab Number:** L2354136**Project Number:** ENG23-2810**Report Date:** 10/05/23**SAMPLE RESULTS**

Lab ID: L2354136-01

Date Collected: 09/13/23 09:22

Client ID: 116 NORTH TERRACE ROAD 230913

Date Received: 09/15/23

Sample Location: BENNINGTON, VERMONT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	95		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	100		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	96		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	93		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	106		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	107		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	83		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	109		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	95		50-200

Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Lab Number: L2354136
Report Date: 10/05/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 136,533
Analytical Date: 09/21/23 22:27
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/21/23 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 01 Batch: WG1830017-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.668
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.00	0.668
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.668
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.668
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.00	0.668
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	2.00	0.668
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	2.00	0.668
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.668
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	2.00	0.668
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	2.00	0.668
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.668
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.668
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	0.668
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.668
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.668
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.668
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.668
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	2.00	0.668
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.668
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.668
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.668
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	2.00	0.668
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.668

Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Lab Number: L2354136
Report Date: 10/05/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 136,533
Analytical Date: 09/21/23 22:27
Analyst: CAP

Extraction Method: EPA 533
Extraction Date: 09/21/23 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab for sample(s): 01 Batch: WG1830017-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	93		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	92		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	94		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	92		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	82		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	98		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	97		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	102		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	108		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	115		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	99		50-200

Lab Control Sample Analysis

Batch Quality Control

Project Name: VTDEC-BENNINGTON

Lab Number: L2354136

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01 Batch: WG1830017-2								
Perfluorobutanoic Acid (PFBA)	108		-		50-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	111		-		50-150	-		30
Perfluoropentanoic Acid (PFPeA)	104		-		50-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	104		-		50-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	87		-		50-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	90		-		50-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	86		-		50-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	126		-		50-150	-		30
Perfluorohexanoic Acid (PFHxA)	107		-		50-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	112		-		50-150	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	107		-		50-150	-		30
Perfluoroheptanoic Acid (PFHpA)	110		-		50-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	102		-		50-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	110		-		50-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	105		-		50-150	-		30
Perfluorooctanoic Acid (PFOA)	108		-		50-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	89		-		50-150	-		30
Perfluorononanoic Acid (PFNA)	102		-		50-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	120		-		50-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	97		-		50-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	99		-		50-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: VTDEC-BENNINGTON

Lab Number: L2354136

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01 Batch: WG1830017-2								
Perfluorodecanoic Acid (PFDA)	94		-		50-150	-		30
Perfluoroundecanoic Acid (PFUnA)	109		-		50-150	-		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	106		-		50-150	-		30
Perfluorododecanoic Acid (PFDoA)	104		-		50-150	-		30

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	94				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	95				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	96				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	84				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	99				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	93				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89				50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	102				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	94				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	117				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	108				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	120				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	106				50-200

Matrix Spike Analysis

Batch Quality Control

Project Name: VTDEC-BENNINGTON

Lab Number: L2354136

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab												
			Associated sample(s): 01		QC Batch ID: WG1830017-3		QC Sample: L2353727-01		Client ID: MS Sample			
Perfluorobutanoic Acid (PFBA)	ND	1.82	1.90	104		-	-		50-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	1.82	1.83	100		-	-		50-150	-		30
Perfluoropentanoic Acid (PFPeA)	ND	1.82	1.88	103		-	-		50-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	ND	1.62	1.63J	101		-	-		50-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	1.82	1.67J	92		-	-		50-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	1.63	1.50J	92		-	-		50-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	1.82	1.85	101		-	-		50-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	1.71	2.12	124		-	-		50-150	-		30
Perfluorohexanoic Acid (PFHxA)	ND	1.82	2.04	112		-	-		50-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	1.72	1.80J	105		-	-		50-150	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	1.82	2.09	115		-	-		50-150	-		30
Perfluoroheptanoic Acid (PFHpA)	ND	1.82	1.82	100		-	-		50-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	1.66	1.65J	99		-	-		50-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	1.72	1.92	111		-	-		50-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.74	2.25	130		-	-		50-150	-		30
Perfluorooctanoic Acid (PFOA)	ND	1.82	1.97	108		-	-		50-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.74	1.54J	88		-	-		50-150	-		30
Perfluorononanoic Acid (PFNA)	ND	1.82	1.85	101		-	-		50-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	ND	1.69	1.87	110		-	-		50-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	1.7	1.59J	93		-	-		50-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.75	1.94	111		-	-		50-150	-		30
Perfluorodecanoic Acid (PFDA)	ND	1.82	1.94	106		-	-		50-150	-		30

Matrix Spike Analysis

Batch Quality Control

Project Name: VTDEC-BENNINGTON

Lab Number: L2354136

Project Number: ENG23-2810

Report Date: 10/05/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab												
			Associated sample(s): 01			QC Batch ID: WG1830017-3			QC Sample: L2353727-01		Client ID: MS Sample	
Perfluoroundecanoic Acid (PFUnA)	ND	1.82	2.01	110		-	-		50-150	-		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	1.72	1.80J	104		-	-		50-150	-		30
Perfluorododecanoic Acid (PFDoA)	ND	1.82	1.99	109		-	-		50-150	-		30

Surrogate (Extracted Internal Standard)	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	117				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	91				50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	99				50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	87				50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	102				50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98				50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83				50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	89				50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97				50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	111				50-200
Perfluoro[13C4]Butanoic Acid (MPFBA)	91				50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88				50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98				50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86				50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93				50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91				50-200

Lab Duplicate Analysis

Batch Quality Control

Project Name: VTDEC-BENNINGTON

Project Number: ENG23-2810

Lab Number: L2354136

Report Date: 10/05/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1830017-4 QC Sample: L2353778-01 Client ID: DUP Sample						
Perfluorobutanoic Acid (PFBA)	0.790J	0.793J	ng/l	NC		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	ND	ng/l	NC		30
Perfluoropentanoic Acid (PFPeA)	ND	ND	ng/l	NC		30
Perfluorobutanesulfonic Acid (PFBS)	1.10J	1.10J	ng/l	NC		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	ND	ng/l	NC		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	ND	ng/l	NC		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/l	NC		30
Perfluorohexanoic Acid (PFHxA)	ND	ND	ng/l	NC		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/l	NC		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	ND	ng/l	NC		30
Perfluoroheptanoic Acid (PFHpA)	ND	ND	ng/l	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	1.04J	1.04J	ng/l	NC		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluorooctanoic Acid (PFOA)	1.99	2.10	ng/l	5		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonic Acid (PFOS)	3.82	3.77	ng/l	1		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	ND	ng/l	NC		30

Lab Duplicate Analysis

Batch Quality Control

Project Name: VTDEC-BENNINGTON

Project Number: ENG23-2810

Lab Number: L2354136

Report Date: 10/05/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 533 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1830017-4 QC Sample: L2353778-01 Client ID: DUP Sample						
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/l	NC		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85		87		50-200
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	86		87		50-200
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		86		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	99		86		50-200
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85		85		50-200
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		88		50-200
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98		88		50-200
Perfluoro[13C8]Octanoic Acid (M8PFOA)	90		88		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	103		91		50-200
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		88		50-200
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	94		88		50-200
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	104		99		50-200
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	129		116		50-200
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	103		104		50-200
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	115		113		50-200
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	81		88		50-200

Project Name: VTDEC-BENNINGTON**Lab Number:** L2354136**Project Number:** ENG23-2810**Report Date:** 10/05/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2354136-01A	Plastic 250ml Ammonium Acetate preserved	A	NA		3.1	Y	Absent		A2-533(28)
L2354136-01B	Plastic 250ml Ammonium Acetate preserved	A	NA		3.1	Y	Absent		A2-533(28)

Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Serial_No:10052316:30
Lab Number: L2354136
Report Date: 10/05/23

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
PERFLUOROETHER SULFONIC ACIDS (PFESAs)		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Serial_No:10052316:30
Lab Number: L2354136
Report Date: 10/05/23

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Lab Number: L2354136
Report Date: 10/05/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Lab Number: L2354136
Report Date: 10/05/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Lab Number: L2354136
Report Date: 10/05/23

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: VTDEC-BENNINGTON
Project Number: ENG23-2810

Lab Number: L2354136
Report Date: 10/05/23

REFERENCES

- 136 Determination of Per- and Polyfluoroalkyl Substances in Drinking Water by Isotope Dilution Anion Exchange Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 533, EPA Document 815-B-19-020, November 2019.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



CHAIN OF CUSTODY

PAGE 1 OF 1

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Project Information

Project Name: VT DEC - Bennington

Project Location: Bennington, Vermont

Project #: EN623-2810

Project Manager: Lee Rosberg

ALPHA Quote #:

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)

Date Due: _____ Time: _____

Date Rec'd in Lab: 9/15/23

ALPHA Job #: L2394136

Report Information - Data Deliverables

FAX EMAIL

ADEX Add'l Deliverables

Same as Client info PO # EN623-2810

invoices@wseinc.com

Billing Information

Client Information

Client: Weston & Sampson

Address: 98 S. Main St, Waterbury VT

Phone: 802 613 4106

Fax:

Email: Rosberg.Lee@wseinc.com

These samples have been previously analyzed by Alpha

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
<u>VT</u>	<u>VT Drinking Water MCL</u>

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS

EPA Method 533

TOTAL # BOTTLES

2

SAMPLE HANDLING

Filtration _____

Done

Not needed

Lab to do

Preservation _____

Lab to do

(Please specify below)

Sample Specific Comments _____

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
<u>54136-01</u>	<u>116 North Terrace Road ²³⁰⁹¹³</u>	<u>9/13</u>	<u>922</u>	<u>DW</u>	<u>SRHX</u>

Container Type P

Preservative Ammonia acetate

Relinquished By:	Date/Time	Received By:	Date/Time
<u>Jan Henry</u> <u>FEDEX</u>	<u>9/14 1514</u> <u>9/15/23 0944</u>	<u>FEDEX</u> <u>Lee Rosberg</u>	<u>9/15/23 0944</u>

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

ORIGIN ID:HVLA (802) 560-4111
SHIPPING MANAGER
BACK & SEND PLUS
38 N. MAIN ST
ON THE ROUNDABOUT
WATERBURY, VT 05676
UNITED STATES US

SHIP DATE: 14SEP23
ACT WGT: 11.15 LB
CRD: 25435558/MSX13600
DTIS: 14X12X11 IN
BILL SENDER

TO **SAMPLE RECEIVING**
ALPHA ANALYTICAL INC.
320 FORBES BLVD

MANSFIELD MA 02048
REF: LEE ROSSBERG
DEPT:

(509) 566-8220
ONLY PKG ID: 96830



TRK# 7837 7299 8670
0201

XE PYMA

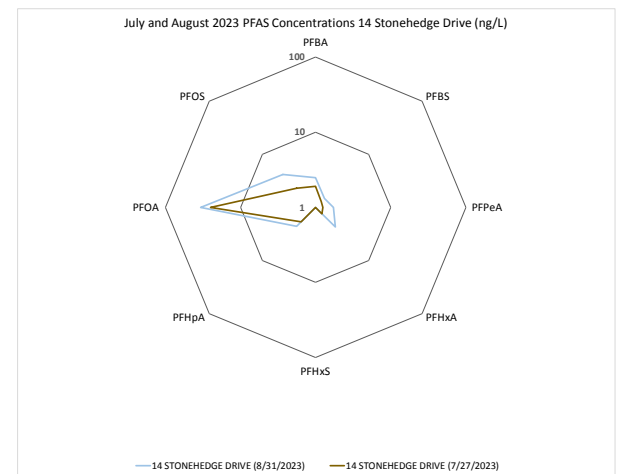
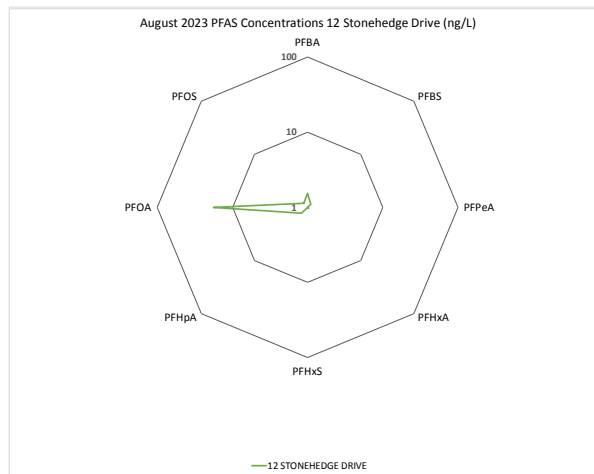
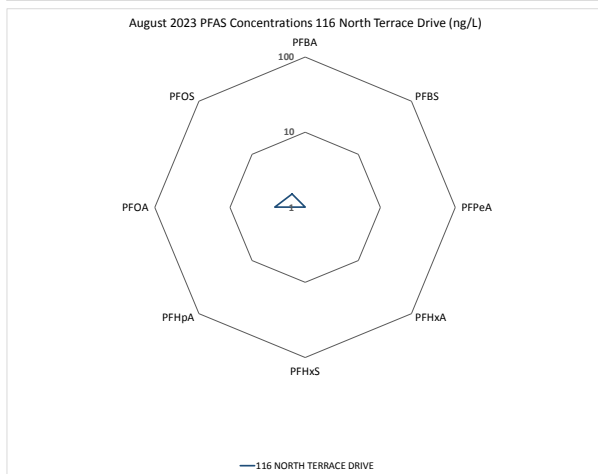
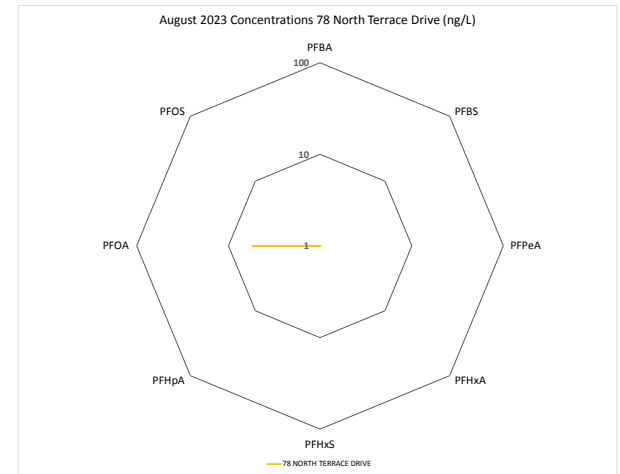
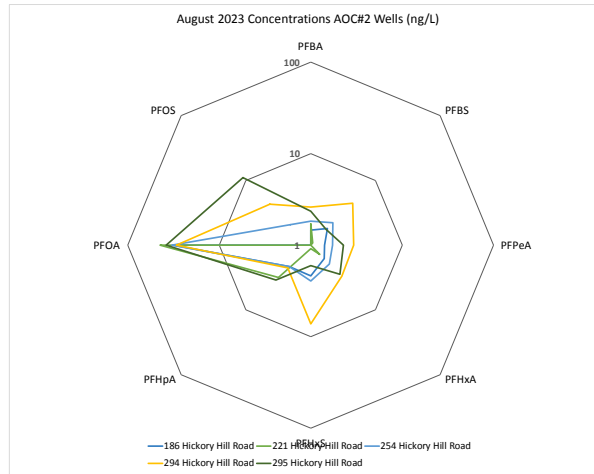
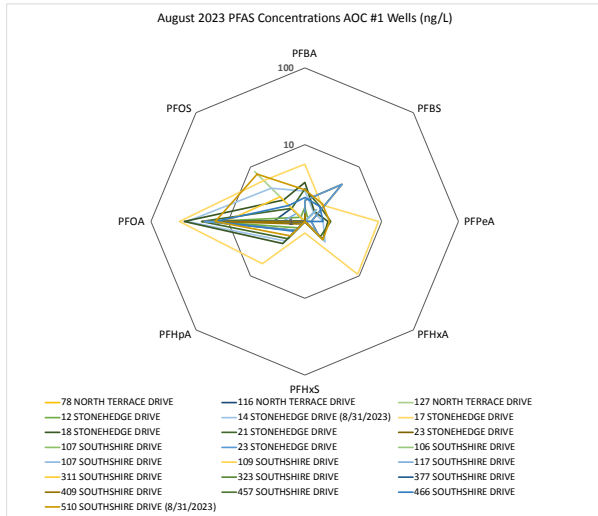
FRI - 15 SEP 10:30A
PRIORITY OVERNIGHT

02048
MA-US **BOS**

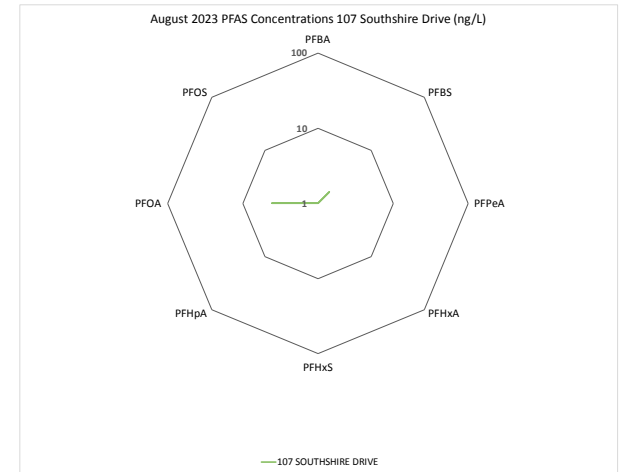
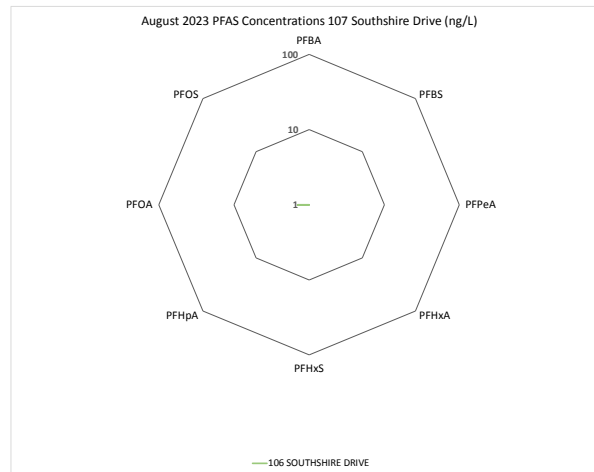
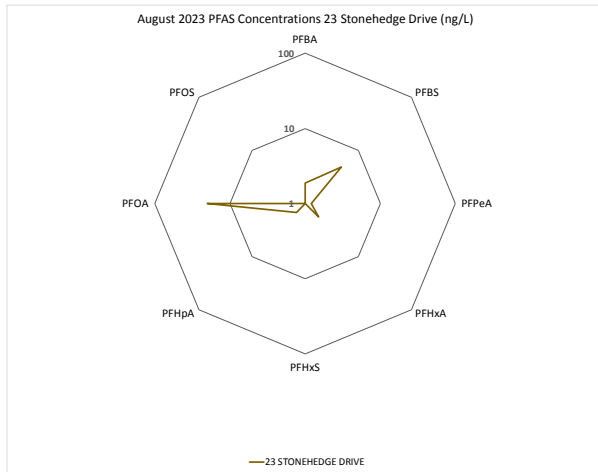
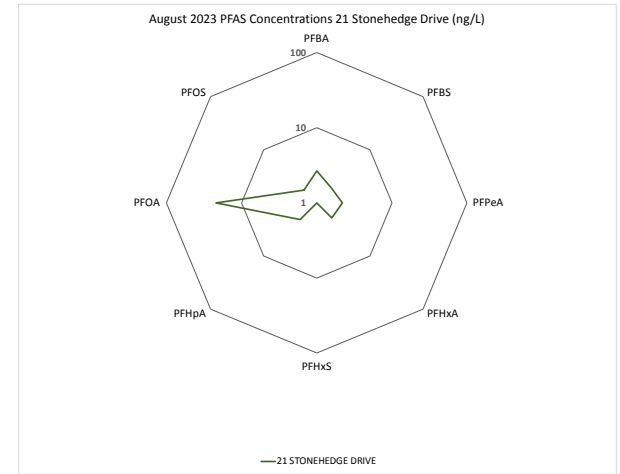
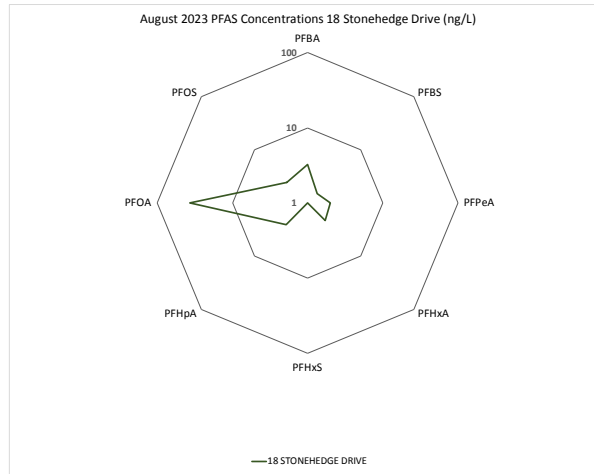
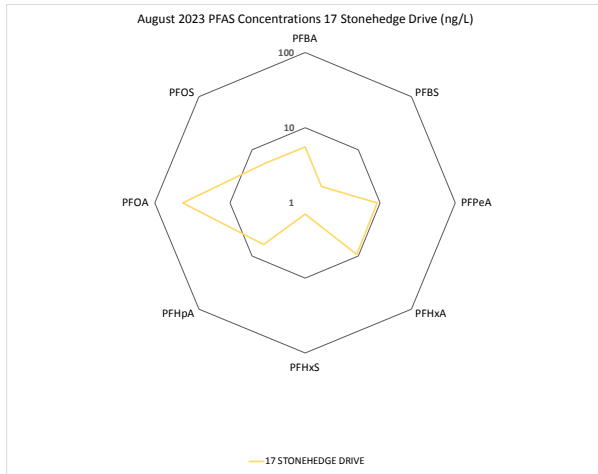


APPENDIX B

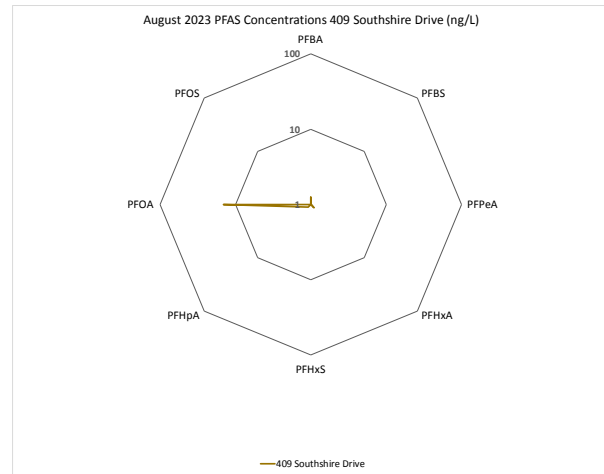
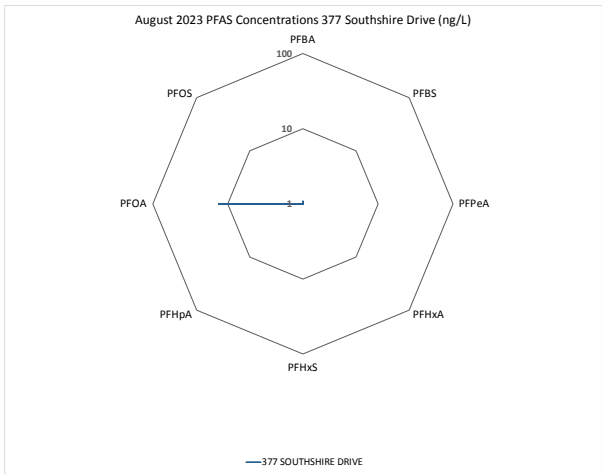
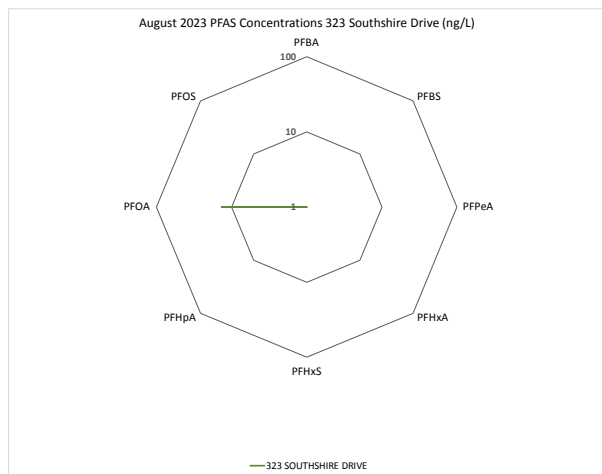
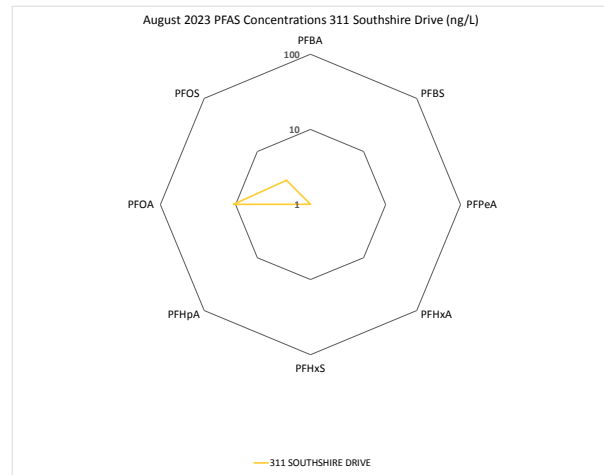
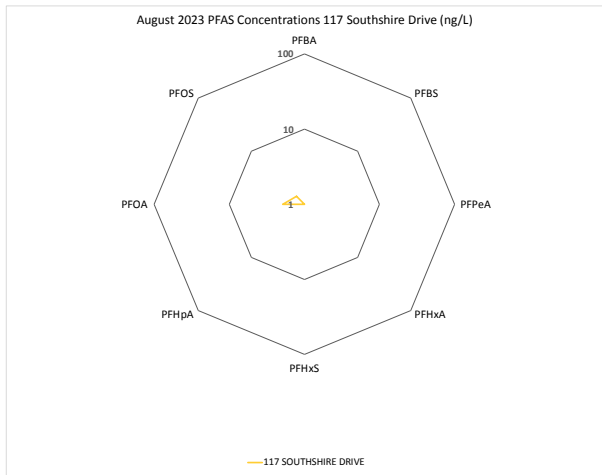
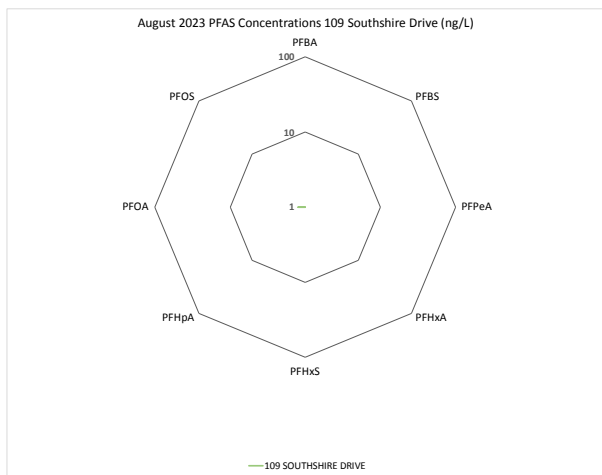
BENNINGTON, VT PFAS MULTIVARIATE PLOTS



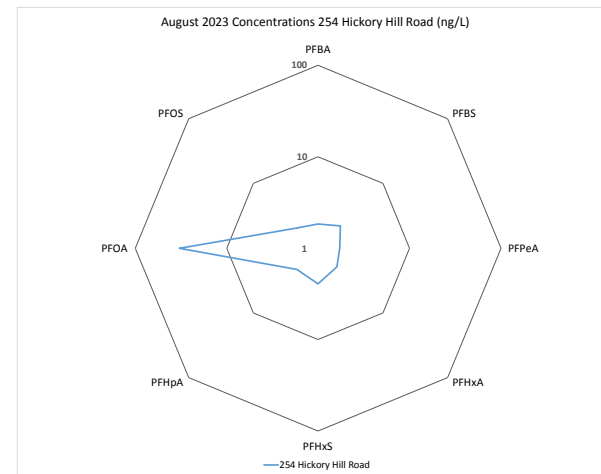
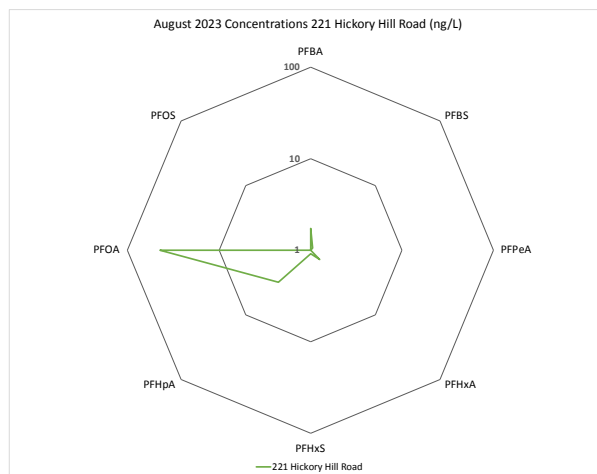
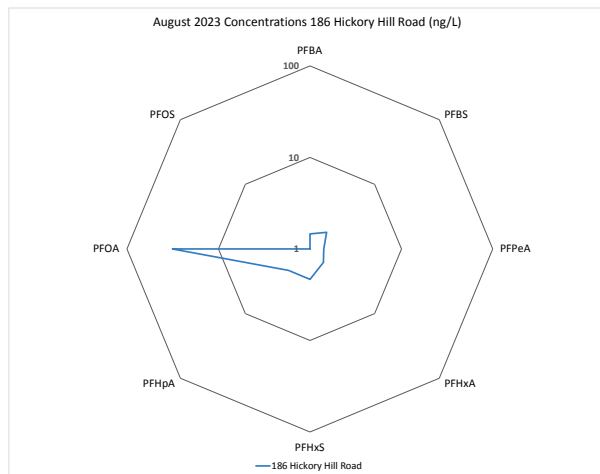
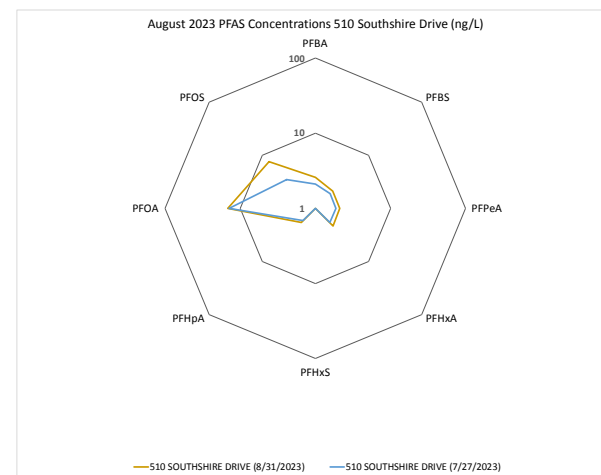
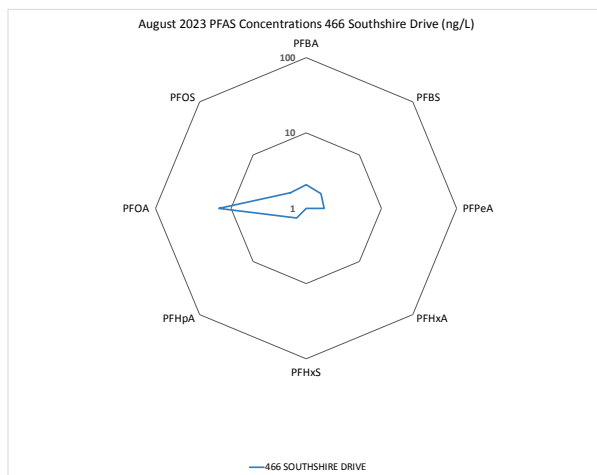
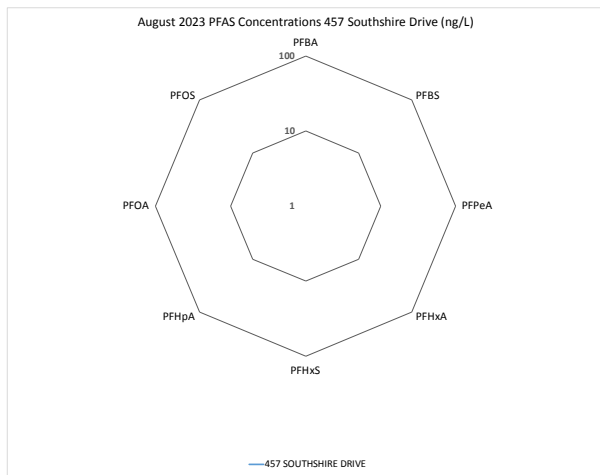
BENNINGTON, VT PFAS MULTIVARIATE PLOTS



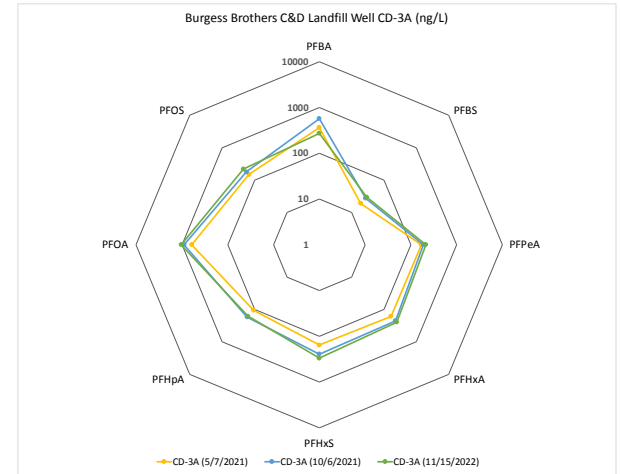
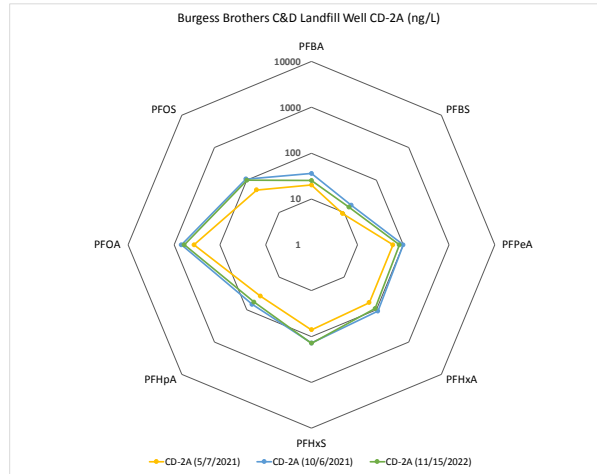
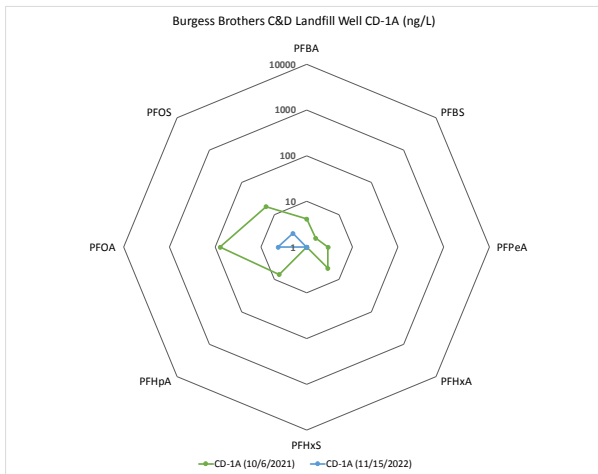
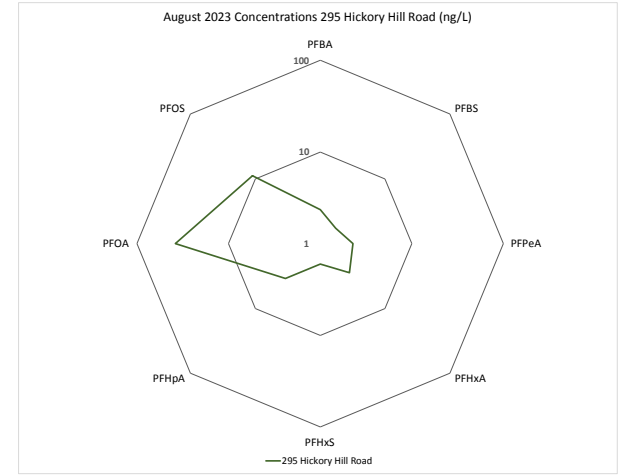
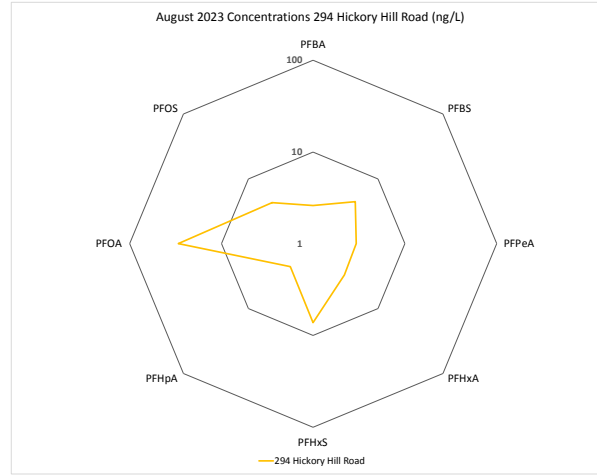
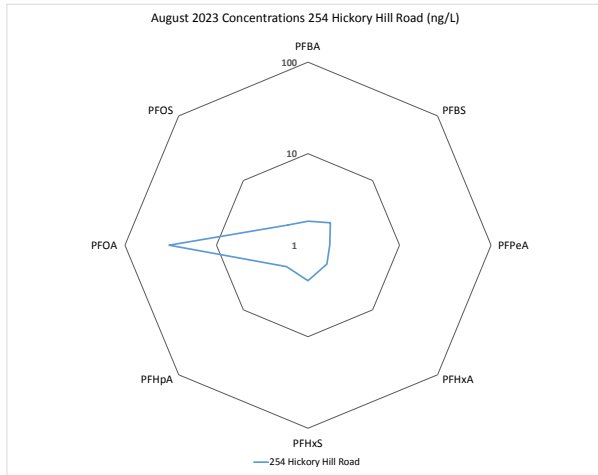
BENNINGTON, VT PFAS MULTIVARIATE PLOTS



BENNINGTON, VT PFAS MULTIVARIATE PLOTS



BENNINGTON, VT PFAS MULTIVARIATE PLOTS



BENNINGTON, VT PFAS MULTIVARIATE PLOTS

