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SUPPLEMENTAL SITE ASSESSMENT REPORT

Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida
ERIC_5641
FDEP Contract HW683, Task Assignment SA203-2

Prepared for

Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Prepared by

Geosyntec Consultants, Inc.
19321 U.S. Highway 19 North
Building C, Suite 200
Clearwater, FL 33764

Project FR7522D

7 April 2023

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1. INTRODUCTION

1.1 Overview

Geosyntec Consultants, Inc. (Geosyntec) has prepared this Supplemental Site Assessment Report for the Former Florida State Fire College (FFSFC; herein, the "Site") located at 1501 West Silver Springs Boulevard in Ocala, Florida (**Figure 1**) on behalf of the Florida Department of Environmental Protection (FDEP). This work was conducted in accordance with Task Assignments HW683-SA160 and HW683-203.

1.2 Objectives

The objectives of this investigation were to further evaluate the extent and magnitude of per- and polyfluoroalkyl substances (PFAS) in Site media including soil, groundwater, sediment, and surface water.

1.3 PFAS Overview

The Interstate Technology and Regulatory Council (ITRC) has developed fact sheets and guidance documents to summarize the latest science and emerging technologies for PFAS. According to the ITRC PFAS Technical and Regulatory Guidance, it is estimated that PFAS may consist of 5,000 to 10,000 manmade fluorinated organic chemical compounds that have been extensively manufactured since the mid-20th century (ITRC, 2021).

PFAS are widely used due to their unique physical and chemical properties (e.g., surfactant, oil-repelling, water-repelling, etc.) (ITRC, 2021; USEPA, 2017). One widely recognized use of PFAS is as a component in aqueous film forming foam (AFFF) (USEPA, 2017). AFFF has been stored and used by the military, airports, and other firefighting and fire-training facilities to extinguish hydrocarbon fires (ITRC, 2020; USEPA, 2017). PFAS are emerging environmental contaminants of concern due to evidence of their potential human health effects or environmental risks. When released to the environment, some PFAS have been shown to be stable, mobile, persistent, and bioaccumulative (ITRC 2020; USEPA 2017).

PFAS have been manufactured using two major processes: electrochemical fluorination (ECF) and fluorotelomerization (ITRC, 2021). Both perfluoroalkyl substances and polyfluoroalkyl substances may be manufactured using ECF and fluorotelomerization. Perfluoroalkyl substances are fully fluorinated and include perfluoroalkyl acids (PFAAs) and perfluoroalkane sulfonamides (FASAs). Polyfluoroalkyl substances are partially fluorinated and have a non-fluorine atom attached to at least one of the carbon atoms (ATSDR, 2017; ITRC, 2021). Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) are two perfluoroalkyl substances (specifically PFAAs) (ITRC, 2021; USEPA, 2017).

PFAAs are considered to be less complex compared to other PFAS and essentially do not degrade under normal environmental conditions. As a result, they are much more persistent compared to other PFAS and have been the focus of the majority of regulatory screening criteria. PFAAs may be found at sites from the use and release of products that contain these molecules or may be found

in the environment as the result of polyfluoroalkyl substance degradation. Polyfluoroalkyl substances that degrade into PFAAs are referred to as "precursors." According to ITRC, longer chain PFAAs are not known to degrade to shorter chain PFAAs in the environment. However, FASAs can degrade to form PFAAs (ITRC, 2021).

PFAAs are divided into two major subgroups: perfluoroalkyl carboxylic acids (PFCAs) and perfluoroalkane sulfonic acids (PFSAs). PFSAs are produced only using the ECF process, but PFCAs are produce using both ECF and fluorotelomerization. Additionally, PFSAs and PFCAs may also be found in the environment from the transformation of different precursors. Because of the persistence of PFAAs in the environment, some have been phased out of production and replaced with other PFAS chemistries (ITRC, 2021).

1.4 Assessment Overview

Geosyntec completed Site-wide soil and groundwater assessment activities in October 2020 at FFSFC (Task Assignment HW550-SOL-0A096), and the results indicated that concentrations of PFOA and/or PFOS were detected above FDEP's provisional cleanup target levels (CTLs) in soil and groundwater (see **Section 1.5** regarding provisional CTLs). Following the initial assessment, further investigation was needed on the City of Ocala property to the north and east of the Site (**Figure 2**).

Geosyntec continued assessment activities at FFSFC (Task Assignment HW550-SOL-0A118) between March and April 2021 to evaluate the extent and magnitude of PFAS in soil and groundwater. During this time, Geosyntec collected a total of 290 soil samples from 74 boring locations, 93 direct push technology (DPT) groundwater samples from 25 screen point locations, 1 groundwater sample from 1 irrigation supply well, and associated quality assurance and quality control (QA/QC) samples (**Table 1** and **Figure 3**). Additionally, in May 2021, Geosyntec oversaw the installation of 8 monitoring wells across the Site. Results from the March to June 2021 sampling activities indicated concentrations of PFOA and/or PFOS were detected above FDEP's provisional CTLs in soil and groundwater. The site assessment activities conducted from October 2020 to June 2021 and the results were described in the *Site Assessment Report* (SAR) dated 11 August 2021 (Geosyntec, 2021a).

Supplemental soil and groundwater sampling activities were conducted from March to April 2022 (Task Assignment HW683-SA160) and included soil, surface water, groundwater, and sediment assessment activities to evaluate the extent of PFAS in these respective media. Results from March to April 2022 indicated concentrations of PFOA and/or PFOS were detected above FDEP's provisional CTLs in soil and groundwater, and concentrations in surface water could represent a potential exposure pathway for human health and supplemental investigations activities were warranted. Additional monitoring well installation and soil and groundwater sampling activities were conducted from November 2022 to January 2023 (Task Assignment HW683-203). This report documents supplemental assessment activities and results conducted between March 2022 to January 2023 in **Section 4**.

Prior to the assessment activities, Geosyntec prepared work plans that described the proposed sampling activities for FDEP review. The work plans included figures showing the proposed

sampling locations and tables summarizing the sampling locations, matrices, depth intervals, sampling methods, laboratory analyses, rationale, and screening criteria. A comprehensive table listing samples collected at the Site to-date is provided as **Table 1**.

1.5 Laboratory Analysis and Data Screening Process

Samples collected from environmental media including groundwater, sediment, soil, and surface water were packed on wet ice and transported under chain-of-custody to the FDEP Laboratory. Samples were analyzed for PFAS by the FDEP Laboratory using FDEP Standard Operating Procedure (SOP) LC-001-3.

CTLs for individual PFAS have not been promulgated under Chapter 62-777, Florida Administrative Code (FAC). Following the procedures promulgated in Chapter 62-777 FAC, Chapter 62-780 FAC, and at the request of FDEP, the University of Florida (UF) calculated provisional soil cleanup target levels (SCTLs) for residential-direct exposure (R-), commercial/industrial-direct exposure (I-), and provisional groundwater leachability (L-) SCTLs for PFOA and PFOS. Following the promulgated procedures, UF also calculated provisional groundwater cleanup target levels (GCTLs) for PFOA and PFOS. The formulas, assumptions, and chemical-specific parameters used in the calculations are presented in letters prepared by UF included in **Appendix A**. The following table summarizes the provisional cleanup target levels.

Provisional Cleanup Target Level	PFOA	PFOS	PFOA + PFOS*	Units**
R-SCTL	1,300	1,300	Not applicable	µg/kg
I-SCTL	25,000	25,000	Not applicable	µg/kg
L-SCTL	2	7	Not applicable	µg/kg
Groundwater	70	70	70	ng/L

* PFOA + PFOS indicates the summation of PFOA and PFOS.

** µg/kg indicates micrograms per kilogram and ng/L indicates nanograms per liter.

The provisional CTLs were used as the primary screening criteria to evaluate the nature and extent of PFAS in soil and groundwater. The analytical results of the media sampled at the Site were evaluated to identify PFAS present at concentrations that exceed applicable screening criteria and assess areas of the Site that may require further investigation. For general Site characterization, both soil and groundwater were screened against human health criteria. Soil data were compared to the provisional L-, R-, and I-SCTLs, and groundwater data were compared to the provisional GCTLs.

At the request of FDEP, UF calculated irrigation well screening levels (IWSLs) for PFOA and PFOS based on the protection of human health under an irrigation scenario, including the irrigation of lawns, ornamental beds, and vegetable crops. The formulas, assumptions, and chemical-specific parameters used in the calculations are presented in a white paper prepared by UF included in

Appendix A. The following table summarizes the IWSLs for residential (R-IWSL), industrial (I-IWSL), and produce (P-IWSL) scenarios.

Irrigation Well Screening Levels	PFOA (ng/L)	PFOS (ng/L)
R-IWSL	6,700	72,000
I-IWSL	750,000	370,000
P-IWSL	NA (10)	600

NA indicates not applicable since the Briggs plant uptake model is not applicable for chemicals (e.g., PFOA) with a log Kow greater than 4.5.

At the request of FDEP, UF also calculated surface water screening levels for PFOA and PFOS based on the protection of human health based on fish and shellfish ingestion pathways. The formulas, assumptions, and chemical-specific parameters used in the calculations are presented in a white paper prepared by UF included in **Appendix A**. The following table summarizes the surface water screening levels.

Surface Water Screening Levels for PFOA and PFOS		
Surface Water Screening Levels Based on the Consumption of Freshwater and Estuarine Finfish and Shellfish	PFOA	PFOS
	500 ng/L	10 ng/L

Currently, the screening levels for surface water are non-regulatory and non-enforceable. Neither provisional CTLs nor screening levels for sediment has been calculated. Therefore, the analytical results from these media were evaluated to identify potential exposure pathways and/or potential sources of PFAS.

2. SITE DESCRIPTION AND HISTORY

2.1 Site Location

The Site is located at the Hampton Center at 1501 West Silver Springs Boulevard in Ocala, Marion County, Florida. The Site property lies within Section 18, Township 15 South, and Range 22 East and encompasses approximately 4.64 acres. According to the FDEP website (FDEP, 2023a), the FFSFC included a large warehouse, burn buildings and pits, and other fire training areas before relocating to the current Florida State Fire College in Reddick, Florida. The Hampton Center, which contains a satellite campus for the College of Central Florida, now resides on the FFSFC property.

The Site is bordered by the City of Ocala Dr. Martin Luther King, Jr. Recreational Complex to the east and north and mixed residential/commercial properties to the south and west. The United States Geological Survey topographic map showing the Site location is provided as **Figure 1**. The Site Vicinity map is presented in **Figure 2**.

2.2 Site Utilities

There are multiple underground utility lines including water, sanitary, stormwater, electric, telecommunication, and gas located within the areas of environmental assessment activities at the Site. The Site is served by an on-Site water-supply well (herein, the "Irrigation Well") for grounds maintenance. The Irrigation Well is used on a routine basis (see **Figure 3**). The Irrigation Well is screened from 105 to 140 feet (ft) below land surface (BLS), and the average daily volumes of water withdrawn are unknown.

2.3 Topography and Drainage

The topography of the Site is generally flat with some low-lying areas. The elevation across the Site varies from approximately 65 to 80 ft above mean sea level relative to the North American Vertical Datum 1988 (**Figure 1**).

The Site Vicinity Map (**Figure 2**) depicts a low-lying stormwater basin on-Site along the eastern property boundary and along the north/northeastern property boundary. Multiple stormwater grates are located within the parking lot of the Hampton Center and drain into the low-lying stormwater basin during rainfall events. The stormwater basin was observed to hold water once during a high-volume rainfall event.

On a larger scale, stormwater that overflows low-lying basins within the Site and the adjoining park is directed via the Martin Luther King, Jr. Avenue stormwater sewer network to a holding pond (designated by the City of Ocala as WRA #127) located within the northeast corner of the Dr. Martin Luther King, Jr. Recreational Complex. The holding pond is secured from public access with a chain link fence. The City of Ocala drainage well NCF_15644_DRN_2_P2 is located within holding pond WRA #127 and accepts overflow from the holding pond. According to the St. Johns River Water Management District (SJRWMD) website, the drainage well is 129 ft deep

and cased from land surface to 29 ft BLS (SJRWMD, 2023). Based on these construction details, the drainage well may serve as a conduit for surface water to the Upper Floridan aquifer.

2.4 Water Well Desktop Survey

A water well desktop survey was conducted within a 1-mile radius of the Site through the Florida Department of Health (FDOH) and SJRWMD websites (FDOH, 2023; SJRWMD, 2023). A total of 4 non-potable supply wells, listed as irrigation, were identified by FDOH between a 0.5 and 1-mile radius from the Site. A total of 25 active SJRWMD wells were identified within a 0.5-mile radius with well usage types listed as domestic, drainage, irrigation, irrigation – landscape, other, and other/unknown. A total of 78 SJRWMD wells were identified between a 0.5- and 1-mile radius from the Site with well types listed as agriculture, domestic, drainage, environmental, irrigation, irrigation - landscape, other, and other/unknown (see **Figure 4**). Further designation of the wells as potable or non-potable was not provided for the SJRWMD wells. **Table 2** includes detailed information of the wells included on **Figure 4**.

2.5 Operational Description

According to the FDEP website (FDEP, 2023a), firefighting training was performed at this facility starting in 1939 before being relocated to its current location in Reddick, Florida. While at this Ocala address, the college held approximately six classes per year. Firefighting exercises were performed in the north and central portions of the Site. The east-central portion of the Site contained a large warehouse with an 8 by 16 ft sump adjacent to the eastern wall of the building ("warehouse sump"). North of the warehouse was a concrete block structure used as a target for fire appliance testing and practice. Water from the appliances was aimed at the target and deflected by the concrete block structure into two adjacent sumps ("target sump") before traveling through a buried line to the warehouse sump. Hay or wooden pallets were burned with diesel fuel in seven burn pits across the Site and extinguished. Two burn buildings, a four-story structure and a two-story structure, and a former tank trailer were located in the west-central portion of the Site, and pallets and fuel were also burned and extinguished at these locations. Historically, the Site was relatively flat, but there was off-Site drainage to the northeast and a drainage ditch ("historic drainage ditch") that extended from the two-story burn building and former tank trailer area to a storm sewer on the west-central Site boundary (Ecology and Environmental, Inc. (E&E), 1992). Historical documents and photographs show that the facility stored up to 25 AFFF drums on-Site with 19 drums in the target sump area and 6 drums in the warehouse sump area. These drums were observed in the early 1990's during an environmental assessment of hydrocarbon contamination related to firefighting training exercises (FDEP, 2023a). Historical Site features provided by FDEP are shown in **Figure 5**, and historical Site photos are included as **Appendix B**.

2.6 Previous Investigations

According to the FDEP Information Portal website, no known environmental investigations for PFAS have been previously conducted or reported to the FDEP for the Site, but an environmental assessment for hydrocarbon contamination was conducted in the early 1990's following a written complaint from a resident of Ocala (FDEP, 2023b). Assessment activities conducted by E&E

began in September 1990 mark the initial environmental investigations at the Site (E&E, 1992). Following the submittal of the Preliminary Environmental Contamination Assessment Report by E&E, there is no record of any additional assessment activities on the FDEP Information Portal until the preliminary PFAS assessment conducted by Geosyntec in October 2020 (FDEP, 2023b).

3. GEOLOGY AND HYDROGEOLOGY

3.1 Regional Geology and Hydrogeology

The Site is in the Central Valley physiographic subdivision of the Central or Mid-Peninsular Zone geomorphologic province of Florida (Hoenstine et al., 1988). The Central Valley is a low, flat area that extends over central Marion County. It ranges in elevation from approximately 50 to 75 ft National Geodetic Vertical Datum. The Oklawaha River watershed runs through this subdivision. Also associated with this subdivision are lakes and riverine wetlands. These features are mantled by a thin veneer of sand. The clay content generally increases with depth (Lane and Hoenstine, 1991).

The vast majority of Marion County has karst terrain or topography. This includes sinkholes and cavernous springs. Throughout central Marion County, primarily within the Central Valley subdivision and the Oklawaha River watershed, more than 200 feet thick of cohesive sediments interlayered with discontinuous carbonate beds exist. Sinkholes in this area are few. When they do exist, they are of large diameter, deep, and are the cover-collapse variety (Lane and Hoenstine, 1991; Sinclair and Stewart, 1985).

There are three hydrostratigraphic units present in Marion County that include: the surficial aquifer system, intermediate aquifer system/confining unit, and the Floridan aquifer system. The surficial and intermediate aquifer systems occur sporadically in Marion County (Lane and Hoenstine, 1991).

The surficial aquifer system consists of Pleistocene to Holocene undifferentiated sand, clayey sand, and clay sediments and the sands and minor clays of the Cypresshead Formation (Fm). This also includes what was formerly referred to as the Jackson Bluff Fm, Alachua Fm, and Fort Preston Fm. The surficial aquifer system does not exist as a continuous unit in many parts of Marion County. This is particularly evident in western Marion County, where the Hawthorn Group is absent. Sand and clay lenses may allow for the existence of a perched water table that can retain water for a short period of time. A surficial aquifer system may be present in areas having an appreciable thickness (tens of feet) of interbedded sand and clay deposits. Where present, the surficial aquifer system (water table) is found generally 10 to 40 ft BLS. The surficial aquifer system is recharged primarily by rainfall and is reportedly not used as a major source of water near the Site; however, where present, it may be used for stock and irrigation watering (Lane and Hoenstine, 1991; Miller, 1986).

The intermediate aquifer system/confining unit may be present in isolated pockets of relatively thick Miocene Epoch Hawthorn Group sediments. These sediments typically have a high phosphate content and consist of interbedded sands, sandy clays, clayey sands, dolostones, and clays. The Hawthorn Group is generally absent in western Marion County. Where present, it averages approximately 50 ft thick in central and eastern Marion County and approximately 20 to 30 ft thick in Ocala. The intermediate aquifer system is reportedly not used as a major source of water in the county (Lane and Hoenstine, 1991).

The Floridan aquifer system is the major source of drinking water in the area and consists of carbonate (limestone and dolomite) deposits of the Eocene Epoch. The most productive portion is referred to as the Upper Floridan aquifer. The units include, in descending order, the Ocala Limestone Fm, and Avon Park Fm. The Upper Floridan aquifer is solution riddled and faulted. The Floridan aquifer exists under unconfined to semi-confined conditions and the top of the aquifer can be found as shallow as land surface in some parts of Ocala. The Floridan aquifer system is between 600 ft (southwest Marion County) to 1,900 ft (southern Marion County) thick. The Ocala area is in an area of high recharge to the Floridan aquifer system (Lane and Hoenstine, 1991).

The Floridan aquifer system in Marion County consists of two major permeable zones. The two zones (the Upper and Lower Floridan aquifers) are separated by middle semi-confining units, commonly referred to as Middle Confining Unit I and/or Middle Confining Unit II. Middle Confining Unit I is present in the eastern half of Marion County, while Middle Confining Unit II is present in mostly in the western half. The Upper Floridan aquifer consists of, in descending order, the Ocala Limestone and the upper portions of the Avon Park Fm. Middle Confining Unit I is a zone of slightly lower permeability and consists of dense dolostone interbedded with limestones within the middle third of the Avon Park Fm. The contrast in permeability between rocks in Middle Confining Unit I and the rocks of the Upper and Lower Floridan aquifer is less than any other Middle Confining Unit in the Southeastern United States. Solution cavities and dissolution enlargement of fault planes and fractures transecting this semi-confining unit allows for interchange of water between the two permeable sections of the aquifer. Middle Confining Unit II consists of low permeability anhydritic/gypsiferous dolomite and dolomitic limestone. It is present within the middle portion of the Avon Park Fm. Middle Confining Unit II is considered a non-leaking confining unit. The Lower Floridan aquifer consists of, in descending order, the lower third of the Avon Park Fm, the Oldsmar Fm, and upper portions of the Cedar Key Fm. The Lower Floridan aquifer generally contains highly mineralized water. In the northern half of Lake County, where Middle Confining Unit II is absent, the contrast in permeability between rocks in Middle Confining Unit I and the rocks of the Upper and Lower Floridan aquifer is less than any other Middle Confining Unit in the southeastern United States (Miller, 1986).

3.2 Site-Specific Geology

Geosyntec documented lithology from soil borings and monitoring well installations, and two cross section transects were drawn to generalize Site lithology as presented on **Figure 6**, **Figure 7**, and **Figure 8**. Lithology documented during DPT soil borings consists of sand with silt/clay nodules that extend from the land surface to depths ranging from 0.5 to 18 ft BLS and is underlain by an interbedded sandy clay and clayey sand with minor amounts of chert. As documented during monitoring well installations, this unit is underlain by limestone, and as shown on the cross sections (**Figure 7** and **Figure 8**), the contact depth between the unconsolidated sediments and limestone varies. Limestone generally occurs at approximately 30 ft BLS at the Site, but the depth ranges from 19 to 36 ft BLS (Geosyntec, 2020 and 2021b).

The general lithology observed during monitoring well installation at FFSFC and the surrounding area consists of surficial sands of variable thickness (5 to 20 ft observed) with varying amounts of fines (plastic and non-plastic). The surficial deposits are underlain by medium to high plastic,

brown/greenish grey clay of varying thickness (20 to 30 ft observed) and density identified as Hawthorn Group sediments. These sediments also include interbedded chert. The clay unit rests on top of white to cream fossiliferous, friable limestone consistent with the Ocala Limestone of the Upper Floridan aquifer (Geosyntec, 2021b).

Significant voids were encountered during the installation and drilling at DEPMW-7 (100-120') and DEPMW-9 (150-170'), respectively. During the installation of DEPMW-7 (100-120') in May 2021 a 20-ft void was encountered from approximately 95 to 115 ft BLS. During the drilling of DEPMW-9 (150-170'), a 40-ft void was encountered from 160 to 200 ft BLS.

3.3 Site-Specific Hydrogeology

Geosyntec collected depth-to-groundwater (DTW) measurements in the monitoring well network associated with the Site (see **Section 4.4** and **Appendix C**) in January 2023 prior to groundwater sampling. Based on the measurements, groundwater surface elevation contour figures were generated for monitoring wells screened within the three monitored intervals including 20 to 45 ft BLS, 100 to 120 ft BLS, and 150 to 185 ft BLS. **Figure 9** depicts groundwater elevations in wells screened from 20 to 45 ft BLS, **Figure 10** depicts groundwater elevations in wells screened from 100 to 120 ft BLS, and **Figure 11** depicts groundwater elevations in wells screened from 150 to 185 ft BLS.

Groundwater in wells screened from 20 to 45 and 100 to 120 ft BLS generally flows east/northeast across the Site, which is consistent with historic flow directions from 1992 (E&E, 1992). Groundwater flow in wells screened from 150 to 185 ft BLS was generally to the southeast, but additional data are warranted based on the limited number of wells installed. Based on DTW measurements from January 2023, the difference in groundwater elevations between wells screened between 20 and 45 ft BLS and wells screened between 100 to 120 ft BLS in each well pair are 0.03 ft or less, which indicates that a strong vertical hydraulic gradient is not present. Additionally, a similar difference in groundwater elevation of 0.02 ft was observed between DEPMW-5 (100 to 120') and DEPMW-11 (165-185'), which indicates that a strong vertical hydraulic gradient is not present between these intervals. The similar groundwater flow direction and groundwater elevations in the wells installed from 20 to 45 ft BLS and 100 to 120 ft BLS, along with observed lithology during well installation activities, demonstrates that these wells are installed in the same aquifer, which includes Ocala Limestone Fm of the Upper Floridan aquifer. Due to the absence of the surficial aquifer and the inconsistent presence of clays, the Upper Floridan aquifer is under unconfined to semi-confined conditions across the Site.

4. SITE CHARACTERIZATION AND RESULTS

4.1 Overview

Field activities were performed in general accordance with FDEP SOPs for Field Activities and internal SOPs for PFAS sampling that were developed by Geosyntec. The sampling locations (including QA/QC samples), matrices, depth intervals, sampling methods, laboratory analyses, rationale, and screening criteria used during the assessment activities are summarized on **Table 1**, which reflects any deviations from the Site Assessment Work Plans (and which are further discussed in the sections below). Sample locations are provided on **Figure 3**. Field forms are provided in **Appendix C**, and laboratory analytical reports are provided in **Appendix D**.

Geosyntec updated the Site-specific Health and Safety Plan (HASP) in October 2022 to address project-specific hazards that were known or suspected to be present due to existing conditions and work to be performed at the Site. This HASP met the requirements specified in the Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response program and Geosyntec's internal health and safety standards. Geosyntec maintained the HASP on-Site during assessment activities.

4.2 Utility Locate

Geosyntec observed GeoTek Services, LLC (GeoTek) perform underground utility surveys prior to soil sampling and/or drilling activities on 28 March 2022 and 15 November 2022. During the surveys, GeoTek utilized electromagnetic induction and ground penetrating radar to identify any potential subsurface utilities or obstructions. The suspected underground utilities were marked on land surface and sampling or monitoring well locations were repositioned as necessary to avoid potential subsurface conflicts.

4.3 Soil Assessment

Geosyntec collected soil samples during the previous investigations and conducted hand-auger soil sampling at a total of five boring locations during the March and December 2022 assessment activities. Soil sample locations are presented on **Figure 12**.

4.3.1 Soil Sampling Methodology

To date, Geosyntec has collected a total of 305 discrete soil samples from 79 boring locations for laboratory analysis, which included 15 discrete soil samples from 5 locations for laboratory analysis in March and December 2022. Soil samples from depths less than 6 ft BLS were collected using decontaminated stainless-steel hand augers, and soil samples from depths greater than 6 ft BLS were collected via DPT soil samplers to the approximate depth of the observed water table. Completed soil borings were backfilled with the unused soil cuttings corresponding to the specific soil boring location and interval from which the soil was removed or grouted upon completion. Soil sample intervals and identifications are included in **Table 1**.

QA/QC samples from March and December 2022 consisted of 1 field reagent blank (FRB-12) collected near the decontamination area and 2 equipment blanks (EQB-49 and EQB-53) that were

collected from decontaminated hand auger buckets. PFOA and/or PFOS were not detected in these equipment blanks.

4.3.2 Soil Results and Conclusions

Comprehensive soil laboratory analytical results are summarized on **Table 3** and depicted on **Figure 12**. PFOS results are presented by individual depth interval on **Figure 13** through **Figure 18**. PFOA results are presented by individual depth interval on **Figure 19** through **Figure 24**. Comprehensive results from soil samples collected to date indicated the following:

- Concentrations of PFOA were above the provisional L-SCTL of 2 µg/kg at 10 locations and 18 discrete samples near former fire training areas; and
- Concentrations of PFOS were above the provisional L-SCTL of 7 µg/kg at 31 locations and 63 discrete samples near former fire training areas.

The results indicate that PFAS soil impacts extend from the land surface down to the water table. Soil impacts are generally located in the areas of the warehouse sump, target sump, and near the historic drainage ditch. The results indicate PFAS soil impacts are horizontally delineated at all depth intervals except to the south of SB-79 on the western side of the Site. Soil samples with detections of PFOS greater than the L-SCTLs that were collected in intervals immediately above the water table (e.g., 28 to 30 ft BLS) are considered vertically delineated by the water table. The greatest PFAS-impacted soils across the Site are associated with PFOS, and the highest concentrations detected are around the warehouse sump and target sump documented in **Figure 5**.

Based on these results and **Figure 5**, soils with the highest concentrations of PFAS are associated with the areas where AFFF was used and stored (e.g., warehouse sump and target sump). However, the historic drainage ditch that directed fluids and runoff from the fire training area to the western portion of the Site likely impacted soils. The current Hampton Center building was constructed in 2006, and impacted soils may extend beneath the building, along the western boundary of the property. Based on the results to date, additional soil sampling to the south of SB-79 is warranted to complete horizontal delineation. Additional soil sampling from 4 ft BLS to the water table (approximately 30 ft BLS) is warranted near SB-76 and SB-79 to evaluate vertical delineation at these locations since the runoff within the drainage ditch is an assumed "secondary" release mechanism that is different from the release mechanism in the fire training areas. Additionally, continued monitoring of the groundwater plume in the 20 to 45 ft BLS interval (i.e., water table) is warranted to evaluate plume stability over time and determine if the impacted soil is causing the plume to increase or migrate.

4.4 Groundwater and Surface Water Assessment

To date, Geosyntec has installed and sampled a total of 23 permanent monitoring wells (DEPMW-1 through DEPMW-23), sampled 1 irrigation well (Irrigation Well), conducted direct-push technology (DPT) groundwater sampling at 37 locations (SP-1 through SP-37), and collected surface water samples at 3 locations (SW-1 through SW-3). Sample locations are presented on **Figure 3**.

4.4.1 Monitoring Well Installation

To date, Geosyntec has installed 23 permanent monitoring wells. Since the 2021 SAR, Geosyntec has installed 15 additional monitoring wells including 6 wells in November 2022 and 9 wells in December 2022, which are discussed in this report. Monitoring well locations are presented on **Figure 3** and well construction details are presented in **Table 4**.

Geosyntec subcontracted with Preferred Drilling Solutions, Inc. (PDS) to install the 15 monitoring wells [DEPMW-9 (150-170') to DEPMW-23 (25-45')] varying in depths from 45 to 185 ft BLS using the rotosonic technique in November and December 2022. PDS utilized a post-hole digger and/or a hand auger to confirm the absence of subsurface utilities to a depth of up to 5 ft BLS or refusal prior to installing the monitoring wells. Based on these lithologic descriptions and previous descriptions, the 15 monitoring wells are considered to be installed at varying depths within the Upper Floridan aquifer in the Ocala Limestone Fm. Field boring logs containing lithologic descriptions are included in **Appendix C**.

With the exception of DEPMW-9 (150-170'), monitoring wells were constructed with 20 ft of 2-inch diameter polyvinyl chloride (PVC) well screen slotted at 0.010 inches and varying lengths of 2-inch diameter PVC riser to land surface. During installation of monitoring wells greater than a total depth of 45 ft BLS, a temporary override 8-inch casing was installed to a depth at least two feet into limestone (where encountered; approximately 35 to 80 ft BLS) to prevent seepage across the limestone. During installation of DEPMW-10 and DEPMW-11, stainless steel centralizers were installed at 50, 100, and 150 ft BLS to align the well screen within the center of the borehole and improve filter pack construction around the screen. Filter packs consisting of 20/30 silica sand were added from the well terminus to at least 2 ft above the top of the well screens. Fine sand seals (30/65 sand) were added to the monitoring wells installed across the water table (i.e., 45 ft BLS) and between 150 to 185 ft BLS to at least 3 ft above the top of the filter packs. Bentonite seals were added to the monitoring wells installed from 100 to 120 ft BLS to at least 4 ft above the top of the filter pack. The remaining annular space in each borehole above the fine sand or bentonite seals was completed using Portland cement to land surface.

Due to a void encountered during drilling, DEPMW-9 (150-170') was constructed with 20 ft of 2-inch diameter PVC pre-packed well screen slotted at 0.010 inches that was installed within the void without a filter pack. A 4-inch diameter rubber shale trap was used at the top of the pre-packed well screen to create bridging for the installation of 1 ft of coarse gravel and a 5-ft fine sand seal (30/65 sand) on top of the shale trap. The remaining annular space in the borehole above the fine sand seal was completed using Portland cement to land surface.

The monitoring wells were completed as flush mounts with 8-inch bolt-down manhole covers in 2 ft by 2 ft concrete well pads. The monitoring wells were developed using a submersible pump until the water was relatively free of sediment. Purge water generated during well development activities was containerized and transported off-Site for disposal (see **Section 4.7**). Well construction and development field forms are presented in **Appendix C**.

QA/QC samples collected during the monitoring well installation activities in December 2022 consisted of 2 field reagent blanks (FRB-11 and FRB-14) collected near the decontamination area

and during rainy conditions and 3 equipment blanks (EQB-54 through EQB-56) that were collected from decontaminated rotosonic drilling rods and casing. PFOA and/or PFOS were not detected in these equipment blanks.

4.4.2 Monitoring Well Surveying

On 3 January 2023, Kugelmann Land Surveying, Inc., a Florida-licensed surveyor, conducted a survey of the top-of-casing (TOC) elevations (North American Vertical Datum of 1988) and horizontal coordinates (Florida State Plane Coordinate System, East Zone, North American Datum of 1983) at the 15 monitoring wells. Monitoring well TOC elevations are included in **Table 4**. **Figure 3** depicts the locations of the monitoring wells using the surveyed horizontal coordinates.

4.4.3 Depth-to-Groundwater and Groundwater Sampling Methodology

Geosyntec measured depth-to-groundwater in 23 wells within the monitoring well network [DEPMW-1 (100-120') to DEPMW-23 (25-45')] and VISAMW [M-0200] on 3 January 2023 prior to groundwater sampling. Groundwater levels were measured to the nearest 0.01 ft using an electronic water-level indicator.

Groundwater samples were collected in March 2022 and January 2023 via submersible pump after stabilization of water quality parameters including temperature, conductivity, pH, turbidity, and dissolved oxygen. One duplicate sample was collected in March 2022 from DEPMW-6. Three duplicate samples were collected from DEPMW-6, DEPMW-9, and Irrigation Well in January 2023. Groundwater sampling logs and calibration forms are included with the field notes in **Appendix C**. The laboratory analytical reports are provided in **Appendix D**. Purge water generated during well sampling activities was containerized and transported off-Site for disposal (see **Section 4.7**).

QA/QC samples from March 2022 and January 2023 consisted of 2 field reagent blanks (FRB-9 and FRB-13) that were collected near the equipment decontamination areas and 4 equipment blanks (EQB-52 and EQB-57 through EQB-59) that were collected from decontaminated submersible pumps used for sampling. PFOA and/or PFOS were not detected in these equipment blanks.

4.4.4 Direct Push Groundwater Sampling Methodology

To date, Geosyntec has collected a total of 144 DPT groundwater samples (including 15 duplicates) from 37 screen point locations (SP-1 through SP-37), which included 51 groundwater samples (including 5 duplicates) from 12 locations for laboratory analysis in March and April 2022. Geosyntec subcontracted PDS to conduct DPT groundwater sampling in March and April 2022. DPT groundwater samples were collected using a 4-ft DPT groundwater screen point sampler. Drilling refusal was encountered at 10 screen point locations in March and April 2021 and 5 screen point locations in March and April 2022, and if the proposed depth intervals were not reached, a groundwater sample was taken above the depth of refusal. Groundwater samples were collected by inserting new high-density polyethylene (HDPE) tubing through the drilling rods to the groundwater screen point sampler and pumping water via peristaltic pump. A decontaminated check-ball valve was installed on the end of the HDPE tubing prior to inserting the tubing through

the drilling rods. Groundwater was manually lifted using the check-ball valve when the peristaltic pump did not produce water. The completed groundwater borings were backfilled with Portland cement to ground surface. Purge water and decontamination water generated during DPT groundwater sampling activities were containerized and transported off-Site for disposal (see **Section 4.7**).

QA/QC samples associated with DPT groundwater sampling consisted of 1 field reagent blank (FRB-8) collected near a sampling location and 4 equipment blanks (EQB-44 through EQB-47) that were collected from decontaminated screen point samplers. PFOA and/or PFOS were not detected in these equipment blanks.

4.4.5 Irrigation Well Sampling Methodology

Geosyntec collected groundwater samples from the on-Site Irrigation Well faucet located in the northwestern corner of the property in March 2022 and January 2023. The Irrigation Well is routinely used, but the volumes of water withdrawn from the well are unknown. Geosyntec assumes the Irrigation Well is installed in the Upper Floridan aquifer based on the screened interval of 105 to 140 ft BLS. During sampling, the Irrigation Well faucet was opened, and the water was allowed to purge for between 5 to 10 minutes prior to collecting a grab sample. One duplicate sample was collected in January 2023. Groundwater sampling forms are included with the field notes in **Appendix C**. The laboratory analytical reports are provided in **Appendix D**.

4.4.6 Surface Water Sampling Methodology

In March 2022, Geosyntec collected 3 surface water samples using the direct grab technique that were co-located with sediment samples (see **Section 4.5**) from a holding pond (designated by the City of Ocala as WRA #127) located within the northeast corner of the Dr. Martin Luther King, Jr. Recreational Complex. Sample locations are presented on **Figure 3**. QA/QC samples were not collected since sampling equipment was not used to collect the surface water samples.

4.4.7 Groundwater Elevation Results

DTW measurements and the surveyed TOC elevations were used to calculate groundwater elevations presented in **Table 5**. Groundwater elevation data from January 2023 were plotted, and groundwater elevation maps are provided on **Figure 9** (wells screened from 20 to 45 ft BLS), **Figure 10** (wells screened from 100 to 120 ft BLS), and **Figure 11** (wells screened from 150 to 185 ft BLS). During the January 2023 groundwater sampling event, groundwater was generally flowing east/northeast, across the Site for wells screened between 20 to 45 ft BLS and 100 to 120 ft BLS; these results are generally consistent with observed historic flow directions. Groundwater flow in wells screened from 150 to 185 ft BLS was generally to the southeast, but additional data are warranted based on the limited number of wells installed. As previously stated, the monitoring wells are installed in the same aquifer unit, and groundwater elevations in the wells are comparable. Therefore, Geosyntec anticipates that groundwater flow in the wells screened from 150 to 185 ft BLS is similar to the other depth intervals.

Based on DTW measurements from January 2023, the difference in groundwater elevations between wells screened between 20 and 45 ft BLS and wells screened between 100 to 120 ft BLS

in each well pair are 0.03 ft or less, which indicates that a strong vertical hydraulic gradient is not present. Additionally, a similar difference in groundwater elevation of 0.02 ft was observed between DEPMW-5 (100 to 120') and DEPMW-11 (165-185'), which indicates that a strong vertical hydraulic gradient is not present between these intervals. The similar groundwater flow direction and groundwater elevations in the wells installed from 20 to 45 ft BLS and 100 to 120 ft BLS, along with observed lithology during well installation activities (see **Section 3.2**), demonstrates that these wells are installed in the Ocala Limestone Fm of the Upper Floridan aquifer.

4.4.8 Groundwater Sampling Results and Conclusions

Laboratory analytical results for DPT groundwater and monitoring well samples are summarized in **Table 6** and **Table 7**, respectively. Comprehensive groundwater laboratory analytical results are depicted on **Figure 25**. The maximum groundwater PFOA + PFOS results at each screen point location and the most recent monitoring well PFOA + PFOS results for each monitoring well are depicted on **Figure 26**. The vertical extent of PFOA and PFOS from groundwater collected in January 2023 is depicted across A-A' in **Figure 27** and B-B' in **Figure 28**.

Comprehensive results from the DPT sampling events to date and the groundwater sampling event in January 2023 indicated the following:

- Within the 20 to 45 ft BLS monitored interval, the highest PFOA + PFOS groundwater concentrations above the provisional GCTL were detected at SP-5 (31-35') and DEPMW-8 (20-40'), which is located within the warehouse sump area, where drums of AFFF were stored. Groundwater PFOA + PFOS concentrations were also detected above provisional GCTLs off-Site at the upgradient location DEPMW-13 (25-45') and the downgradient location DEPMW-23 (25-45'). Based on the interpretations presented in this document, PFOA + PFOS concentrations are delineated to the east and south. Additional groundwater monitoring of DEPMW-13 (25-45'), DEPMW-23 (25-45'), and VISAMW [M-0200] is warranted to confirm the PFOA + PFOS exceedances in these wells and DEPMW-15 (25-45'), DEPMW-17 (25-45'), DEPMW-19 (25-45'), and DEPMW-21 (25-45') to confirm concentrations remain below provisional GCTLs. The results of this sampling event will support the selection of additional sampling locations to further refine and delineate PFOA + PFOS exceedances in groundwater. The distribution of PFOA + PFOS in groundwater indicates that impacted groundwater has migrated downgradient from the warehouse sump and target sump areas, and elevated PFAS concentrations are present at SP-20, SP-24, and SP-26. Therefore, the installation of monitoring wells in this area may be warranted to refine the conceptual site model and monitor plume stability. Based on the results of the soil sampling associated with the draining ditch, supplemental groundwater investigations in the southwestern portion of the property may also be warranted.

- Within the 100 to 120 ft BLS monitored interval, the highest PFOA + PFOS groundwater concentration above the provisional GCTL was detected at DEPMW-6 (100-120'), which is located approximately 600 to 700 ft downgradient from the warehouse sump and target sump areas. Similar to the 20 to 40 ft BLS monitored interval, groundwater PFOA + PFOS

concentrations were also detected above provisional GCTLs off-Site at the upgradient location DEPMW-12 (100-120') and the downgradient location DEPMW-22 (100-120'). Based on the interpretations presented in this document, PFOA + PFOS concentrations are delineated to the east and south. Additional groundwater monitoring of DEPMW-12 (100-120') and DEPMW-22 (100-120') is warranted to confirm the PFOA + PFOS exceedances in these wells and DEPMW-14 (100-120'), DEPMW-16 (100-120'), DEPMW-18 (100-120'), and DEPMW-20 (100-120') to confirm concentrations remain below provisional GCTLs. The results of this sampling event will support the selection of additional sampling locations to further refine and delineate PFOA + PFOS exceedances in groundwater. Similar to the discussion associated with wells installed in the 20 to 45 ft BLS internal, the installation of monitoring wells downgradient from the warehouse sump and target sump areas (e.g., SP-20, SP-24, and SP-26) may be warranted to refine the conceptual site model and monitor plume stability.

- Within the 150 to 185 ft BLS monitored interval, the highest PFOA + PFOS groundwater concentration above the provisional GCTL was detected at DEPMW-9 (150-170'), which is located immediately downgradient of the warehouse sump area. Due to the significant voids encountered while drilling at DEPMW-7 (100-120') and DEPMW-9 (150-170'), the installation of a deeper well near DEPMW-9 (150-170') is not recommended. The delineation of groundwater exceedances in this depth interval is achieved by DEPMW-10 (160-180') and DEPMW-11 (165-185'). Additional groundwater monitoring of DEPMW-9 (150-170') is warranted to confirm the PFOA + PFOS exceedance in this well and DEPMW-10 (160-180') and DEPMW-11 (165-185') to confirm concentrations remain below provisional GCTLs. The results of this sampling event will support the selection of additional sampling locations to further refine and delineate PFOA + PFOS exceedances in groundwater. Due to exceedances of PFOA + PFOS at DEPMW-1 (100-120') and soil impacts along the western boundary of the Site (i.e., SB-57, SB-58, SB-76, and SB-79), additional groundwater investigations may be warranted in this area.

- PFOA and PFOS concentrations were detected above the provisional GCTLs in the Irrigation Well; however, the concentrations were significantly less than the R-IWSLs for PFOA and PFOS; P-IWSLs were not considered since the Site is not used to grow vegetables or fruits for personal consumption.

Soil sampling data indicate that the northeastern portion of the Site in the warehouse sump area and target sump area likely were impacted by the use or storage of AFFF. Groundwater within and adjacent to this area is impacted as observed from the PFOA + PFOS concentration at the water table of 5,233 ng/L (over 70 times the provisional GCTL) at DEPMW-8 (20-40') and within deeper portions of the aquifer at SP-2 and SP-3. Impacted groundwater extends to a depth of at least 170 ft BLS in this area at DEPMW-9 (150-170').

Impacted groundwater is present downgradient from the warehouse and target sump areas, eastward towards NW 12th Avenue at SP-16, DEPMW-5 (100-120'), and DEPMW-6 (25-45'). Impacted groundwater also extends downgradient and northeastward toward NW 4th Street at SP-20, SP-24, SP-26, DEPMW-22 (100-120'), and DEPMW-23 (25-45'). Additional groundwater

monitoring of DEPMW-22 (100-120') and DEPMW-23 (25-45') is warranted to confirm the PFOA + PFOS exceedances in these wells. The results of this sampling event will support the selection of additional sampling locations to further refine and delineate PFOA + PFOS exceedances in groundwater. Due to multiple exceedances in screen point samples (i.e., SP-20, SP-24, and SP-26), the installation of additional wells may be warranted to evaluate groundwater concentrations immediately downgradient of the warehouse and target sump areas.

Based on the results of the soil sampling associated with the draining ditch, runoff within the drainage ditch is an assumed "secondary" release mechanism. The soil results and groundwater results from SP-7 and SP-8 in the southwestern portion of the property indicate that supplemental groundwater investigations in the southwestern portion of the property may also be warranted. Concentrations of PFOA + PFOS are present in groundwater upgradient from the western property boundary (i.e., approximately a quarter mile) at DEPMW-12 (100-120') and DEPMW-13 (25-45'). The water table is relative flat; therefore, the extent and magnitude of PFAS concentrations in this area could be related to groundwater flow changes due to seasonal variations or pumping from production wells locate further from the Site and/or preferential flow paths from the Site (e.g., utilities or stormwater conveyance from the former drainage ditch). Additional groundwater monitoring of DEPMW-12 (100-120') and DEPMW-13 (25-45') is warranted to confirm the PFOA + PFOS exceedances in these wells. The results of this sampling event will support the selection of additional sampling locations to further refine and delineate PFOA + PFOS exceedances in groundwater upgradient of the property.

4.4.9 Surface Water Results and Conclusions

Surface water laboratory analytical laboratory results are summarized in **Table 8** and depicted on **Figure 29**. Provisional CTLs have not been developed for surface water; however, surface water screening levels have been derived for the protection of human health based on fish and shellfish ingestion pathways (**Appendix A**). Therefore, concentrations of PFOA and PFOS from the surface water sampling events were compared with the surface water screening levels of 500 and 10 ng/L, respectively. Results from the March 2022 sampling event indicated the following:

- The concentrations of PFOA were detected above the laboratory MDL and less than 500 ng/L at each sample location; and
- The concentration of PFOS was greater than 10 ng/L at SW-1.

Based on observations during these investigations, the sampled surface water body (holding pond designated by the City of Ocala as WRA #127) does not appear to support a finfish population. Additionally, fishing activities have not been observed in the surface water body since it is within a locked, fenced area. Therefore, this surface water feature does not represent a complete exposure pathway for human health.

Additionally, based on the results, surface water is likely not a significant contributor to groundwater impacts near the holding pond (e.g., downgradient at DEPMW-22 and DEPMW-23) since the PFOS concentration detected SW-1 is less than the provisional GCTL for PFOS. No additional surface water sampling is warranted. The City of Ocala drainage well

NCF_15644_DRN_2_P2 is located within holding pond WRA #127 and may serve as a conduit for surface water to the Upper Floridan aquifer. Additional groundwater sampling at this well location is warranted.

4.5 Sediment Assessment

In March 2022, Geosyntec collected 3 sediment samples from 3 locations that were co-located with surface water samples (see **Section 4.4.6**) from a holding pond (designated by the City of Ocala as WRA #127) located within the northeast corner of the Dr. Martin Luther King, Jr. Recreational Complex. Sample locations are presented on **Figure 3**.

4.5.1 Sediment Sampling Methodology

Geosyntec collected sediment samples from 0 to 1 ft BLS using decontaminated stainless-steel hand augers. QA/QC samples from March 2022 consisted of 1 equipment blank (EQB-50) that was collected from a decontaminated hand auger bucket. PFOA and/or PFOS were not detected in this equipment blank.

4.5.2 Sediment Results and Conclusions

Comprehensive sediment laboratory analytical results are summarized in **Table 9** and presented on **Figure 29**. Since provisional CTLs have not been developed for sediment, individual concentrations of PFOA and PFOS were compared with the provisional L-SCTLs of 2 µg/Kg and 7 µg/Kg, respectively, to evaluate potential sources that could contribute PFAS to Site media (e.g., groundwater and/or surface water). Sediments that remain perpetually submerged do not represent a complete exposure pathway for human health. Results from the March 2022 sampling event indicated the following:

- The concentrations of PFOA were below the provisional L-SCTL of 2 µg/Kg at each sediment location; and
- The concentrations of PFOS were above the provisional L-SCTL of 7 µg/Kg at Sed-3.

Sediment in the holding pond represents a potential source of PFOS to surface water and/or groundwater based on the sediment result at Sed-3 above the PFOS provisional L-SCTL. Sediment does not represent a complete exposure pathway for human health since the holding pond is within a locked, fenced area. The elevated concentrations at Sed-3 may warrant additional sediment sampling to assess the extent of PFAS in sediment.

4.6 Decontamination Procedures

Decontamination activities were performed in accordance with Geosyntec internal SOPs for PFAS sampling either at a designated staging and laydown area or at each monitoring well location. Decontaminated equipment was staged on clean plastic sheeting prior to use. Decontamination fluids were drummed as investigation derived waste (IDW) and disposed off-Site.

Decontamination procedures utilized for non-disposable, reusable soil, sediment, and groundwater sampling equipment included decontaminating the sampling equipment in 5-gallon HDPE

buckets. This sampling equipment was first submerged and scrubbed in one 5-gallon HDPE bucket filled with a solution of Liquinox detergent and PFAS-free water and then submerged in two 5-gallon HDPE buckets filled with PFAS-free water. The equipment was rinsed with PFAS-free water in spray bottles after the first and third buckets. Equipment blanks were collected during soil, groundwater, and sediment sampling activities, as discussed in **Section 4.3**, **Section 4.4,** and **Section 4.5**, respectively.

Decontamination procedures utilized for monitoring well installation and DPT groundwater sampling equipment included pressure washing the drilling rods and equipment. Drilling equipment was decontaminated using a pressure washer and Liquinox detergent followed by a series of rinses using PFAS-free water over a constructed wooden and plastic sheeting decontamination pit that collected decontamination fluids. During decontamination activities, both the exterior and interior of the drill tooling was scrubbed using a combination of clean rags and wire brushes. Decontaminated equipment was staged on clean plastic sheeting prior to use. Decontamination fluids were drummed as IDW and disposed off-Site. Equipment blanks were collected from decontaminated drilling equipment used for monitoring well installation and DPT groundwater sampling, as discussed in **Section 4.4**.

4.7 Investigation Derived Waste

A total of 7 drums of IDW (1 drum of solid IDW and 6 drums of liquid IDW) were generated during March and April 2022 assessment from soil, sediment, DPT groundwater, and monitoring well sampling activities. A total of 64 drums of IDW (26 drums of solid IDW and 38 drums of liquid IDW) were generated during November to December 2022 and January 2023 monitoring well installation and soil and groundwater sampling activities. The drums were labelled and staged on concrete or asphalt at a location approved by FFSFC representatives. Field drum inventories are provided in **Appendix C**. Erwin Remediation, Inc. removed 7 drums on 21 April 2022, 12 drums on 30 November 2022, 15 drums on 8 December 2022, 14 drums on 16 December 2022, 13 drums on 21 December 2022, and 10 drums on 19 January 2023. Final IDW manifests are provided in **Appendix E**.

5. CONCLUSIONS

During Site assessment activities, Geosyntec collected samples of Site media (soil, groundwater, surface water, and sediment) for laboratory analysis of PFAS. The concentrations of PFOA and PFOS in soil and groundwater were compared against provisional CTLs, concentrations of PFOA and PFOS in surface water and the Irrigation Well were screened against screening levels, and the results from sediment were evaluated to identify potential exposure pathways and/or potential PFAS sources. The comprehensive assessment results collected to date indicated the following.

- Soil concentrations of PFOA and/or PFOS are above the provisional L-SCTLs at multiple depth intervals at multiple soil sample locations within and adjacent to the former fire training facility operational area (e.g., warehouse sump area and target sump area). The results indicate that PFOS and PFOA extend from the land surface down to the water table and are likely leaching from soil to groundwater at concentrations above provisional GCTLs and may represent potential sources at these locations. Additional horizontal delineation south of SB-79 is warranted to meet site assessment requirements pursuant to Chapter 62-780, FAC and investigate the draining ditch as a "secondary" source. Additional soil sampling from 4 ft BLS to the water table (approximately 30 ft BLS) is warranted near SB-76 and SB-79 to evaluate vertical delineation at these locations. Continued monitoring of the groundwater plume is warranted to evaluate plume stability over time and determine if the impacted soil is causing the plume to increase or migrate.

- Groundwater concentrations of PFOA and/or PFOS are above the provisional GCTLs within the 20 to 45, 100 to 120, and 150 to 185 ft BLS monitored intervals. The highest PFOA + PFOS concentrations were observed within and adjacent to the warehouse sump area and target sump area, near the eastern boundary of the Site. PFOA + PFOS concentrations were observed off-Site, including locations upgradient and downgradient from the Site. Based on these results, horizontal and vertical delineation of groundwater is not complete. Additional groundwater sampling is warranted to monitor concentrations of PFOS + PFOA and support the selection of additional sampling locations to further refine and delineate PFOA + PFOS exceedances in groundwater. Additional groundwater investigations may be warranted in the southwestern portion of the property near the former drainage ditch, upgradient of the property, and immediately downgradient of the warehouse sump area and target sump area near SP-23, SP-24, and SP-26. The City of Ocala drainage well NCF_15644_DRN_2_P2 is located within holding pond WRA #127 and may serve as a conduit for surface water to the Upper Floridan aquifer. Additional groundwater sampling at this well location is warranted.

- Groundwater concentrations of PFOA and PFOS were significantly less than the R-IWSLs at the Irrigation Well indicating that continued use of the Irrigation Well for irrigation of lawns or ornamental beds may not pose a significant human health exposure risk.

- Surface water results were greater than FDEP screening levels for PFOS at one sampling location. Field observations suggest the sampled surface water body does not appear to

support a finfish population and that recreational fishing activities have not been observed in the surface water body; therefore, there is not a potential exposure pathway for human health at this surface water body location. Additionally, the PFOS concentration at SW-1 was less than the PFOS provisional GCTL, suggesting that surface water infiltrating at this location may not represent a significant contributor to groundwater contamination. No additional surface water sampling is warranted. The City of Ocala drainage well NCF_15644_DRN_2_P2 is located within holding pond WRA #127 and may serve as a conduit for surface water to the Upper Floridan aquifer. Additional groundwater sampling at this well location is warranted.

- Sediment concentrations of PFOS were above L-SCTLs at one location, which represents a potential source of PFAS that could leach from the sediment to groundwater and/or surface water. Sediment does not represent a complete exposure pathway for human health because it is within a locked, fenced area. The elevated concentrations at Sed-3 may warrant additional sediment sampling to assess the extent of PFAS in sediment.

6. RECOMMENDATIONS

Geosyntec recommends the following:

- Collect additional soil samples to horizontally delineate the provisional L-SCTL exceedances at SB-79 and further investigate the drainage ditch as a "secondary" source of PFAS. Collect soil samples from 4 ft BLS to the water table near SB-76 and SB-79 to vertically delineate the provisional L-SCTL exceedances at these locations.
- Conduct groundwater monitoring including synoptic depth-to-groundwater measurements across the Site-wide monitoring well network and the collection of groundwater samples from monitoring wells screened from 20 to 45, 100 to 120, and 150 to 185 ft BLS.
- To further investigate PFAS exceedances in upgradient monitoring wells DEPMW-12 and DEPMW-13, evaluate and compare PFAS signatures in the upgradient wells with on-Site monitoring wells.
- If available, obtain and review information showing the locations of septic systems in this upgradient area to evaluate the potential for the septic systems as a source of PFAS upgradient from the Site. Groundwater samples from monitoring wells and potentially samples from septic tanks should be analyzed for constituents indicative of septic systems.
- Based on the results from the above recommendations, Geosyntec will discuss with FDEP if the collection of additional groundwater samples and/or the installation of additional monitoring wells is warranted to delineate the horizontal and vertical extents of PFAS concentrations exceeding the provisional GCTL.

A work plan summarizing the proposed sampling activities will be submitted to the FDEP under a separate cover.

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TABLES

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Soil Samples							
Location ID	**Sample ID**	**Matrix**	**Depth (ft BLS)**	**Method**	**Analyses**	**Rationale**	**Criteria**
SB-1	SB-1 (0-0.5')	Soil	0-0.5	HA	PFAS	Delineation Sampling	Provisional Soil Cleanup Target Levels
	SB-1 (0.5-2')		0.5-2				
	SB-1 (2-4')		2-4				
	SB-1 (4-6')		4-6	DPT			
	SB-1 (6-8')		6-8				
	SB-1 (10-12')		10-12				
	SB-1 (13-15')		13-15				
	SB-1 (23-25')		23-25				
	SB-1 (33-35')		33-35				
SB-2	SB-2 (0.5-2')		0.5-2	HA			
	SB-2 (2-4')		2-4				
	SB-2 (4-6')		4-6	DPT			
	SB-2 (6-8')		6-8				
	SB-2 (10-12')		10-12				
	SB-2 (13-15')		13-15				
	SB-2 (23-25')		23-25				
	SB-2 (28-30')		28-30				
SB-3	SB-3 (0.5-2')		0.5-2	HA			
	SB-3 (2-4')		2-4				
	SB-3 (4-6')		4-6	DPT			
	SB-3 (6-8')		6-8				
	SB-3 (10-12')		10-12				
	SB-3 (13-15')		13-15				
	SB-3 (23-25')		23-25				
	SB-3 (28-30')		28-30				
SB-4	SB-4 (0.5-2')		0.5-2	HA			
	SB-4 (2-4')		2-4				
	SB-4 (4-6')		4-6	DPT			
	SB-4 (6-8')		6-8				
	SB-4 (10-12')		10-12				
	SB-4 (13-15')		13-15				
	SB-4 (23-25')		23-25				
	SB-4 (30-32')		30-32				
SB-5	SB-5 (0-0.5')		0-0.5	HA			
	SB-5 (0.5-2')		0.5-2				
	SB-5 (2-4')		2-4				
	SB-5 (4-6')		4-6	DPT			
	SB-5 (6-8')		6-8				
	SB-5 (10-12')		10-12				
	SB-5 (13-15')		13-15				
	SB-5 (23-25')		23-25				
	SB-5 (28-30')		28-30				
SB-6	SB-6 (0-0.5')		0-0.5	HA			
	SB-6 (0.5-2')		0.5-2				
	SB-6 (2-4')		2-4				
	SB-6 (4-6')		4-6	DPT			
	SB-6 (6-8')		6-8				
	SB-6 (10-12')		10-12				
	SB-6 (13-15')		13-15				
	SB-6 (23-25')		23-25				
	SB-6 (28-30')		28-30				
SB-7	SB-7 (0.5-2')		0.5-2	HA			
	SB-7 (2-4')		2-4				
	SB-7 (4-6')		4-6	DPT			
	SB-7 (6-8')		6-8				
	SB-7 (10-12')		10-12				
	SB-7 (13-15')		13-15				
	SB-7 (23-25')		23-25				
	SB-7 (28-30')		28-30				
SB-8	SB-8 (0-0.5')		0-0.5	HA			
	SB-8 (0.5-2')		0.5-2				
	SB-8 (2-4')		2-4				
	SB-8 (4-6')		4-6				
SB-9	SB-9 (0-0.5')		0-0.5				
	SB-9 (0.5-2')		0.5-2				
	SB-9 (2-4')		2-4				
	SB-9 (4-6')		4-6				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Method	Analyses	Rationale	Criteria
SB-10	SB-10 (0-0.5')	Soil	0-0.5	HA	PFAS	Delineation Sampling	Provisional Soil Cleanup Target Levels
	SB-10 (0.5-2')		0.5-2				
	SB-10 (2-4')		2-4				
	SB-10 (4-6')		4-6				
SB-11	SB-11 (0-0.5')		0-0.5				
	SB-11 (0.5-2')		0.5-2				
SB-12	SB-12 (0-0.5')		0-0.5				
	SB-12 (0.5-2')		0.5-2				
SB-13	SB-13 (0-0.5')		0-0.5				
	SB-13 (0.5-2')		0.5-2				
	SB-13 (2-4')		2-4				
SB-14	SB-14 (0.5-2')		0.5-2				
	SB-14 (2-4')		2-4				
SB-15	SB-15 (0.5-2')		0.5-2				
	SB-15 (2-4')		2-4				
SB-16	SB-16 (0-0.5')		0-0.5				
	SB-16 (0.5-2')		0.5-2				
	SB-16 (2-4')		2-4				
SB-17	SB-17 (0-0.5')		0-0.5				
	SB-17 (0.5-2')		0.5-2				
	SB-17 (2-4')		2-4				
SB-18	SB-18 (0-0.5')		0-0.5				
	SB-18 (0.5-2')		0.5-2				
	SB-18 (2-4')		2-4				
SB-19	SB-19 (0-0.5')		0-0.5				
	SB-19 (0.5-2')		0.5-2				
	SB-19 (2-4')		2-4				
SB-20	SB-20 (0-0.5')		0-0.5				
	SB-20 (0.5-2')		0.5-2				
	SB-20 (2-4')		2-4				
SB-21	SB-21 (0-0.5')		0-0.5				
	SB-21 (0.5-2')		0.5-2				
	SB-21 (2-4')		2-4				
SB-22	SB-22 (0-0.5')		0-0.5				
	SB-22 (0.5-2')		0.5-2				
	SB-22 (2-4')		2-4				
SB-23	SB-23 (0-0.5')		0-0.5				
	SB-23 (0.5-2')		0.5-2				
	SB-23 (2-4')		2-4				
SB-24	SB-24 (0-0.5')		0-0.5				
	SB-24 (0.5-2')		0.5-2				
	SB-24 (2-4')		2-4				
SB-25	SB-25 (0-0.5')		0-0.5				
	SB-25 (0.5-2')		0.5-2				
SB-26	SB-26 (0-0.5')		0-0.5				
	SB-26 (0.5-2')		0.5-2				
SB-27	SB-27 (0-0.5')		0-0.5				
	SB-27 (0.5-2')		0.5-2				
	SB-27 (2-3')		2-3				
	SB-27 (4-6')		4-6				
SB-28	SB-28 (0.5-2')		0.5-2				
	SB-28 (2-4')		2-4				
SB-29	SB-29 (0.5-2')		0.5-2				
	SB-29 (2-4')		2-4				
SB-30	SB-30 (0.5-2')		0.5-2				
	SB-30 (2-4')		2-4				
SB-31	SB-31 (0-0.5')		0-0.5				
	SB-31 (0.5-2')		0.5-2				
	SB-31 (2-4')		2-4				
SB-32	SB-32 (0-0.5')		0-0.5				
	SB-32 (0.5-2')		0.5-2				
	SB-32 (2-4')		2-4				
SB-33	SB-33 (0-0.5')		0-0.5				
	SB-33 (0.5-2')		0.5-2				
	SB-33 (2-4')		2-4				
SB-34	SB-34 (0.5-2')		0.5-2				
	SB-34 (2-4')		2-4				
SB-35	SB-35 (0.5-2')		0.5-2				
	SB-35 (2-3')		2-3				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Method	Analyses	Rationale	Criteria
SB-36	SB-36 (0.5-2')	Soil	0.5-2	HA	PFAS	Delineation Sampling	Provisional Soil Cleanup Target Levels
	SB-36 (2-4')		2-4				
SB-37	SB-37 (0-0.5')		0-0.5				
	SB-37 (0.5-2')		0.5-2				
	SB-37 (2-4')		2-4				
	SB-37 (4-6')		4-6				
SB-38	SB-38 (0-0.5')		0-0.5				
	SB-38 (0.5-2')		0.5-2				
SB-39	SB-39 (0-0.5')		0-0.5				
	SB-39 (0.5-2')		0.5-2				
	SB-39 (2-4')		2-4				
SB-40	SB-40 (0.5-2')		0.5-2				
	SB-40 (2-4')		2-4				
SB-41	SB-41 (0-0.5')		0-0.5				
	SB-41 (0.5-2')		0.5-2				
	SB-41 (2-4')		2-4				
SB-42	SB-42 (0-0.5')		0-0.5				
	SB-42 (0.5-2')		0.5-2				
	SB-42 (2-4')		2-4				
	SB-42 (4-6')		4-6				
SB-43	SB-43 (0-0.5')		0-0.5				
	SB-43 (0.5-2')		0.5-2				
	SB-43 (2-4')		2-4				
	SB-43 (4-6')		4-6				
SB-44	SB-44 (0-0.5')		0-0.5				
	SB-44 (0.5-2')		0.5-2				
	SB-44 (2-4')		2-4				
	SB-44 (4-6')		4-6				
SB-45	SB-45 (0-0.5')		0-0.5				
	SB-45 (0.5-2')		0.5-2				
	SB-45 (2-4')		2-4				
	SB-45 (4-6')		4-6				
	SB-45 (6-8')		6-8	DPT			
	SB-45 (10-12')		10-12				
	SB-45 (13-15')		13-15				
	SB-45 (23-25')		23-25				
	SB-45 (28-30')		28-30				
SB-46	SB-46 (0.5-2')		0.5-2	HA			
	SB-46 (2-4')		2-4				
SB-47	SB-47 (0.5-2')		0.5-2				
	SB-47 (2-4')		2-4				
SB-48	SB-48 (0-0.5')		0-0.5				
	SB-48 (0.5-2')		0.5-2				
	SB-48 (2-3')		2-3				
	SB-48 (4-6')		4-6				
SB-49	SB-49 (0-0.5')		0-0.5				
	SB-49 (0.5-2')		0.5-2				
SB-50	SB-50 (0.5-2')		0.5-2				
	SB-50 (2-4')		2-4				
SB-51	SB-51 (0.5-2')		0.5-2				
	SB-51 (2-4')		2-4				
SB-52	SB-52 (0.5-2')		0.5-2				
	SB-52 (2-4')		2-4				
SB-53	SB-53 (0-0.5')		0-0.5				
	SB-53 (0.5-2')		0.5-2				
SB-54	SB-54 (0-0.5')		0-0.5				
	SB-54 (0.5-2')		0.5-2				
	SB-54 (2-4')		2-4				
SB-55	SB-55 (0-0.5')		0-0.5				
	SB-55 (0.5-2')		0.5-2				
	SB-55 (2-4')		2-4				
SB-56	SB-56 (0-0.5')		0-0.5				
	SB-56 (0.5-2')		0.5-2				
	SB-56 (2-4')		2-4				
SB-57	SB-57 (0-0.5')		0-0.5				
	SB-57 (0.5-2')		0.5-2				
	SB-57 (2-4')		2-4				
	SB-57 (4-6')		4-6				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Method	Analyses	Rationale	Criteria
SB-58	SB-58 (0-0.5')	Soil	0-0.5	HA	PFAS	Delineation Sampling	Provisional Soil Cleanup Target Levels
	SB-58 (0.5-2')		0.5-2				
	SB-58 (2-4')		2-4				
	SB-58 (4-6')		4-6				
SB-59	SB-59 (0-0.5')		0-0.5				
	SB-59 (0.5-2')		0.5-2				
	SB-59 (2-4')		2-4				
	SB-59 (4-6')		4-6				
SB-60	SB-60 (0-0.5')		0-0.5				
	SB-60 (0.5-2')		0.5-2				
	SB-60 (2-4')		2-4				
	SB-60 (4-6')		4-6				
SB-61	SB-61 (0-0.5')		0-0.5				
	SB-61 (0.5-2')		0.5-2				
	SB-61 (2-4')		2-4				
	SB-61 (4-6')		4-6				
	SB-61 (6-8')		6-8	DPT			
	SB-61 (10-12')		10-12				
	SB-61 (13-15')		13-15				
	SB-61 (23-25')		23-25				
	SB-61 (28-30')		28-30				
SB-62	SB-62 (0-0.5')		0-0.5	HA			
	SB-62 (0.5-2')		0.5-2				
	SB-62 (2-4')		2-4				
	SB-62 (4-6')		4-6				
SB-63	SB-63 (0-0.5')		0-0.5				
	SB-63 (0.5-2')		0.5-2				
	SB-63 (2-4')		2-4				
	SB-63 (4-6')		4-6				
	SB-63 (6-8')		6-8	DPT			
	SB-63 (10-12')		10-12				
	SB-63 (13-15')		13-15				
	SB-63 (23-25')		23-25				
	SB-63 (33-35')		33-35				
SB-64	SB-64 (0-0.5')		0-0.5	HA			
	SB-64 (0.5-2')		0.5-2				
	SB-64 (2-4')		2-4				
	SB-64 (4-6')		4-6				
SB-65	SB-65 (0-0.5')		0-0.5				
	SB-65 (0.5-2')		0.5-2				
SB-66	SB-66 (0-0.5')		0-0.5				
	SB-66 (0.5-2')		0.5-2				
	SB-66 (2-4')		2-4				
	SB-66 (4-6')		4-6				
SB-67	SB-67 (0-0.5')		0-0.5				
	SB-67 (0.5-2')		0.5-2				
	SB-67 (2-4')		2-4				
	SB-67 (4-6')		4-6				
SB-68	SB-68 (0-0.5')		0-0.5				
	SB-68 (0.5-2')		0.5-2				
	SB-68 (2-4')		2-4				
	SB-68 (4-6')		4-6				
	SB-68 (6-8')		6-8	DPT			
	SB-68 (10-12')		10-12				
	SB-68 (13-15')		13-15				
	SB-68 (23-25')		23-25				
	SB-68 (32-34')		32-34				
SB-69	SB-69 (0-0.5')		0-0.5	HA			
	SB-69 (0.5-2')		0.5-2				
	SB-69 (2-4')		2-4				
	SB-69 (4-6')		4-6				
SB-70	SB-70 (0-0.5')		0-0.5				
	SB-70 (0.5-2')		0.5-2				
	SB-70 (2-4')		2-4				
	SB-70 (4-6')		4-6				
SB-71	SB-71 (0-0.5')		0-0.5				
	SB-71 (0.5-2')		0.5-2				
	SB-71 (2-4')		2-4				
	SB-71 (4-6')		4-6				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Method	Analyses	Rationale	Criteria
SB-72	SB-72 (0-0.5')	Soil	0-0.5	HA	PFAS	Delineation Sampling	Provisional Soil Cleanup Target Levels
	SB-72 (0.5-2')		0.5-2				
	SB-72 (2-4')		2-4				
	SB-72 (4-6')		4-6				
	SB-72 (6-8')		6-8	DPT			
	SB-72 (10-12')		10-12				
	SB-72 (13-15')		13-15				
	SB-72 (23-25')		23-25				
	SB-72 (33-35')		33-35				
SB-73	SB-73 (0-0.5')		0-0.5	HA			
	SB-73 (0.5-2')		0.5-2				
	SB-73 (2-4')		2-4				
	SB-73 (4-6')		4-6				
SB-74	SB-74 (0-0.5')		0-0.5				
	SB-74 (0.5-2')		0.5-2				
	SB-74 (2-4')		2-4				
	SB-74 (4-6')		4-6				
SB-75	SB-75 (0-0.5')		0-0.5				
	SB-75 (0.5-2')		0.5-2				
	SB-75 (2-4')		2-4				
SB-76	SB-76 (0-0.5')		0-0.5				
	SB-76 (0.5-2')		0.5-2				
	SB-76 (2-4')		2-4				
SB-77	SB-77 (0-0.5')		0-0.5				
	SB-77 (0.5-2')		0.5-2				
	SB-77 (2-4')		2-4				
SB-78	SB-78 (0-0.5')		0-0.5				
	SB-78 (0.5-2')		0.5-2				
	SB-78 (2-4')		2-4				
SB-79	SB-79 (0-0.5')		0-0.5				
	SB-79 (0.5-2')		0.5-2				
	SB-79 (2-4')		2-4				
Sediment Samples							
Sed-1	Sed-1 (0-1')	Sediment	0-1	HA	PFAS	Assess Potential PFAS Impacts	N/A
Sed-2	Sed-2 (0-1')		0-1				
Sed-3	Sed-3 (0-1')		0-1				
Surface Water Samples							
SW-1	SW-1	Surface Water	N/A	Grab	PFAS	Assess Potential PFAS Impacts	Surface Water Screening Criteria based on Consumption of Freshwater and Estuarine Finfish and Shellfish
SW-2	SW-2						
SW-3	SW-3						
Screen Point Groundwater Samples							
SP-1	SP-1 (36-40')	Groundwater	36-40	DPT	PFAS	Groundwater Assessment	Provisional Groundwater Cleanup Target Level
SP-2	SP-2 (32-36')		32-36				
	SP-2 (46-50')		46-50				
	SP-2 (46-50') DUP		46-50				
	SP-2 (66-70')		66-70				
	SP-2 (86-90')		86-90				
SP-3	SP-3 (31-35')		31-35				
	SP-3 (31-35') DUP		31-35				
	SP-3 (46-50')		46-50				
	SP-3 (66-70')		66-70				
	SP-3 (66-70') DUP		66-70				
	SP-3 (86-90')		86-90				
SP-4	SP-4 (33-37')		33-37				
SP-5	SP-5 (31-35')		31-35				
	SP-5 (46-50')		46-50				
	SP-5 (66-70')		66-70				
	SP-5 (82-86')		82-86				
	SP-5 (82-86') DUP		82-86				
SP-6	SP-6 (31-35')		31-35				
SP-7	SP-7 (31-35')		31-35				
SP-8	SP-8 (32-36')		32-36				
	SP-8 (46-50')		46-50				
	SP-8 (66-70')		66-70				
	SP-8 (86-90')		86-90				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Method	Analyses	Rationale	Criteria
SP-9	SP-9 (31-35')	Groundwater	31-35	DPT	PFAS	Groundwater Assessment	Provisional Groundwater Cleanup Target Level
	SP-9 (31-35') DUP		31-35				
	SP-9 (46-50')		46-50				
	SP-9 (61-65')		61-65				
SP-10	SP-10 (36-40')		36-40				
	SP-10 (46-50')		46-50				
	SP-10 (66-70')		66-70				
	SP-10 (86-90')		86-90				
SP-11	SP-11 (31-35')		31-35				
	SP-11 (46-50')		46-50				
	SP-11 (66-70')		66-70				
	SP-11 (81-85')		81-85				
SP-12	SP-12 (36-40')		36-40				
	SP-12 (36-40') DUP		36-40				
	SP-12 (46-50')		46-50				
	SP-12 (66-70')		66-70				
SP-13	SP-13 (46-50')		46-50				
	SP-13 (66-70')		66-70				
SP-14	SP-14 (36-40')		36-40				
	SP-14 (46-50')		46-50				
	SP-14 (46-50') DUP		46-50				
	SP-14 (66-70')		66-70				
	SP-14 (86-90')		86-90				
SP-15	SP-15 (41-45')		41-45				
	SP-15 (46-50')		46-50				
	SP-15 (46-50') DUP		46-50				
	SP-15 (66-70')		66-70				
	SP-15 (86-90')		86-90				
SP-16	SP-16 (36-40')		36-40				
	SP-16 (46-50')		46-50				
	SP-16 (66-70')		66-70				
	SP-16 (78-82')		78-82				
SP-17	SP-17 (36-40')		36-40				
	SP-17 (46-50')		46-50				
	SP-17 (66-70')		66-70				
	SP-17 (82-86')		82-86				
SP-18	SP-18 (36-40')		36-40				
	SP-18 (46-50')		46-50				
	SP-18 (66-70')		66-70				
	SP-18 (82-86')		82-86				
SP-19	SP-19 (35-39')		35-39				
	SP-19 (46-50')		46-50				
	SP-19 (66-70')		66-70				
	SP-19 (86-90')		86-90				
SP-20	SP-20 (36-40')		36-40				
	SP-20 (46-50')		46-50				
	SP-20 (66-70')		66-70				
	SP-20 (86-90')		86-90				
SP-21	SP-21 (36-40')		36-40				
	SP-21 (46-50')		46-50				
	SP-21 (66-70')		66-70				
	SP-21 (86-90')		86-90				
SP-22	SP-22 (36-40')		36-40				
	SP-22 (46-50')		46-50				
	SP-22 (66-70')		66-70				
	SP-22 (86-90')		86-90				
	SP-22 (86-90') DUP		86-90				
SP-23	SP-23 (36-40')		36-40				
	SP-23 (46-50')		46-50				
	SP-23 (66-70')		66-70				
	SP-23 (66-70') DUP		66-70				
	SP-23 (78-82')		78-82				
SP-24	SP-24 (36-40')		36-40				
	SP-24 (46-50')		46-50				
	SP-24 (66-70')		66-70				
	SP-24 (78-82')		78-82				
SP-25	SP-25 (36-40')		36-40				
	SP-25 (46-50')		46-50				
	SP-25 (66-70')		66-70				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Method	Analyses	Rationale	Criteria
SP-26	SP-26 (36-40')	Groundwater	36-40	DPT	PFAS	Groundwater Assessment	Provisional Groundwater Cleanup Target Level
	SP-26 (46-50')		46-50				
	SP-26 (66-70')		66-70				
	SP-26 (86-90')		86-90				
SP-27	SP-27 (36-40')		36-40				
	SP-27 (46-50')		46-50				
	SP-27 (46-50') DUP						
	SP-27 (66-70')		66-70				
	SP-27 (74-78')		74-78				
SP-28	SP-28 (41-45')		41-45				
	SP-28 (46-50')		46-50				
	SP-28 (66-70')		66-70				
	SP-28 (86-90')		86-90				
SP-29	SP-29 (36-40')		36-40				
	SP-29 (46-50')		46-50				
	SP-29 (66-70')		66-70				
SP-30	SP-30 (41-45')		41-45				
	SP-30 (46-50')		46-50				
	SP-30 (66-70')		66-70				
	SP-30 (66-70') DUP						
	SP-30 (86-90')		86-90				
SP-31	SP-31 (41-45')		41-45				
	SP-31 (46-50')		46-50				
	SP-31 (66-70')		66-70				
	SP-31 (82-86')		82-86				
SP-32	SP-32 (36-40')		36-40				
	SP-32 (46-50')		46-50				
	SP-32 (66-70')		66-70				
	SP-32 (86-90')		86-90				
SP-33	SP-33 (36-40')		36-40				
	SP-33 (46-50')		46-50				
	SP-33 (46-50') DUP						
	SP-33 (66-70')		66-70				
	SP-33 (86-90')		86-90				
SP-34	SP-34 (36-40')		36-40				
	SP-34 (46-50')		46-50				
	SP-34 (66-70')		66-70				
	SP-34 (86-90')		86-90				
SP-35	SP-35 (36-40')		36-40				
	SP-35 (46-50')		46-50				
	SP-35 (66-70')		66-70				
	SP-35 (78-82')		78-82				
	SP-35 (78-82') DUP						
SP-36	SP-36 (36-40')		36-40				
	SP-36 (46-50')		46-50				
	SP-36 (66-70')		66-70				
	SP-36 (81-85')		81-85				
SP-37	SP-37 (36-40')		36-40				
	SP-37 (46-50')		46-50				
	SP-37 (46-50') DUP						
	SP-37 (66-70')		66-70				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Monitoring Well Groundwater Samples							
Location ID	**Sample ID**	**Matrix**	**Depth (ft BLS)**	**Method**	**Analyses**	**Rationale**	**Criteria**
DEPMW-1	DEPMW-1 (100-120')	Groundwater	100-120	Submersible Pump	PFAS	Groundwater Assessment	Provisional Groundwater Cleanup Target Level
DEPMW-2	DEPMW-2 (25-45')		25-45				
DEPMW-3	DEPMW-3 (100-120')		100-120				
DEPMW-4	DEPMW-4 (25-45')		25-45				
DEPMW-5	DEPMW-5 (100-120')		100-120				
DEPMW-6	DEPMW-6 (25-45')		25-45				
	DEPMW-6 (25-45') DUP						
DEPMW-7	DEPMW-7 (100-120')		100-120				
DEPMW-8	DEPMW-8 (20-40')		20-40				
	DEPMW-8 (20-40') DUP						
DEPMW-9	DEPMW-9 (150-170')		150-170				
	DEPMW-9 (150-170') DUP						
DEPMW-10	DEPMW-10 (160-180')		160-180				
DEPMW-11	DEPMW-11 (165-185')		165-185				
DEPMW-12	DEPMW-12 (100-120')		100-120				
DEPMW-13	DEPMW-13 (25-45')		25-45				
DEPMW-14	DEPMW-14 (100-120')		100-120				
DEPMW-15	DEPMW-15 (25-45')		25-45				
DEPMW-16	DEPMW-16 (100-120')		100-120				
DEPMW-17	DEPMW-17 (25-45')		25-45				
DEPMW-18	DEPMW-18 (100-120')		100-120				
DEPMW-19	DEPMW-19 (25-45')		25-45				
DEPMW-20	DEPMW-20 (100-120')		100-120				
DEPMW-21	DEPMW-21 (25-45')		25-45				
DEPMW-22	DEPMW-22 (100-120')		100-120				
DEPMW-23	DEPMW-23 (25-45')		25-45				
VISAMW [M-0200]	VISAMW (M-200)		30-40				
Irrigation Well (105-140')	Irrigation Well (105-140')		105-140	Grab			
	Irrigation Well (105-140') DUP						

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Laboratory Quality Assurance/Quality Control Samples						
Sample Type	**Sample ID**	**Matrix**	**Equipment sampled**	**Analyses**	**Rationale**	**Criteria**
Equipment Blanks (ratio of 1:10)	EQB-1	Water	DPT Groundwater Sampling Equipment	PFAS	Assess potential sources of contamination from sampling and/or monitoring well installation equipment	N/A
	EQB-2		Soil Sampling Equipment - Hand Auger			
	EQB-3					
	EQB-4					
	EQB-5					
	EQB-6					
	EQB-7					
	EQB-8					
	EQB-9					
	EQB-10					
	EQB-11					
	EQB-12					
	EQB-13					
	EQB-14					
	EQB-15					
	EQB-16					
	EQB-17		Soil Sampling Equipment - DPT			
	EQB-18					
	EQB-19					
	EQB-20					
	EQB-21		DPT Groundwater Sampling Equipment			
	EQB-22					
	EQB-23					
	EQB-24					
	EQB-25					
	EQB-26					
	EQB-27					
	EQB-28					
	EQB-29		Soil Sampling Equipment - Hand Auger			
	EQB-30					
	EQB-31					
	EQB-32					
	EQB-33					
	EQB-34					
	EQB-35					
	EQB-36					
	EQB-37		Soil Sampling Equipment - DPT			
	EQB-38					
	EQB-39					
	EQB-40		MW Installation Equipment			
	EQB-41					
	EQB-42		Submersible Pump			
	EQB-43		K-Packer			
	EQB-44		DPT Groundwater Sampling Equipment			
	EQB-45					
	EQB-46					
	EQB-47					
	EQB-49		Soil Sampling Equipment			
	EQB-50		Sediment Sampling Equipment			
	EQB-52		Submersible Pump			
	EQB-53		Hand Auger			
	EQB-54		MW Installation Equipment			
	EQB-55					
	EQB-56					
	EQB-57		Submersible Pump			
	EQB-58					
	EQB-59					

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Sample Type	Sample ID	Matrix	Equipment sampled	Analyses	Rationale	Criteria
Field Reagent Blanks	FRB-1	Water	DPT Groundwater Sampling	PFAS	Evaluate potential impact of sample cross-contamination	N/A
	FRB-2		Decontamination			
	FRB-3		HA Decon Area			
	FRB-4		DPT Groundwater Sampling			
	FRB-5		Groundwater Sampling			
	FRB-6		Hand Auger and DPT Decontamination			
	FRB-7		Monitoring Well Decon			
	FRB-8		DPT Groundwater Sampling			
	FRB-9		Groundwater Sampling			
	FRB-10		DPT Decontamination			
	FRB-11		Sonic Decontamination			
	FRB-12		Soil Sampling Decontamination			
	FRB-13		Monitoring Well Decon			
	FRB-14		Rainy conditions			
Investigation Derived Waste Samples						
Drum Number	**Sample ID**	**Matrix**	**IDW Source**	**Analysis**	**Rationale**	**Criteria**
4	IDW-Soil-20201014	Soil	Soil cuttings	PFAS, VOCs, SVOCs, RCRA metals	Waste characterization	N/A
5	IDW-Water-20201014	Water	Decontamination and purge water			

Notes:

1. DPT indicates direct push technology.
2. ft BLS indicates feet below land surface.
3. SB indicates soil boring.
4. HA indicates hand auger.
5. PFAS indicates per- and polyfluoroalkyl substances.
6. N/A indicates not applicable.
7. EQB indicates equipment blank.
8. SP indicates screen point.
9. Sed indicates sediment.
10. SW indicates surface water.
11. MW indicates monitoring well.
12. DUP indicates duplicate.
13. FRB indicates field reagent blank.
14. IDW indicates investigation derived waste.
15. VOC indicates volatile organic compounds.
16. SVOC indicates semi-volatile organic compounds.
17. RCRA metals indicates Resource Conservation and Recovery Act metals arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.
18. EQB-43 was collected on a K-packer to determine whether this equipment is suitable for assessing these analytes.

TABLE 2: WATER WELLS WITHIN A 1-MILE RADIUS
Former Florida State Fire College

Figure ID	SJRWMD or FDOH Identification	Source	Range from Site (Miles)	Total Depth (ft BLS)	Casing Length (feet)	Well Diameter (inches)	Well Usage or Type	Address
01	420074401	FDOH	0.5-1	-	-	-	Irrigation	2248 NW 10TH ST
02	AAK5683			-	-	2	Irrigation	1896 NW 10TH ST
03	420073101			-	-	-	Irrigation	2336 NW 7TH ST
04	420078201			-	-	-	Irrigation	2432 NW 4TH ST
05	324421	SJRWMD		180	-	-	Domestic	NW 19TH PLACE
06	186869			70	63	4	Domestic	-
07	147301			-	-	-	Domestic	-
08	100040			95	84	4	Domestic	-
09	100066			85	73	4	Domestic	-
10	100108			95	84	4	Domestic	-
11	185083			130	89	4	Irrigation	-
12	405207			15	-	2	Other	1616 N MAGNOLIA
13	280242			85	-	4	Irrigation	CORNER OF HWY 200/MARTIN LUTHER KING BLVD
14	280388			100	-	4	Irrigation	1109 SW 10TH ST
15	100078			95	70	4	Domestic	-
16	436104			130	89	4	Irrigation - Landscape	NW 20TH ST
17	82035			120	71	4	Irrigation	-
18	436312		0-0.5	150	99	4	Domestic	1239 NW 4TH ST
19	180270			150	99	4	Irrigation	-
20	187449			120	102	4	Domestic	-
21	187243			131	105	4	Domestic	-
22	82179		0.5-1	134	132	4	Irrigation	-
23	431602			110	-	-	Domestic	CR 316 NW 4TH AVE
24	184597			31	31	2	Other	-
25	184579			28	28	2	Other	-
26	184564			15	15	4	Other	-
27	184544			27	27	2	Other	-
28	91974			65	55	4	Domestic	-
29	185065			105	95	4	Domestic	-
30	307525			20	-	-	Other/Unknown	125 NE 1ST AVE
31	307527			15	-	-	Other/Unknown	125 NE 1ST AVE
32	269556			100	-	2	Domestic	101 NE 1ST AVE
33	150831			120	99	4	Domestic	-
34	150647			130	75	4	Domestic	-
35	276104			68	-	2	Domestic	SE 1ST ST
36	202519			100	85	4	Other	-
37	439555		0-0.5	105	80	4	Domestic	224 NW 16TH CT
38	148149			130	79	4	Irrigation	-

TABLE 2: WATER WELLS WITHIN A 1-MILE RADIUS
Former Florida State Fire College

Figure ID	SJRWMD or FDOH Identification	Source	Range from Site (Miles)	Total Depth (ft BLS)	Casing Length (feet)	Well Diameter (inches)	Well Usage or Type	Address
39	452338	SJRWMD	0-0.5	160	112	4	Irrigation - Landscape	606 SW 2ND AVE
40	436314			100	77	4	Irrigation - Landscape	HWY 200
41	446992			12	0.5	2	Other	321 S MAGNOLIA AVE
42	82240			140	105	4	Domestic	-
43	183880			63	-	-	Irrigation	-
44	168458			-	-	-	Other/Unknown	-
45	168469			-	-	-	Other/Unknown	-
46	101769			33	33	2	Other	-
47	101770			38	38	2	Other	-
48	168493			-	-	-	Other/Unknown	-
49	350058			105	-	4	Other/Unknown	SW 6TH AVE LOT #6, SHERWOOD HILLS
50	405200		0.5-1	126	-	-	Other/Unknown	112 S PINE AVE
51	436479			140	83	4	Irrigation - Landscape	195 SE FT KING
52	276204			160	-	4	Domestic	472 SS 1ST TERRACE
53	436316			160	114	4	Irrigation - Landscape	200 SW 8TH ST
54	180190			160	114	4	Irrigation	-
55	169595			100	83	4	Irrigation	-
56	270250			140	-	4	Domestic	SW 12TH CT
57	169779			130	88	4	Domestic	-
58	436339			140	114	4	Domestic	1212 SW PINE AVE
59	436319			71	63	4	Domestic	-
60	436318			90	65	4	Domestic	-
61	436333			142	113	4	Irrigation - Landscape	SW 1ST AVE
62	185156			90	65	4	Domestic	-
63	183953			71	63	4	Domestic	-
64	185169			136	-	-	Domestic	-
65	91800			165	132	4	Irrigation	-
66	276156			115	-	-	Other	HWY 200 & HWY 441/301 (PINE PLAZA SHOPPING CENTER)
67	269866			140	-	2	Domestic	1212 SW PINE AVE
68	147184			66	63	4	Irrigation	-
69	446465			100	64	4	Irrigation - Landscape	1602 SW COLLEGE RD
70	168966			180	189	4	Other/Unknown	-
71	131859			90	71	4	Domestic	-
72	435937			90	71	4	Domestic	1450 SW 21ST AVE
73	131417			90	-	-	Domestic	-
74	435913			100	68	4	Irrigation - Landscape	1101 SW 20TH CT
75	405250			140	-	4	Domestic	SW 23RD PLACE
76	287366			164	-	-	Other/Unknown	2335 NW 10TH ST
77	287368			160	-	-	Other/Unknown	2335 NW 10TH ST
78	131703		0-0.5	-	-	-	Other/Unknown	-

TABLE 2: WATER WELLS WITHIN A 1-MILE RADIUS
Former Florida State Fire College

Figure ID	SJRWMD or FDOH Identification	Source	Range from Site (Miles)	Total Depth (ft BLS)	Casing Length (feet)	Well Diameter (inches)	Well Usage or Type	Address
79	435760	SJRWMD	0-0.5	85	57	4	Irrigation - Landscape	CORNER OF HWY 200/MARTIN LUTHER KING BLVD
80	131723			150	70	4	Irrigation	-
81	131611			63	63	4	Irrigation	-
82	131747		0.5-1	180	74	4	Irrigation	-
83	184276		0-0.5	170	154	4	Irrigation	-
84	318905		0.5-1	120	-	4	Irrigation	2402 NW 6TH ST
85	435759			87	77	4	Irrigation - Landscape	2500 NW 6TH ST
86	269552			190	-	4	Other/Unknown	601 SE 25TH AVE
87	269553			190	-	4	Other/Unknown	601 SE 25TH AVE
88	131546			100	67	4	Domestic	-
89	350473			75	-	-	Other/Unknown	2285 NW 6TH PLACE
90	350474			75	-	-	Other/Unknown	2285 NW 6TH PLACE
91	NCF_15345_DRN_2_P2			124	22	-	Drainage	-
92	NCF_15345_DRN_2_P1			124	22	-	Drainage	-
93	NCF_15495_DRN_2_P3			118	16	-	Drainage	-
94	NCF_15496_DRN_2_P9			128	26	-	Drainage	-
95	NCF_15495_DRN_2_P5			131	29	-	Drainage	-
96	NCF_15495_DRN_2_P4			131	29	-	Drainage	-
97	NCF_15495_DRN_2_P1			125	23	-	Drainage	-
98	NCF_15495_DRN_2_P2			125	23	-	Drainage	-
99	NCF_15644_DRN_2_P2		0-0.5	131	29	-	Drainage	-
100	NCF_15644_DRN_2_P3			134	32	-	Drainage	-
101	NCF_15645_DRN_2_P1		0.5-1	130	28	-	Drainage	-
102	NCF_15646_DRN_2_P1			155	53	-	Drainage	-
103	NCF_15644_DRN_2_P1		0-0.5	114	12	-	Drainage	-
104	SJ_7163_11352		0.5-1	115	-	6	Environmental	-
105	SJ_7163_11351			109	-	4	Environmental	-
106	NCF_15794_DRN_2_P1			121	19	-	Drainage	-
107	FSAID4cen_ALG_39571_GW			-	-	-	Agriculture	-

Notes:

1. SJRWMD indicates St. Johns River Water Management District. Source of data: SJRWMD Well Completion Report Sites Delegated Counties from Geospatial Open Data portal, file dated 16 February 2023 and SJRWMD Water Use Permit Type locations from https://data-floridaswater.opendata.arcgis.com/datasets/floridaswater::wup-permit-type-1), file dated 16 February 2023.

2. FDOH indicates Florida Department of Health. Source of data: https://www.floridahealth.gov/environmental-health/drinking-water/well-surveys.html, file dated 3 March 2023.

3. ft BLS indicates feet below land surface.

4. - indicates information not specified.

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
			Provisional Residential SCTL (µg/kg)	**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	**2**	**7**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1	SB-1 (0-0.5')	10/14/2020	0-0.5	0.23 I	3.8	NA	0.41 I	0.20 U	0.20 U	0.21 I	0.39 U	0.57 I	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.099 U	0.099 U
	SB-1 (0.5-2')	10/14/2020	0.5-2	0.20 I	**8.3**	NA	0.34 I	0.21 U	0.22 I	0.23 I	0.42 U	0.28 I	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.22 I	NA	0.10 U	0.10 U
	SB-1 (2-4')	10/14/2020	2-4	0.12 I	**22**	NA	0.19 U	0.19 U	0.19 U	0.49 I	0.44 I	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.097 U	0.097 U
	SB-1 (4-6')	10/14/2020	4-6	0.31 I	**8.0**	NA	0.21 U	0.21 U	0.21 U	0.82 I	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.46 I	0.21 U	NA	0.10 U	0.10 U
	SB-1 (6-8')	10/14/2020	6-8	0.13 I	1.9	NA	0.20 U	0.20 U	0.20 U	0.25 I	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.49 I	0.20 U	NA	0.098 U	0.098 U
	SB-1 (10-12')	10/14/2020	10-12	0.11 I	1.9	NA	0.19 U	0.19 U	0.19 U	0.31 I	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.097 U	0.097 U
	SB-1 (13-15')	10/14/2020	13-15	0.10 U	0.64 I	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-1 (23-25')	10/14/2020	23-25	0.15 I	**11**	NA	0.21 U	0.21 U	0.21 U	0.42 I	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.11 U
	SB-1 (33-35')	10/14/2020	33-35	0.16 U	3.1	NA	0.32 U	0.32 U	0.32 U	0.32 U	0.65 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.83 I	0.32 U	NA	0.16 U	0.16 U
SB-2	SB-2 (0.5-2')	10/12/2020	0.5-2	**3.3**	**23**	NA	6.5	4.8	5.8	1.6	1.5 I	0.27 I	0.20 U	0.20 U	0.20 U	0.20 U	2.2	40	NA	0.49	0.46
	SB-2 (2-4')	10/12/2020	2-4	**2.8**	**42**	NA	4.4	4.7	5.8	2.7	0.57 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	3.0	250	NA	0.43	0.60
	SB-2 (4-6')	10/12/2020	4-6	1.9	**120**	NA	2.7	1.9	2.7	2.3	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	2.8	92	NA	0.21 I	0.53
	SB-2 (6-8')	10/12/2020	6-8	**2.8**	**180**	NA	2.2	2.3	2.5	4.6	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	11	65	NA	0.18 I	0.64
	SB-2 (10-12')	10/12/2020	10-12	1.3	**150**	NA	3.6	1.7	1.7	1.3	0.54 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	6.3	79	NA	0.26 I	0.28 I
	SB-2 (13-15')	10/12/2020	13-15	0.099 U	**70**	NA	0.20 U	0.20 U	0.20 U	0.83	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	120	NA	0.099 U	0.099 U
	SB-2 (23-25')	10/12/2020	23-25	**5.5**	**21**	NA	7.1	7.4	12	5.8	4.4	0.30 U	0.35 I	0.30 U	0.30 U	0.30 U	4.0	140	NA	0.23 I	0.22 I
	SB-2 (28-30')	10/12/2020	28-30	0.21 I	**18**	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.55 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	1.1 I	17	NA	0.14 U	0.14 U
SB-3	SB-3 (0.5-2')	10/13/2020	0.5-2	**17**	**47**	NA	29	26	40	3.0	1.5 I	1.1	0.54 I	0.21 U	0.21 U	0.21 U	0.69 I	6.9	NA	0.90	1.4
	SB-3 (2-4')	10/13/2020	2-4	0.90	4.4	NA	6.4	3.4	2.4	0.21 I	0.51 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.32 I	NA	0.21 I	0.20 I
	SB-3 (4-6')	10/13/2020	4-6	**3.3**	**36**	NA	8.8	6.0	4.6	2.1	1.1 I	0.25 I	0.20 U	0.20 U	0.20 U	0.20 U	1.0 I	8.0	NA	0.39 I	0.56
	SB-3 (6-8')	10/13/2020	6-8	0.81	**8.9**	NA	1.9	1.1	1.2	0.42 I	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	2.7	NA	0.12 I	0.16 I
	SB-3 (10-12')	10/13/2020	10-12	**4.4**	**110**	NA	1.9	3.5	4.1	3.3	0.50 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	3.4	37	NA	0.29 I	0.59
	SB-3 (13-15')	10/13/2020	13-15	**3.1**	**69**	NA	0.90 I	1.8	2.1	2.0	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.51 I	11	NA	0.13 I	0.28 I
	SB-3 (23-25')	10/13/2020	23-25	1.5	**22**	NA	0.33 I	0.30 I	1.1	1.5	0.48 U	0.24 U	0.24 UJ	0.24 U	0.24 U	0.24 U	0.48 U	5.1	NA	0.12 U	0.12 U
	SB-3 (28-30')	10/13/2020	28-30	1.5	**68**	NA	0.32 I	0.23 U	0.64 I	2.9	0.47 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.47 U	15	NA	0.12 U	0.12 U
SB-4	SB-4 (0.5-2')	10/12/2020	0.5-2	2.4	7.4	NA	2.8	2.7	5.3	1.7	0.38 U	0.39 I	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.68 I	NA	0.095 U	0.28 I
	SB-4 (2-4')	10/12/2020	2-4	0.33 I	2.9	NA	1.1	1.2	0.64 I	0.58 I	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.29 I	NA	0.10 U	0.13 I
	SB-4 (4-6')	10/12/2020	4-6	0.10 U	0.83 I	NA	0.68 I	1.1	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-4 (6-8')	10/12/2020	6-8	0.094 U	0.66 I	NA	0.19 U	0.19 U	0.30 I	0.19 U	0.37 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.37 U	0.19 U	NA	0.094 U	0.094 U
	SB-4 (10-12')	10/12/2020	10-12	0.13 U	0.52 I	NA	0.25 U	0.25 U	0.25 U	0.25 U	0.51 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.51 U	0.25 U	NA	0.13 U	0.13 U
	SB-4 (13-15')	10/12/2020	13-15	0.14 U	0.62 I	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U	0.28 U	NA	0.14 U	0.14 U
	SB-4 (23-25')	10/12/2020	23-25	0.15 U	0.30 U	NA	0.30 U	0.30 U	0.30 U	0.30 U	0.60 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.60 U	0.30 U	NA	0.15 U	0.15 U
	SB-4 (30-32')	10/12/2020	30-32	0.13 U	0.44 I	NA	0.26 U	0.26 U	0.26 U	0.26 U	0.51 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.51 U	0.26 U	NA	0.13 U	0.13 U
SB-5	SB-5 (0-0.5')	10/13/2020	0-0.5	0.49 I	**14**	NA	1.2	1.4	0.64 I	0.50 I	0.52 U	0.93 I	0.26 U	0.26 U	0.26 U	0.26 U	0.52 U	0.26 U	NA	0.20 I	0.34 I
	SB-5 (0.5-2')	10/13/2020	0.5-2	1.0	**28**	NA	1.8	2.4	1.0 I	0.64 I	0.60 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.60 U	0.30 U	NA	0.24 I	0.34 I
	SB-5 (2-4')	10/13/2020	2-4	0.14 U	5.8	NA	0.37 I	0.54 I	0.37 I	0.28 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U	0.28 U	NA	0.28 I	0.19 I
	SB-5 (4-6')	10/13/2020	4-6	0.17 I	2.2	NA	0.24 U	0.29 I	0.28 I	0.24 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.48 U	0.24 U	NA	0.25 I	0.23 I
	SB-5 (6-8')	10/13/2020	6-8	0.13 U	6.0	NA	0.26 U	0.26 U	0.26 U	0.26 U	0.51 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.51 U	0.26 U	NA	0.15 I	0.17 I
	SB-5 (10-12')	10/13/2020	10-12	0.11 U	4.1	NA	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	NA	0.11 U	0.11 U
	SB-5 (13-15')	10/13/2020	13-15	0.11 U	1.2	NA	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
	SB-5 (23-25')	10/13/2020	23-25	0.12 U	**8.0**	NA	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	NA	0.12 U	0.12 U
	SB-5 (28-30')	10/13/2020	28-30	0.12 U	**250**	NA	0.25 U	0.39 I	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	NA	0.12 U	0.12 U

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replcement	Replacement	Replacement	Replacement	Misc	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
			Provisional Residential SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1	SB-1 (0-0.5')	10/14/2020	0-0.5	0.27 I	0.099 U	0.099 U	0.099 U	NA	NA	NA	0.099 U	0.099 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-1 (0.5-2')	10/14/2020	0.5-2	0.41 I	0.10 U	0.12 I	0.25 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-1 (2-4')	10/14/2020	2-4	0.35 I	0.097 U	0.097 U	0.097 U	NA	NA	NA	0.097 U	0.097 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-1 (4-6')	10/14/2020	4-6	0.60	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-1 (6-8')	10/14/2020	6-8	0.37 I	0.098 U	0.098 U	0.098 U	NA	NA	NA	0.098 U	0.098 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-1 (10-12')	10/14/2020	10-12	0.43	0.097 U	0.097 U	0.097 U	NA	NA	NA	0.097 U	0.097 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-1 (13-15')	10/14/2020	13-15	0.20 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-1 (23-25')	10/14/2020	23-25	0.14 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-1 (33-35')	10/14/2020	33-35	0.16 U	0.16 U	0.16 U	0.16 U	NA	NA	NA	0.16 U	0.16 U	NA	NA	NA	0.65 U	NA	NA	NA	NA	NA
SB-2	SB-2 (0.5-2')	10/12/2020	0.5-2	14	0.33 I	0.25 I	0.11 I	NA	NA	NA	0.099 U	0.099 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-2 (2-4')	10/12/2020	2-4	5.5	0.10 U	0.24 I	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-2 (4-6')	10/12/2020	4-6	2.7	0.15 I	0.097 U	0.097 U	NA	NA	NA	0.097 U	0.097 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-2 (6-8')	10/12/2020	6-8	4.4	0.76	0.13 I	0.094 U	NA	NA	NA	0.094 U	0.094 U	NA	NA	NA	0.38 U	NA	NA	NA	NA	NA
	SB-2 (10-12')	10/12/2020	10-12	2.7	0.30 I	0.098 U	0.098 U	NA	NA	NA	0.098 U	0.098 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-2 (13-15')	10/12/2020	13-15	0.18 I	0.099 U	0.099 U	0.099 U	NA	NA	NA	0.099 U	0.099 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-2 (23-25')	10/12/2020	23-25	3.1	0.20 I	0.29 I	0.36 I	NA	NA	NA	0.15 U	0.15 U	NA	NA	NA	0.59 U	NA	NA	NA	NA	NA
	SB-2 (28-30')	10/12/2020	28-30	0.31 I	0.14 U	0.14 U	0.14 U	NA	NA	NA	0.14 U	0.14 U	NA	NA	NA	0.55 U	NA	NA	NA	NA	NA
SB-3	SB-3 (0.5-2')	10/13/2020	0.5-2	35	0.77	0.23 I	0.35 I	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-3 (2-4')	10/13/2020	2-4	3.2	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-3 (4-6')	10/13/2020	4-6	11	0.22 I	0.25 I	0.19 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-3 (6-8')	10/13/2020	6-8	2.3	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-3 (10-12')	10/13/2020	10-12	13	0.30 I	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.50 U	NA	NA	NA	NA	NA
	SB-3 (13-15')	10/13/2020	13-15	7.5	0.18 I	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.45 U	NA	NA	NA	NA	NA
	SB-3 (23-25')	10/13/2020	23-25	2.2	0.17 I	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.48 U	NA	NA	NA	NA	NA
	SB-3 (28-30')	10/13/2020	28-30	1.4	0.26 I	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.47 U	NA	NA	NA	NA	NA
SB-4	SB-4 (0.5-2')	10/12/2020	0.5-2	6.3	0.13 I	0.095 U	0.095 U	NA	NA	NA	0.095 U	0.095 U	NA	NA	NA	0.38 U	NA	NA	NA	NA	NA
	SB-4 (2-4')	10/12/2020	2-4	1.2	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-4 (4-6')	10/12/2020	4-6	0.25 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-4 (6-8')	10/12/2020	6-8	0.094 U	0.094 U	0.094 U	0.094 U	NA	NA	NA	0.094 U	0.094 U	NA	NA	NA	0.37 U	NA	NA	NA	NA	NA
	SB-4 (10-12')	10/12/2020	10-12	0.13 U	0.13 U	0.13 U	0.13 U	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA	0.51 U	NA	NA	NA	NA	NA
	SB-4 (13-15')	10/12/2020	13-15	0.14 U	0.14 U	0.14 U	0.14 U	NA	NA	NA	0.14 U	0.14 U	NA	NA	NA	0.56 U	NA	NA	NA	NA	NA
	SB-4 (23-25')	10/12/2020	23-25	0.15 U	0.15 U	0.15 U	0.15 U	NA	NA	NA	0.15 U	0.15 U	NA	NA	NA	0.60 U	NA	NA	NA	NA	NA
	SB-4 (30-32')	10/12/2020	30-32	0.13 U	0.13 U	0.13 U	0.13 U	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA	0.51 U	NA	NA	NA	NA	NA
SB-5	SB-5 (0-0.5')	10/13/2020	0-0.5	5.3	0.14 I	0.14 I	0.44 I	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA	0.52 U	NA	NA	NA	NA	NA
	SB-5 (0.5-2')	10/13/2020	0.5-2	6.5	0.64	0.15 U	0.15 U	NA	NA	NA	0.15 U	0.15 U	NA	NA	NA	0.60 U	NA	NA	NA	NA	NA
	SB-5 (2-4')	10/13/2020	2-4	3.7	0.14 U	0.14 U	0.14 U	NA	NA	NA	0.14 U	0.14 U	NA	NA	NA	0.56 U	NA	NA	NA	NA	NA
	SB-5 (4-6')	10/13/2020	4-6	2.8	0.12 U	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.48 U	NA	NA	NA	NA	NA
	SB-5 (6-8')	10/13/2020	6-8	3.1	0.13 U	0.13 U	0.13 U	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA	0.51 U	NA	NA	NA	NA	NA
	SB-5 (10-12')	10/13/2020	10-12	0.78	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.46 U	NA	NA	NA	NA	NA
	SB-5 (13-15')	10/13/2020	13-15	0.33 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-5 (23-25')	10/13/2020	23-25	0.62	0.12 U	0.12 U	0.40 I	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.46 U	NA	NA	NA	NA	NA
	SB-5 (28-30')	10/13/2020	28-30	0.96	0.12 U	1.9	2.9	NA	NA	NA	0.27 I	0.12 U	NA	NA	NA	0.50 U	NA	NA	NA	NA	NA

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
			Provisional Residential SCTL (µg/kg)	**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	**2**	**7**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-6	SB-6 (0-0.5')	10/13/2020	0-0.5	0.17 I	2.9	NA	0.23 I	0.36 I	0.21 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.11 U
	SB-6 (0.5-2')	10/13/2020	0.5-2	0.10 U	1.0	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
	SB-6 (2-4')	10/13/2020	2-4	0.10 U	0.60 I	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-6 (4-6')	10/13/2020	4-6	0.11 U	0.97	NA	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	NA	0.11 U	0.11 U
	SB-6 (6-8')	10/13/2020	6-8	0.11 U	0.46 I	NA	0.22 U	0.22 U	0.22 U	0.22 U	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.45 U	0.22 U	NA	0.11 U	0.11 U
	SB-6 (10-12')	10/13/2020	10-12	0.12 U	0.25 I	NA	0.24 U	0.24 U	0.24 U	0.24 U	0.49 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.49 U	0.24 U	NA	0.12 U	0.12 U
	SB-6 (13-15')	10/13/2020	13-15	0.12 U	0.23 U	NA	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	NA	0.12 U	0.12 U
	SB-6 (23-25')	10/13/2020	23-25	0.14 U	0.28 U	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U	0.28 U	NA	0.14 U	0.14 U
	SB-6 (28-30')	10/13/2020	28-30	0.15 U	0.59 I	NA	0.30 U	0.30 U	0.30 U	0.30 U	0.61 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.61 U	0.30 U	NA	0.15 U	0.15 U
SB-7	SB-7 (0.5-2')	10/13/2020	0.5-2	0.10 U	6.3	NA	0.20 U	0.20 U	0.34 I	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-7 (2-4')	10/13/2020	2-4	0.17 I	4.9	NA	0.67 I	0.65 I	0.34 I	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-7 (4-6')	10/14/2020	4-6	0.98	3.2	NA	1.2	1.1 I	0.78 I	0.33 I	0.57 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.57 U	0.28 U	NA	0.14 U	0.14 U
	SB-7 (6-8')	10/14/2020	6-8	0.41 I	1.4	NA	0.75 I	0.76 I	0.52 I	0.29 U	0.58 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.58 U	0.29 U	NA	0.15 U	0.15 U
	SB-7 (10-12')	10/14/2020	10-12	0.31 I	0.34 I	NA	0.56 I	0.54 I	0.52 I	0.26 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.52 U	0.26 U	NA	0.13 U	0.13 U
	SB-7 (13-15')	10/14/2020	13-15	0.13 U	0.27 U	NA	0.27 U	0.27 U	0.27 U	0.27 U	0.53 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.53 U	0.27 U	NA	0.13 U	0.13 U
	SB-7 (23-25')	10/14/2020	23-25	0.12 U	0.61 I	NA	0.24 U	0.24 U	0.24 U	0.24 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.48 U	0.24 U	NA	0.12 U	0.12 U
	SB-7 (28-30')	10/14/2020	28-30	0.12 U	2.3	NA	0.23 U	0.23 U	0.23 U	0.23 U	0.47 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.47 U	0.23 U	NA	0.12 U	0.12 U
SB-8	SB-8 (0-0.5')	10/15/2020	0-0.5	0.20 I	2.8	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.29 I	0.20 U	0.20 U	0.20 U	0.20 U	0.40 I	0.20 U	NA	0.10 U	0.10 U
	SB-8 (0.5-2')	10/15/2020	0.5-2	0.098 U	1.7	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.44 I	0.20 U	NA	0.098 U	0.098 U
	SB-8 (2-4')	3/23/2021	2-4	0.20 U	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.098 U	0.098 U
	SB-8 (4-6')	3/23/2021	4-6	0.19 U	0.20 I	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	NA	0.095 U	0.095 U
SB-9	SB-9 (0-0.5')	10/13/2020	0-0.5	0.16 I	1.3	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.25 I	0.22 I	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-9 (0.5-2')	10/13/2020	0.5-2	0.49	**11**	NA	0.23 I	0.28 I	0.30 I	0.21 U	0.42 U	1.6	0.21 U	0.28 I	0.21 U	0.21 U	1.9	4.6	NA	0.11 U	0.11 U
	SB-9 (2-4')	3/23/2021	2-4	0.20 U	3.1	0.40 U	0.20 U	0.22 I	0.20 U	0.20 U	0.40 U	1.9	0.28 I	0.28 I	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.099 U	0.099 U
	SB-9 (4-6')	3/23/2021	4-6	0.21 U	1.1	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.70 I	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
SB-10	SB-10 (0-0.5')	10/14/2020	0-0.5	0.12 I	1.5	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.31 I	0.43 I	0.28 I	0.20 U	0.20 U	0.41 I	0.20 U	NA	0.10 U	0.10 U
	SB-10 (0.5-2')	10/14/2020	0.5-2	0.10 U	0.20 U	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.30 I	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-10 (2-4')	3/23/2021	2-4	0.22 U	0.46 I	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.67 I	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
SB-10	SB-10 (4-6')	3/23/2021	4-6	0.22 U	0.22 I	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	NA	0.11 U	0.11 U
SB-11	SB-11 (0-0.5')	10/14/2020	0-0.5	0.13 I	1.6	NA	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.27 I	0.22 U	0.22 U	0.22 U	0.22 U	0.49 I	0.22 U	NA	0.11 U	0.11 U
	SB-11 (0.5-2')	10/14/2020	0.5-2	0.098 U	1.1	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.098 U	0.098 U
SB-12	SB-12 (0-0.5')	10/13/2020	0-0.5	0.18 I	2.8	NA	0.23 U	0.30 I	0.23 U	0.28 I	0.47 U	0.28 I	0.23 U	0.23 U	0.23 U	0.23 U	0.47 U	0.23 U	NA	0.12 U	0.12 U
	SB-12 (0.5-2')	10/13/2020	0.5-2	0.10 U	1.5	NA	0.21 U	0.21 U	0.21 U	0.25 I	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.48 I	0.21 U	NA	0.10 U	0.10 U
SB-13	SB-13 (0-0.5')	10/14/2020	0-0.5	2.0	**24**	NA	1.8	1.5	2.6	1.1	2.0	3.6	2.3	8.5	1.0	0.24 U	10	17	NA	0.12 U	0.12 I
	SB-13 (0.5-2')	10/14/2020	0.5-2	**2.5**	**24**	NA	0.80 I	0.83	2.6	3.3	3.9	4.4	0.62 I	0.87	0.21 U	0.21 U	1.7	18	NA	0.10 U	0.10 U
	SB-13 (2-4')	10/14/2020	2-4	2.4	7.4	NA	0.64 I	0.89	1.9	2.7	1.4 I	1.5	0.21 U	0.22 I	0.21 U	0.21 U	0.54 I	4.8	NA	0.11 U	0.11 U
SB-14	SB-14 (0.5-2')	10/12/2020	0.5-2	**8.2**	7.3	NA	0.89	2.5	9.1	1.8	0.59 I	0.56 I	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.23 I
	SB-14 (2-4')	10/12/2020	2-4	0.16 I	7.2	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.56 I	4.5	NA	0.10 U	0.10 U
SB-15	SB-15 (0.5-2')	10/13/2020	0.5-2	**4.2**	**73**	NA	0.88	2.1	6.8	2.7	1.9	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	1.2	NA	0.16 I	0.73
	SB-15 (2-4')	10/13/2020	2-4	1.3	**56**	NA	1.6	3.4	1.3	2.2	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	4.9	NA	0.34 I	0.37 I
SB-16	SB-16 (0-0.5')	10/15/2020	0-0.5	0.37 I	3.3	NA	0.34 I	0.27 I	0.28 I	0.42 I	0.43 U	2.5	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.11 U
	SB-16 (0.5-2')	10/15/2020	0.5-2	0.28 I	2.7	NA	0.30 I	0.27 I	0.26 I	0.34 I	0.59 I	2.0	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-16 (2-4')	10/15/2020	2-4	0.095 U	1.2	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	9.2	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	NA	0.095 U	0.095 U
SB-17	SB-17 (0-0.5')	10/15/2020	0-0.5	0.51	**11**	NA	1.1	0.64 I	0.42 I	0.41 I	0.41 U	0.65 I	0.37 I	0.28 I	0.20 U	0.20 U	0.41 U	0.25 I	NA	0.10 U	0.10 U
	SB-17 (0.5-2')	10/15/2020	0.5-2	0.70	**10**	NA	0.38 I	0.27 I	0.62 I	0.56 I	0.95 I	0.88 I	0.23 U	0.23 U	0.23 U	0.23 U	0.46 I	2.0	NA	0.11 U	0.11 U
	SB-17 (2-4')	10/15/2020	2-4	0.097 U	1.6	NA	0.19 U	0.22 I	0.24 I	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.22 I	NA	0.097 U	0.097 U

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
Class				PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replcement	Replacement	Replacement	Replacement	Misc	Misc.	Misc.	Misc.	Misc.
Carbon Chain Length				6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
Provisional Residential SCTL (µg/kg)				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Provisional Industrial SCTL (µg/kg)				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Provisional Leachability SCTL (µg/kg)				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-6	SB-6 (0-0.5')	10/13/2020	0-0.5	0.13 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-6 (0.5-2')	10/13/2020	0.5-2	0.10 U	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-6 (2-4')	10/13/2020	2-4	0.10 U	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-6 (4-6')	10/13/2020	4-6	0.11 U	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.46 U	NA	NA	NA	NA	NA
	SB-6 (6-8')	10/13/2020	6-8	0.11 U	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.45 U	NA	NA	NA	NA	NA
	SB-6 (10-12')	10/13/2020	10-12	0.12 U	0.12 U	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 UJ	NA	NA	NA	0.49 U	NA	NA	NA	NA	NA
	SB-6 (13-15')	10/13/2020	13-15	0.12 U	0.12 U	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.46 U	NA	NA	NA	NA	NA
	SB-6 (23-25')	10/13/2020	23-25	0.14 U	0.14 U	0.14 U	0.14 U	NA	NA	NA	0.14 U	0.14 U	NA	NA	NA	0.56 U	NA	NA	NA	NA	NA
	SB-6 (28-30')	10/13/2020	28-30	0.15 U	0.15 U	0.15 U	0.15 U	NA	NA	NA	0.15 U	0.15 U	NA	NA	NA	0.61 U	NA	NA	NA	NA	NA
SB-7	SB-7 (0.5-2')	10/13/2020	0.5-2	0.28 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-7 (2-4')	10/13/2020	2-4	0.18 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-7 (4-6')	10/14/2020	4-6	0.22 I	0.14 U	0.14 U	0.14 U	NA	NA	NA	0.14 U	0.14 U	NA	NA	NA	0.57 U	NA	NA	NA	NA	NA
	SB-7 (6-8')	10/14/2020	6-8	0.23 I	0.15 U	0.15 U	0.15 U	NA	NA	NA	0.15 U	0.15 U	NA	NA	NA	0.58 U	NA	NA	NA	NA	NA
	SB-7 (10-12')	10/14/2020	10-12	0.15 I	0.13 U	0.13 U	0.13 U	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA	0.52 U	NA	NA	NA	NA	NA
	SB-7 (13-15')	10/14/2020	13-15	0.13 U	0.13 U	0.13 U	0.13 U	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA	0.53 U	NA	NA	NA	NA	NA
	SB-7 (23-25')	10/14/2020	23-25	0.12 U	0.12 U	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.48 U	NA	NA	NA	NA	NA
	SB-7 (28-30')	10/14/2020	28-30	0.20 I	0.12 U	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.47 U	NA	NA	NA	NA	NA
SB-8	SB-8 (0-0.5')	10/15/2020	0-0.5	0.29 I	0.10 U	0.10 U	0.14 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-8 (0.5-2')	10/15/2020	0.5-2	0.098 U	0.098 U	0.098 U	0.098 U	NA	NA	NA	0.098 U	0.098 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-8 (2-4')	3/23/2021	2-4	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.20 U	0.39 U	NA	NA	NA	NA	NA
	SB-8 (4-6')	3/23/2021	4-6	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.19 U	0.19 U	0.38 U	NA	NA	NA	NA	NA
SB-9	SB-9 (0-0.5')	10/13/2020	0-0.5	0.20 I	0.10 U	0.10 U	0.26 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-9 (0.5-2')	10/13/2020	0.5-2	0.32 I	0.11 U	0.11 U	0.82	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-9 (2-4')	3/23/2021	2-4	2.7	0.099 U	0.10 I	4.5	0.13 I	0.43	0.85	0.099 U	0.099 U	0.099 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-9 (4-6')	3/23/2021	4-6	1.7	0.11 U	0.14 I	0.64	0.11 U	0.41 I	0.51	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
SB-10	SB-10 (0-0.5')	10/14/2020	0-0.5	0.12 I	0.10 U	0.10 U	0.26 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-10 (0.5-2')	10/14/2020	0.5-2	0.10 U	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-10 (2-4')	3/23/2021	2-4	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.43 U	NA	NA	NA	NA	NA
SB-10	SB-10 (4-6')	3/23/2021	4-6	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.44 U	NA	NA	NA	NA	NA
SB-11	SB-11 (0-0.5')	10/14/2020	0-0.5	0.20 I	0.11 U	0.11 U	0.11 I	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-11 (0.5-2')	10/14/2020	0.5-2	0.098 U	0.098 U	0.098 U	0.098 U	NA	NA	NA	0.098 U	0.098 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
SB-12	SB-12 (0-0.5')	10/13/2020	0-0.5	0.14 I	0.12 U	0.12 U	0.16 I	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.47 U	NA	NA	NA	NA	NA
	SB-12 (0.5-2')	10/13/2020	0.5-2	0.10 U	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-13	SB-13 (0-0.5')	10/14/2020	0-0.5	2.1	0.18 I	0.18 I	1.5	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.49 U	NA	NA	NA	NA	NA
	SB-13 (0.5-2')	10/14/2020	0.5-2	2.2	0.27 I	0.36 I	0.70	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-13 (2-4')	10/14/2020	2-4	1.5	0.15 I	0.11 U	0.12 I	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
SB-14	SB-14 (0.5-2')	10/12/2020	0.5-2	11	0.22 I	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-14 (2-4')	10/12/2020	2-4	0.20 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
SB-15	SB-15 (0.5-2')	10/13/2020	0.5-2	36	0.52	0.097 U	0.097 U	NA	NA	NA	0.097 U	0.097 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-15 (2-4')	10/13/2020	2-4	5.8	0.16 I	0.098 U	0.098 U	NA	NA	NA	0.098 U	0.098 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
SB-16	SB-16 (0-0.5')	10/15/2020	0-0.5	0.63	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-16 (0.5-2')	10/15/2020	0.5-2	0.79	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-16 (2-4')	10/15/2020	2-4	0.46	0.095 U	0.095 U	0.095 U	NA	NA	NA	0.095 U	0.095 U	NA	NA	NA	0.38 U	NA	NA	NA	NA	NA
SB-17	SB-17 (0-0.5')	10/15/2020	0-0.5	1.7	0.10 U	0.10 U	0.16 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-17 (0.5-2')	10/15/2020	0.5-2	1.7	0.11 U	0.16 I	0.15 I	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.46 U	NA	NA	NA	NA	NA
	SB-17 (2-4')	10/15/2020	2-4	0.45	0.097 U	0.097 U	0.097 U	NA	NA	NA	0.097 U	0.097 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
			Provisional Residential SCTL (µg/kg)	**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	**2**	**7**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-18	SB-18 (0-0.5')	10/12/2020	0-0.5	0.73	6.4	NA	1.0 I	0.60 I	0.59 I	0.49 I	0.58 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.58 U	0.29 U	NA	0.14 U	0.14 U
	SB-18 (0.5-2')	10/12/2020	0.5-2	0.19 I	3.1	NA	0.32 I	0.22 I	0.40 I	0.22 I	0.43 U	2.4	0.26 I	0.40 I	0.22 U	0.22 U	0.43 U	0.36 I	NA	0.11 U	0.11 U
	SB-18 (2-4')	10/12/2020	2-4	0.25 I	**8.1**	NA	0.25 I	0.23 U	0.23 U	0.23 U	0.65 I	2.7	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.42 I	NA	0.11 U	0.11 U
SB-19	SB-19 (0-0.5')	10/15/2020	0-0.5	0.68	**31**	NA	0.23 I	0.37 I	0.33 I	0.20 U	0.41 U	0.63 I	0.20 U	0.20 U	0.20 U	0.20 U	0.67 I	0.45 I	NA	0.10 U	0.10 U
	SB-19 (0.5-2')	10/15/2020	0.5-2	0.96	**16**	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.21 I	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-19 (2-4')	10/15/2020	2-4	0.21 I	**8.1**	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
SB-20	SB-20 (0-0.5')	10/14/2020	0-0.5	0.10 U	2.6	NA	0.21 U	0.21 U	0.21 U	0.23 I	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-20 (0.5-2')	10/14/2020	0.5-2	0.15 I	3.4	NA	0.27 I	0.20 U	0.20 U	0.20 U	0.39 U	0.24 I	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.099 U	0.099 U
	SB-20 (2-4')	10/14/2020	2-4	0.098 U	5.3	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.098 U	0.098 U
SB-21	SB-21 (0-0.5')	10/14/2020	0-0.5	0.16 I	1.3	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.097 U	0.097 U
	SB-21 (0.5-2')	10/14/2020	0.5-2	0.099 U	2.8	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.099 U	0.099 U
	SB-21 (2-4')	10/14/2020	2-4	0.10 U	0.81 I	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.45 I	0.21 U	NA	0.10 U	0.10 U
SB-22	SB-22 (0-0.5')	10/14/2020	0-0.5	0.31 I	3.4	NA	0.35 I	0.22 I	0.30 I	0.19 U	0.38 U	1.1	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	NA	0.096 U	0.096 U
	SB-22 (0.5-2')	10/14/2020	0.5-2	0.10 U	2.8	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
	SB-22 (2-4')	10/14/2020	2-4	0.10 U	0.64 I	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
SB-23	SB-23 (0-0.5')	10/14/2020	0-0.5	0.38 I	4.5	NA	0.61 I	0.43 I	0.42 I	0.21 U	0.42 U	0.31 I	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
	SB-23 (0.5-2')	10/14/2020	0.5-2	0.11 U	**8.6**	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
	SB-23 (2-4')	10/14/2020	2-4	0.10 U	**7.6**	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
SB-24	SB-24 (0-0.5')	10/13/2020	0-0.5	0.67	2.5	NA	2.3	0.78 I	0.91 I	0.24 U	0.48 U	0.24 I	0.24 U	0.28 I	0.24 U	0.24 U	0.48 U	0.24 U	NA	0.12 U	0.15 I
	SB-24 (0.5-2')	10/13/2020	0.5-2	0.10 U	6.4	NA	0.43 I	0.21 U	0.21 U	0.21 U	0.42 U	2.0	0.44 I	0.36 I	0.21 U	0.21 U	0.42 U	0.36 I	NA	0.10 U	0.10 U
	SB-24 (2-4')	10/13/2020	2-4	0.10 U	**16**	NA	0.20 U	0.20 U	0.20 U	0.62 I	4.0	2.4	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	40	NA	0.10 U	0.10 U
SB-25	SB-25 (0-0.5')	10/15/2020	0-0.5	0.13 I	1.2	NA	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	NA	0.11 U	0.11 U
	SB-25 (0.5-2')	10/15/2020	0.5-2	0.10 U	0.90	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
SB-26	SB-26 (0-0.5')	10/15/2020	0-0.5	0.23 I	2.4	NA	0.32 I	0.68 I	0.30 I	0.25 I	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
	SB-26 (0.5-2')	10/15/2020	0.5-2	0.10 U	0.53 I	NA	0.21 I	0.54 I	0.32 I	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
SB-27	SB-27 (0-0.5')	10/15/2020	0-0.5	0.87	**15**	NA	1.7	1.6	0.75 I	0.80 I	0.41 U	2.2	0.33 I	0.51 I	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.21 I	0.32 I
	SB-27 (0.5-2')	10/15/2020	0.5-2	0.27 I	5.8	NA	0.63 I	0.42 I	0.39 I	0.29 I	0.42 U	0.74 I	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.12 I
	SB-27 (2-3')	10/15/2020	2-3	0.23 I	**14**	NA	0.46 I	0.41 I	0.20 I	0.32 I	0.81 I	0.41 I	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.098 U	0.12 I
	SB-27 (4-6')	3/24/2021	4-6	0.28 U	0.71 I	0.57 U	0.28 U	0.28 U	0.28 U	0.28 U	0.57 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.57 U	0.28 U	NA	0.14 U	0.14 U
SB-28	SB-28 (0.5-2')	10/12/2020	0.5-2	**3.3**	6.2	NA	1.0	1.9	5.9	2.4	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	1.8	NA	0.10 U	0.27 I
	SB-28 (2-4')	10/12/2020	2-4	0.59	2.5	NA	2.3	3.5	1.6	1.4	0.46 I	23	0.46 I	2.7	0.21 U	0.21 U	0.42 U	0.31 I	NA	0.15 I	0.17 I
SB-29	SB-29 (0.5-2')	10/12/2020	0.5-2	**27**	**25**	NA	23	30	33	5.5 J	5.2	2.1	3.9	25	1.2	0.27 I	92	160	NA	0.47	0.60
	SB-29 (2-4')	10/12/2020	2-4	**12**	**15**	NA	16	20	9.9	2.9	7.8	4.6	0.49 I	0.21 U	0.21 U	0.32 I	23	140	NA	0.26 I	0.67
SB-30	SB-30 (0.5-2')	10/12/2020	0.5-2	**4.7**	**19**	NA	1.8	2.9	6.9	2.2	0.64 I	0.43 I	0.20 U	0.20 U	0.20 U	0.20 U	4.9	16	NA	0.10 U	0.13 I
	SB-30 (2-4')	10/12/2020	2-4	2.4	**65**	NA	2.5	2.3	1.2	2.9	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	21	27	NA	0.10 U	0.10 U
SB-31	SB-31 (0-0.5')	10/14/2020	0-0.5	0.22 I	2.5	NA	0.38 I	0.31 I	0.24 I	0.25 I	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
	SB-31 (0.5-2')	10/14/2020	0.5-2	0.12 I	1.8	NA	0.48 I	0.22 I	0.20 I	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.098 U	0.098 U
	SB-31 (2-4')	10/14/2020	2-4	0.10 U	0.81 I	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
SB-32	SB-32 (0-0.5')	10/14/2020	0-0.5	0.30 I	**13**	NA	0.37 I	0.20 U	0.32 I	0.20 U	0.40 U	1.0	0.32 I	0.20 U	0.20 U	0.20 U	0.74 I	0.56 I	NA	0.10 U	0.10 U
	SB-32 (0.5-2')	10/14/2020	0.5-2	0.19 I	2.7	NA	0.32 I	0.24 I	0.27 I	0.21 U	0.46 I	0.23 I	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.11 U
	SB-32 (2-4')	10/14/2020	2-4	0.11 I	4.1	NA	0.22 I	0.19 U	0.21 I	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.097 U	0.097 U
SB-33	SB-33 (0-0.5')	10/14/2020	0-0.5	0.25 I	3.7	NA	0.35 I	0.21 U	0.21 U	0.23 I	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
	SB-33 (0.5-2')	10/14/2020	0.5-2	0.21 I	6.5	NA	0.42 I	0.22 U	0.22 U	0.22 U	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.45 U	0.22 U	NA	0.11 U	0.11 U
	SB-33 (2-4')	10/14/2020	2-4	0.13 I	**9.8**	NA	0.25 I	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
SB-34	SB-34 (0.5-2')	10/13/2020	0.5-2	0.98	**24**	NA	0.29 I	0.20 U	1.9	0.68 I	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
	SB-34 (2-4')	10/13/2020	2-4	0.10 U	6.8	NA	0.23 I	0.33 I	0.69 I	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replcement	Replacement	Replacement	Replacement	Misc	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
			Provisional Residential SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-18	SB-18 (0-0.5')	10/12/2020	0-0.5	3.5	0.14 U	0.14 U	0.14 U	NA	NA	NA	0.14 U	0.14 U	NA	NA	NA	0.58 U	NA	NA	NA	NA	NA
	SB-18 (0.5-2')	10/12/2020	0.5-2	0.75	0.11 U	0.11 U	0.26 I	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-18 (2-4')	10/12/2020	2-4	0.49	0.11 U	0.42 I	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.46 U	NA	NA	NA	NA	NA
SB-19	SB-19 (0-0.5')	10/15/2020	0-0.5	5.2	0.20 I	0.15 I	1.7	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-19 (0.5-2')	10/15/2020	0.5-2	5.6	0.15 I	0.40	0.31 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-19 (2-4')	10/15/2020	2-4	2.3	0.10 U	0.16 I	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
SB-20	SB-20 (0-0.5')	10/14/2020	0-0.5	0.23 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-20 (0.5-2')	10/14/2020	0.5-2	0.29 I	0.099 U	0.099 U	0.099 U	NA	NA	NA	0.099 U	0.099 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-20 (2-4')	10/14/2020	2-4	0.18 I	0.098 U	0.098 U	0.098 U	NA	NA	NA	0.098 U	0.098 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
SB-21	SB-21 (0-0.5')	10/14/2020	0-0.5	0.10 I	0.097 U	0.097 U	0.097 U	NA	NA	NA	0.097 U	0.097 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-21 (0.5-2')	10/14/2020	0.5-2	0.099 U	0.099 U	0.099 U	0.099 U	NA	NA	NA	0.099 U	0.099 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-21 (2-4')	10/14/2020	2-4	0.10 U	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
SB-22	SB-22 (0-0.5')	10/14/2020	0-0.5	0.28 I	0.096 U	0.13 I	0.13 I	NA	NA	NA	0.096 U	0.096 U	NA	NA	NA	0.38 U	NA	NA	NA	NA	NA
	SB-22 (0.5-2')	10/14/2020	0.5-2	0.25 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-22 (2-4')	10/14/2020	2-4	0.17 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-23	SB-23 (0-0.5')	10/14/2020	0-0.5	0.39 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-23 (0.5-2')	10/14/2020	0.5-2	0.19 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-23 (2-4')	10/14/2020	2-4	0.19 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
SB-24	SB-24 (0-0.5')	10/13/2020	0-0.5	4.6	0.12 U	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.48 U	NA	NA	NA	NA	NA
	SB-24 (0.5-2')	10/13/2020	0.5-2	0.78	0.10 U	0.26 I	2.0	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-24 (2-4')	10/13/2020	2-4	0.24 I	0.10 U	1.9	2.6	NA	NA	NA	0.11 I	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-25	SB-25 (0-0.5')	10/15/2020	0-0.5	0.19 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.44 U	NA	NA	NA	NA	NA
	SB-25 (0.5-2')	10/15/2020	0.5-2	0.10 U	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
SB-26	SB-26 (0-0.5')	10/15/2020	0-0.5	0.46	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-26 (0.5-2')	10/15/2020	0.5-2	0.12 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
SB-27	SB-27 (0-0.5')	10/15/2020	0-0.5	6.4	0.13 I	0.10 U	0.19 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-27 (0.5-2')	10/15/2020	0.5-2	3.5	0.10 U	0.16 I	0.22 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-27 (2-3')	10/15/2020	2-3	2.9	0.098 U	0.11 I	0.098 U	NA	NA	NA	0.098 U	0.098 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-27 (4-6')	3/24/2021	4-6	0.78	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U	0.28 U	0.57 U	NA	NA	NA	NA	NA
SB-28	SB-28 (0.5-2')	10/12/2020	0.5-2	4.7	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-28 (2-4')	10/12/2020	2-4	1.2	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
SB-29	SB-29 (0.5-2')	10/12/2020	0.5-2	18	0.59	0.81	1.9	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-29 (2-4')	10/12/2020	2-4	26	0.41	3.3	1.3	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-30	SB-30 (0.5-2')	10/12/2020	0.5-2	4.5	0.16 I	0.12 I	0.10 U	NA	NA	NA	0.10 U	0.14 I	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-30 (2-4')	10/12/2020	2-4	1.7	0.23 I	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-31	SB-31 (0-0.5')	10/14/2020	0-0.5	0.23 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-31 (0.5-2')	10/14/2020	0.5-2	0.15 I	0.098 U	0.098 U	0.098 U	NA	NA	NA	0.098 U	0.098 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-31 (2-4')	10/14/2020	2-4	0.12 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-32	SB-32 (0-0.5')	10/14/2020	0-0.5	1.3	0.14 I	0.10 U	0.11 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-32 (0.5-2')	10/14/2020	0.5-2	0.16 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-32 (2-4')	10/14/2020	2-4	0.11 I	0.097 U	0.097 U	0.097 U	NA	NA	NA	0.097 U	0.11 I	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
SB-33	SB-33 (0-0.5')	10/14/2020	0-0.5	0.56	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-33 (0.5-2')	10/14/2020	0.5-2	0.32 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.45 U	NA	NA	NA	NA	NA
	SB-33 (2-4')	10/14/2020	2-4	0.39 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
SB-34	SB-34 (0.5-2')	10/13/2020	0.5-2	2.2	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-34 (2-4')	10/13/2020	2-4	0.29 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
			Provisional Residential SCTL (µg/kg)	**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	**2**	**7**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-35	SB-35 (0.5-2')	10/12/2020	0.5-2	**2.6**	3.4	NA	2.2	3.2	7.2	0.42 I	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	1.5	NA	0.097 U	0.12 I
	SB-35 (2-3')	10/12/2020	2-3	**5.0**	7.0	NA	2.5	3.4	4.3	2.7	0.92 I	2.0	0.21 U	1.8	0.21 U	0.21 U	0.41 U	0.86	NA	0.10 U	0.11 I
SB-36	SB-36 (0.5-2')	10/12/2020	0.5-2	**2.7**	4.8	NA	0.25 I	0.34 I	3.7	1.2	0.40 U	0.22 I	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-36 (2-4')	10/12/2020	2-4	0.10 U	1.1	NA	0.33 I	0.72 I	0.71 I	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
SB-37	SB-37 (0-0.5')	10/15/2020	0-0.5	0.39 I	**12**	NA	0.68 I	0.90	0.28 I	0.20 U	0.40 U	1.0	0.25 I	0.37 I	0.20 U	0.20 U	0.40 U	0.20 I	NA	0.19 I	0.27 I
	SB-37 (0.5-2')	10/15/2020	0.5-2	0.19 I	3.9	NA	0.30 I	0.29 I	0.24 I	0.20 U	0.41 U	0.41 I	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.16 I
SB-37	SB-37 (2-4')	10/15/2020	2-4	0.41	**17**	NA	0.31 I	0.54 I	0.26 I	0.20 U	0.41 U	0.55 I	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.22 I	0.38 I
	SB-37 (4-6')	10/15/2020	4-6	0.10 U	1.9	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.15 I	0.22 I
SB-38	SB-38 (0-0.5')	10/15/2020	0-0.5	0.54	4.5	NA	1.1	0.81 I	0.44 I	0.38 I	0.47 U	0.84 I	0.24 U	0.24 U	0.24 U	0.24 U	0.47 U	0.24 U	NA	0.12 U	0.12 U
	SB-38 (0.5-2')	10/15/2020	0.5-2	0.096 U	1.4	NA	0.23 I	0.67 I	0.25 I	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	NA	0.096 U	0.096 U
SB-39	SB-39 (0-0.5')	10/13/2020	0-0.5	0.36 I	3.3	NA	0.79 I	0.61 I	0.53 I	0.25 U	0.50 U	0.57 I	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	NA	0.13 U	0.13 U
	SB-39 (0.5-2')	10/13/2020	0.5-2	0.10 U	2.7	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-39 (2-4')	10/13/2020	2-4	0.11 U	3.8	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.11 U
SB-40	SB-40 (0.5-2')	10/13/2020	0.5-2	0.11 I	1.5	NA	0.23 I	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-40 (2-4')	10/13/2020	2-4	0.12 I	2.1	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
SB-41	SB-41 (0-0.5')	10/13/2020	0-0.5	0.89	7.0	NA	1.6	0.64 I	1.1 I	0.39 I	0.67 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.67 U	0.33 U	NA	0.17 U	0.18 I
	SB-41 (0.5-2')	10/13/2020	0.5-2	0.26 I	**8.4**	NA	0.66 I	0.33 I	0.41 I	0.44 I	0.66 I	1.7	0.22 U	0.53 I	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
	SB-41 (2-4')	10/13/2020	2-4	0.10 U	1.6	NA	0.21 U	0.21 U	0.21 U	0.27 I	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
SB-42	SB-42 (0-0.5')	10/14/2020	0-0.5	0.32 I	**12**	NA	0.38 I	0.45 I	0.43 I	0.24 I	0.40 U	1.4	0.69 I	0.20 U	0.20 U	0.20 U	0.40 U	0.50 I	NA	0.10 U	0.10 U
	SB-42 (0.5-2')	10/14/2020	0.5-2	0.13 I	6.4	NA	0.31 I	0.22 U	0.31 I	0.22 U	0.45 I	0.93	1.4	0.76 I	0.26 I	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
	SB-42 (2-4')	10/14/2020	2-4	0.25 I	**9.5**	NA	0.19 U	0.19 U	0.23 I	0.31 I	0.80 I	0.76 I	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.41 I	NA	0.097 U	0.097 U
	SB-42 (4-6')	10/14/2020	4-6	0.26 IJ	**7.5 J**	NA	0.33 UJ	0.33 UJ	0.33 UJ	0.36 IJ	0.66 UJ	0.33 UJ	0.33 UJ	0.33 UJ	0.33 UJ	0.33 UJ	0.66 UJ	0.33 UJ	NA	0.16 UJ	0.16 UJ
SB-43	SB-43 (0-0.5')	10/14/2020	0-0.5	0.45 I	4.8	NA	0.82 I	0.56 I	0.52 I	0.34 I	0.50 U	1.1	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	NA	0.13 U	0.13 U
	SB-43 (0.5-2')	10/14/2020	0.5-2	0.16 I	2.5	NA	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.54 I	0.22 U	0.45 I	0.22 U	0.22 U	0.55 I	0.50 I	NA	0.11 U	0.11 U
	SB-43 (2-4')	10/14/2020	2-4	0.14 UJ	2.0 J	NA	0.27 UJ	0.27 UJ	0.27 UJ	0.27 UJ	0.55 UJ	2.3 J	0.27 UJ	0.29 IJ	0.27 UJ	0.27 UJ	0.55 UJ	0.27 UJ	NA	0.14 UJ	0.14 UJ
	SB-43 (4-6')	10/14/2020	4-6	0.11 U	3.9	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	1.4	0.21 U	0.32 I	0.21 U	0.21 U	0.42 U	0.25 I	NA	0.11 U	0.11 U
SB-44	SB-44 (0-0.5')	10/14/2020	0-0.5	0.15 I	1.7	NA	0.31 I	0.21 U	0.21 U	0.21 U	0.42 U	0.35 I	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-44 (0.5-2')	10/14/2020	0.5-2	0.33 I	7.0	NA	0.64 I	0.52 I	0.64 I	0.51 I	0.42 U	0.82 I	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
	SB-44 (2-4')	10/14/2020	2-4	0.14 I	2.4	NA	0.21 U	0.21 U	0.21 U	0.50 I	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-44 (4-6')	10/14/2020	4-6	0.098 U	0.71 I	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.098 U	0.098 U
SB-45	SB-45 (0-0.5')	10/14/2020	0-0.5	0.25 I	3.3	NA	0.31 I	0.21 U	0.43 I	0.32 I	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-45 (0.5-2')	10/14/2020	0.5-2	0.15 I	7.2	NA	0.21 U	0.21 U	0.27 I	0.21 U	0.42 U	0.34 I	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-45 (2-4')	10/14/2020	2-4	0.15 I	**16**	NA	0.23 I	0.20 U	0.20 U	0.79 I	0.40 U	0.46 I	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-45 (4-6')	3/24/2021	4-6	0.21 U	0.92	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
	SB-45 (6-8')	3/24/2021	6-8	0.21 U	0.69 I	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
	SB-45 (10-12')	3/24/2021	10-12	0.23 U	0.91 I	0.47 U	0.23 U	0.23 U	0.23 U	0.23 U	0.47 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.47 U	0.23 U	NA	0.12 U	0.12 U
	SB-45 (13-15')	3/24/2021	13-15	0.23 U	0.55 I	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	NA	0.11 U	0.11 U
	SB-45 (23-25')	3/24/2021	23-25	0.29 U	0.29 U	0.58 U	0.29 U	0.29 U	0.29 U	0.29 U	0.58 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.58 U	0.29 U	NA	0.15 U	0.15 U
	SB-45 (28-30')	3/24/2021	28-30	0.26 U	0.61 I	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.52 U	0.26 U	NA	0.13 U	0.13 U
SB-46	SB-46 (0.5-2')	10/12/2020	0.5-2	0.65	1.3	NA	0.34 I	0.36 I	0.67 I	0.28 I	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
	SB-46 (2-4')	10/12/2020	2-4	0.23 I	0.33 I	NA	0.35 I	0.32 I	0.36 I	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.096 U	0.096 U
SB-47	SB-47 (0.5-2')	10/12/2020	0.5-2	0.49	1.1	NA	0.36 I	0.19 U	0.58 I	0.23 I	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.097 U	0.097 U
	SB-47 (2-4')	10/12/2020	2-4	0.15 I	0.22 U	NA	0.22 U	0.22 U	0.22 U	0.22 U	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.45 U	0.22 U	NA	0.11 U	0.11 U
SB-48	SB-48 (0-0.5')	10/15/2020	0-0.5	0.99	**13**	NA	0.84 I	0.97 I	1.0	1.3	0.49 U	0.41 I	0.25 U	0.25 U	0.25 U	0.25 U	0.49 U	0.25 U	NA	0.12 U	0.12 U
	SB-48 (0.5-2')	10/15/2020	0.5-2	1.3	**13**	NA	0.49 I	0.77 I	0.70 I	11	0.55 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.55 U	0.27 U	NA	0.16 I	0.27 I
	SB-48 (2-3')	10/15/2020	2-3	0.61	**10**	NA	0.70 I	0.82 I	0.56 I	3.1	0.57 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.57 U	0.28 U	NA	0.14 U	0.14 U
	SB-48 (4-6')	3/23/2021	4-6	0.22 U	0.69 I	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	NA	0.11 U	0.11 U
SB-49	SB-49 (0-0.5')	10/15/2020	0-0.5	0.41	4.1	NA	0.21 U	0.21 U	0.28 I	0.25 I	0.41 U	0.21 UJ	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-49 (0.5-2')	10/15/2020	0.5-2	0.13 I	1.3	NA	0.20 U	0.20 I	0.29 I	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replcement	Replacement	Replacement	Replacement	Misc	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
			Provisional Residential SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-35	SB-35 (0.5-2')	10/12/2020	0.5-2	3.0	0.097 U	0.097 U	0.097 U	NA	NA	NA	0.097 U	0.097 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-35 (2-3')	10/12/2020	2-3	2.7	0.10 U	0.10 U	0.12 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-36	SB-36 (0.5-2')	10/12/2020	0.5-2	1.5	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-36 (2-4')	10/12/2020	2-4	0.47	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-37	SB-37 (0-0.5')	10/15/2020	0-0.5	4.1	0.18 I	0.11 I	1.1	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-37 (0.5-2')	10/15/2020	0.5-2	2.9	0.10 U	0.15 I	0.53	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-37	SB-37 (2-4')	10/15/2020	2-4	8.1	0.38 I	0.52	6.8	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-37 (4-6')	10/15/2020	4-6	2.3	0.10 U	0.13 I	0.63	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
SB-38	SB-38 (0-0.5')	10/15/2020	0-0.5	0.46 I	0.12 U	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.47 U	NA	NA	NA	NA	NA
	SB-38 (0.5-2')	10/15/2020	0.5-2	0.18 I	0.096 U	0.096 U	0.096 U	NA	NA	NA	0.096 U	0.096 U	NA	NA	NA	0.38 U	NA	NA	NA	NA	NA
SB-39	SB-39 (0-0.5')	10/13/2020	0-0.5	0.90	0.13 U	0.13 U	0.13 U	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA	0.50 U	NA	NA	NA	NA	NA
	SB-39 (0.5-2')	10/13/2020	0.5-2	0.18 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-39 (2-4')	10/13/2020	2-4	0.13 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
SB-40	SB-40 (0.5-2')	10/13/2020	0.5-2	0.11 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-40 (2-4')	10/13/2020	2-4	0.10 U	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
SB-41	SB-41 (0-0.5')	10/13/2020	0-0.5	1.9	0.17 U	0.17 U	0.17 U	NA	NA	NA	0.17 U	0.17 U	NA	NA	NA	0.67 U	NA	NA	NA	NA	NA
	SB-41 (0.5-2')	10/13/2020	0.5-2	0.72	0.11 U	0.11 U	0.11 I	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-41 (2-4')	10/13/2020	2-4	0.22 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-42	SB-42 (0-0.5')	10/14/2020	0-0.5	0.74	0.10 U	0.10 U	0.22 I	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-42 (0.5-2')	10/14/2020	0.5-2	0.38 I	0.11 U	0.11 U	0.51	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-42 (2-4')	10/14/2020	2-4	0.17 I	0.097 U	0.19 I	0.097 U	NA	NA	NA	0.097 U	0.097 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-42 (4-6')	10/14/2020	4-6	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	NA	NA	NA	0.16 UJ	0.16 UJ	NA	NA	NA	0.66 UJ	NA	NA	NA	NA	NA
SB-43	SB-43 (0-0.5')	10/14/2020	0-0.5	0.51	0.13 U	0.13 U	0.13 I	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA	0.50 U	NA	NA	NA	NA	NA
	SB-43 (0.5-2')	10/14/2020	0.5-2	0.18 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-43 (2-4')	10/14/2020	2-4	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	NA	NA	NA	0.14 UJ	0.14 UJ	NA	NA	NA	0.55 UJ	NA	NA	NA	NA	NA
	SB-43 (4-6')	10/14/2020	4-6	0.13 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
SB-44	SB-44 (0-0.5')	10/14/2020	0-0.5	0.11 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.12 I	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-44 (0.5-2')	10/14/2020	0.5-2	0.24 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-44 (2-4')	10/14/2020	2-4	0.17 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-44 (4-6')	10/14/2020	4-6	0.098 U	0.098 U	0.098 U	0.098 U	NA	NA	NA	0.098 U	0.098 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
SB-45	SB-45 (0-0.5')	10/14/2020	0-0.5	0.16 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-45 (0.5-2')	10/14/2020	0.5-2	0.27 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-45 (2-4')	10/14/2020	2-4	0.27 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-45 (4-6')	3/24/2021	4-6	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
	SB-45 (6-8')	3/24/2021	6-8	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
	SB-45 (10-12')	3/24/2021	10-12	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U	0.23 U	0.47 U	NA	NA	NA	NA	NA
	SB-45 (13-15')	3/24/2021	13-15	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.23 U	0.46 U	NA	NA	NA	NA	NA
	SB-45 (23-25')	3/24/2021	23-25	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.29 U	0.29 U	0.58 U	NA	NA	NA	NA	NA
	SB-45 (28-30')	3/24/2021	28-30	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.26 U	0.26 U	0.52 U	NA	NA	NA	NA	NA
SB-46	SB-46 (0.5-2')	10/12/2020	0.5-2	0.46	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-46 (2-4')	10/12/2020	2-4	0.11 I	0.096 U	0.096 U	0.096 U	NA	NA	NA	0.096 U	0.096 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
SB-47	SB-47 (0.5-2')	10/12/2020	0.5-2	0.23 I	0.097 U	0.097 U	0.097 U	NA	NA	NA	0.097 U	0.097 U	NA	NA	NA	0.39 U	NA	NA	NA	NA	NA
	SB-47 (2-4')	10/12/2020	2-4	0.11 U	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.45 U	NA	NA	NA	NA	NA
SB-48	SB-48 (0-0.5')	10/15/2020	0-0.5	1.2	0.12 U	0.12 U	0.21 I	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.49 U	NA	NA	NA	NA	NA
	SB-48 (0.5-2')	10/15/2020	0.5-2	17	0.49 I	0.14 U	0.14 U	NA	NA	NA	0.14 U	0.14 U	NA	NA	NA	0.55 U	NA	NA	NA	NA	NA
	SB-48 (2-3')	10/15/2020	2-3	3.6	0.19 I	0.14 U	0.14 U	NA	NA	NA	0.14 U	0.14 U	NA	NA	NA	0.57 U	NA	NA	NA	NA	NA
	SB-48 (4-6')	3/23/2021	4-6	0.22 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.44 U	NA	NA	NA	NA	NA
SB-49	SB-49 (0-0.5')	10/15/2020	0-0.5	0.10 U	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
	SB-49 (0.5-2')	10/15/2020	0.5-2	0.10 U	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
			Provisional Residential SCTL (µg/kg)	**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	**2**	**7**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-50	SB-50 (0.5-2')	10/12/2020	0.5-2	0.22 I	3.4	NA	0.20 U	0.20 U	0.24 I	0.45 I	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-50 (2-4')	10/12/2020	2-4	0.40 I	4.2	NA	0.22 U	0.22 U	0.22 U	0.60 I	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	NA	0.11 U	0.11 U
SB-51	SB-51 (0.5-2')	10/12/2020	0.5-2	0.22 I	1.3	NA	0.21 U	0.21 U	0.34 I	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.11 U
	SB-51 (2-4')	10/12/2020	2-4	0.15 U	0.29 U	NA	0.29 U	0.29 U	0.29 U	0.29 U	0.58 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	1.7 I	0.29 U	NA	0.15 U	0.15 U
SB-52	SB-52 (0.5-2')	10/13/2020	0.5-2	0.15 I	1.0	NA	0.19 U	0.19 U	0.25 I	0.23 I	0.37 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.37 U	0.19 U	NA	0.093 U	0.093 U
	SB-52 (2-4')	10/13/2020	2-4	0.14 I	0.21 U	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
SB-53	SB-53 (0-0.5')	10/15/2020	0-0.5	0.52	4.1	NA	0.48 I	0.53 I	0.49 I	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
	SB-53 (0.5-2')	10/15/2020	0.5-2	0.11 U	0.42 I	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
SB-54	SB-54 (0-0.5')	10/15/2020	0-0.5	0.52	4.2	NA	0.26 I	0.22 I	0.31 I	0.30 I	0.43 U	0.44 I	0.29 I	0.22 U	0.22 U	0.22 U	0.52 I	0.22 U	NA	0.11 U	0.11 U
	SB-54 (0.5-2')	10/15/2020	0.5-2	0.15 I	0.69 I	NA	0.26 U	0.26 U	0.26 U	0.26 U	0.51 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.51 U	0.26 U	NA	0.13 U	0.13 U
	SB-54 (2-4')	10/15/2020	2-4	0.15 I	0.51 I	NA	0.24 U	0.24 U	0.24 U	0.24 U	0.47 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.47 U	0.24 U	NA	0.12 U	0.12 U
SB-55	SB-55 (0-0.5')	10/13/2020	0-0.5	0.32 I	2.0	NA	0.26 I	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
	SB-55 (0.5-2')	10/13/2020	0.5-2	0.11 U	1.4	NA	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	NA	0.11 U	0.11 U
	SB-55 (2-4')	10/13/2020	2-4	0.18 I	7.1	NA	0.21 U	0.21 U	0.21 U	0.64 I	0.43 U	2.5	0.21 U	1.1	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.11 U
SB-56	SB-56 (0-0.5')	10/13/2020	0-0.5	0.16 U	1.2 I	NA	0.32 U	0.32 U	0.39 I	0.32 U	0.65 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.65 U	0.32 U	NA	0.16 U	0.16 U
	SB-56 (0.5-2')	10/13/2020	0.5-2	0.16 I	2.0	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
	SB-56 (2-4')	10/13/2020	2-4	0.19 I	0.78 I	NA	0.24 U	0.24 U	0.36 I	0.24 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.48 U	0.24 U	NA	0.12 U	0.12 U
SB-57	SB-57 (0-0.5')	3/22/2021	0-0.5	0.20 U	2.9	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.42 I	0.32 I	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
	SB-57 (0.5-2')	3/22/2021	0.5-2	0.20 U	2.7	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.66 I	0.22 I	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
	SB-57 (2-4')	3/22/2021	2-4	0.21 U	**8.9**	0.41 U	0.21 U	0.21 U	0.21 U	1.2	0.61 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-57 (4-6')	3/22/2021	4-6	0.20 U	1.5	0.40 U	0.20 U	0.20 U	0.20 U	0.31 I	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.099 U	0.099 U
SB-58	SB-58 (0-0.5')	3/22/2021	0-0.5	0.20 I	3.9	0.40 U	0.20 U	0.20 U	0.24 I	0.20 U	0.40 U	0.46 I	0.20 U	0.20 U	0.20 U	0.20 U	0.46 I	0.20 U	NA	0.099 U	0.099 U
	SB-58 (0.5-2')	3/22/2021	0.5-2	0.33 I	**58**	0.41 U	0.21 U	0.70 I	0.27 I	0.36 I	2.1	0.23 I	0.21 U	0.21 U	0.21 U	0.21 U	0.50 I	6.6	NA	0.10 U	0.10 U
	SB-58 (2-4')	3/22/2021	2-4	0.85 I	**13**	0.53 U	0.41 I	0.30 I	0.72 I	2.4	1.0 I	1.0 I	0.90 I	0.55 I	0.27 U	0.27 U	0.53 U	0.27 U	NA	0.13 U	0.13 U
	SB-58 (4-6')	3/22/2021	4-6	0.53 I	3.2	0.39 U	0.19 U	0.19 U	0.26 I	0.33 I	1.1 I	1.5	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.096 U	0.096 U
SB-59	SB-59 (0-0.5')	3/22/2021	0-0.5	0.29 I	3.2	0.41 U	0.22 I	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-59 (0.5-2')	3/22/2021	0.5-2	0.19 U	2.6	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.21 I	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.097 U	0.097 U
SB-59	SB-59 (2-4')	3/22/2021	2-4	0.21 U	5.6	0.43 U	0.27 I	0.23 I	0.21 U	0.60 I	0.44 I	0.33 I	0.21 U	0.21 U	0.21 U	0.21 U	0.48 I	0.21 U	NA	0.11 U	0.11 U
	SB-59 (4-6')	3/22/2021	4-6	0.20 U	0.80 I	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
SB-60	SB-60 (0-0.5')	3/22/2021	0-0.5	0.20 U	2.5	0.40 U	0.24 I	0.20 U	0.20 U	0.20 U	0.40 U	0.23 I	0.20 U	0.40 I	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-60 (0.5-2')	3/22/2021	0.5-2	0.23 U	2.9	0.46 U	0.28 I	0.23 U	0.23 U	0.23 U	0.46 U	0.87 I	0.23 U	0.23 U	0.23 U	0.23 U	0.54 I	0.23 U	NA	0.12 U	0.12 U
	SB-60 (2-4')	3/22/2021	2-4	0.21 U	3.4	0.42 U	0.24 I	0.21 U	0.21 I	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-60 (4-6')	3/22/2021	4-6	0.21 U	1.5	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
SB-61	SB-61 (0-0.5')	3/22/2021	0-0.5	0.40 I	4.7	0.42 U	0.44 I	0.24 I	0.27 I	0.32 I	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-61 (0.5-2')	3/22/2021	0.5-2	0.26 I	5.1	0.41 U	0.36 I	0.29 I	0.28 I	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-61 (2-4')	3/22/2021	2-4	0.21 U	0.66 I	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-61 (4-6')	3/22/2021	4-6	0.20 U	0.28 I	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.098 U	0.098 U
	SB-61 (6-8')	3/22/2021	6-8	0.23 U	0.30 I	0.47 U	0.23 U	0.23 U	0.23 U	0.23 U	0.47 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.47 U	0.23 U	NA	0.12 U	0.12 U
	SB-61 (10-12')	3/22/2021	10-12	0.27 U	0.27 U	0.55 U	0.27 U	0.27 U	0.27 U	0.27 U	0.55 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.55 U	0.27 U	NA	0.14 U	0.14 U
	SB-61 (13-15')	3/22/2021	13-15	0.31 U	0.31 U	0.61 U	0.31 U	0.31 U	0.31 U	0.31 U	0.61 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.61 U	0.31 U	NA	0.15 U	0.15 U
	SB-61 (23-25')	3/22/2021	23-25	0.28 U	0.28 U	0.57 U	0.28 U	0.28 U	0.28 U	0.28 U	0.57 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.57 U	0.28 U	NA	0.14 U	0.14 U
	SB-61 (28-30')	3/22/2021	28-30	0.25 U	0.25 U	0.49 U	0.25 U	0.25 U	0.25 U	0.25 U	0.49 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.49 U	0.25 U	NA	0.12 U	0.12 U
SB-62	SB-62 (0-0.5')	3/22/2021	0-0.5	0.22 I	2.5	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
	SB-62 (0.5-2')	3/22/2021	0.5-2	0.25 I	2.6	0.38 U	0.35 I	0.33 I	0.29 I	0.22 I	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	NA	0.096 U	0.096 U
	SB-62 (2-4')	3/22/2021	2-4	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-62 (4-6')	3/22/2021	4-6	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 I	0.21 U	NA	0.10 U	0.10 U

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replcement	Replacement	Replacement	Replacement	Misc	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
			Provisional Residential SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-50	SB-50 (0.5-2')	10/12/2020	0.5-2	0.13 I	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.40 U	NA	NA	NA	NA	NA
	SB-50 (2-4')	10/12/2020	2-4	0.56	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.44 U	NA	NA	NA	NA	NA
SB-51	SB-51 (0.5-2')	10/12/2020	0.5-2	0.13 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-51 (2-4')	10/12/2020	2-4	0.15 I	0.15 U	0.15 U	0.15 U	NA	NA	NA	0.15 U	0.15 U	NA	NA	NA	0.58 U	NA	NA	NA	NA	NA
SB-52	SB-52 (0.5-2')	10/13/2020	0.5-2	0.17 I	0.093 U	0.093 U	0.093 U	NA	NA	NA	0.093 U	0.093 U	NA	NA	NA	0.37 U	NA	NA	NA	NA	NA
	SB-52 (2-4')	10/13/2020	2-4	0.10 U	0.10 U	0.10 U	0.10 U	NA	NA	NA	0.10 U	0.10 U	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA
SB-53	SB-53 (0-0.5')	10/15/2020	0-0.5	0.46	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-53 (0.5-2')	10/15/2020	0.5-2	0.11 U	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
SB-54	SB-54 (0-0.5')	10/15/2020	0-0.5	0.24 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-54 (0.5-2')	10/15/2020	0.5-2	0.13 U	0.13 U	0.13 U	0.13 U	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA	0.51 U	NA	NA	NA	NA	NA
	SB-54 (2-4')	10/15/2020	2-4	0.14 I	0.12 U	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.47 U	NA	NA	NA	NA	NA
SB-55	SB-55 (0-0.5')	10/13/2020	0-0.5	0.24 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
	SB-55 (0.5-2')	10/13/2020	0.5-2	0.11 U	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.44 U	NA	NA	NA	NA	NA
	SB-55 (2-4')	10/13/2020	2-4	0.33 I	0.11 U	0.11 U	0.18 I	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.43 U	NA	NA	NA	NA	NA
SB-56	SB-56 (0-0.5')	10/13/2020	0-0.5	0.60 I	0.16 U	0.16 U	0.16 U	NA	NA	NA	0.16 U	0.16 U	NA	NA	NA	0.65 U	NA	NA	NA	NA	NA
	SB-56 (0.5-2')	10/13/2020	0.5-2	0.13 I	0.11 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA	0.42 U	NA	NA	NA	NA	NA
	SB-56 (2-4')	10/13/2020	2-4	0.12 U	0.12 U	0.12 U	0.12 U	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA	0.48 U	NA	NA	NA	NA	NA
SB-57	SB-57 (0-0.5')	3/22/2021	0-0.5	0.15 I	0.10 U	0.10 U	0.15 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.41 U	NA	NA	NA	NA	NA
	SB-57 (0.5-2')	3/22/2021	0.5-2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.41 U	NA	NA	NA	NA	NA
	SB-57 (2-4')	3/22/2021	2-4	0.11 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-57 (4-6')	3/22/2021	4-6	0.12 I	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
SB-58	SB-58 (0-0.5')	3/22/2021	0-0.5	0.27 I	0.099 U	0.099 U	0.32 I	0.099 U	0.099 U	0.12 I	0.099 U	0.099 U	0.099 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-58 (0.5-2')	3/22/2021	0.5-2	0.86	0.13 I	0.24 I	0.29 I	0.10 U	1.1	0.54	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-58 (2-4')	3/22/2021	2-4	1.5	0.40 I	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.27 U	0.27 U	0.53 U	NA	NA	NA	NA	NA
	SB-58 (4-6')	3/22/2021	4-6	0.62	0.13 I	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.19 U	0.19 U	0.39 U	NA	NA	NA	NA	NA
SB-59	SB-59 (0-0.5')	3/22/2021	0-0.5	0.13 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-59 (0.5-2')	3/22/2021	0.5-2	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.19 U	0.39 U	NA	NA	NA	NA	NA
SB-59	SB-59 (2-4')	3/22/2021	2-4	0.12 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.43 U	NA	NA	NA	NA	NA
	SB-59 (4-6')	3/22/2021	4-6	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
SB-60	SB-60 (0-0.5')	3/22/2021	0-0.5	0.19 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-60 (0.5-2')	3/22/2021	0.5-2	0.23 I	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U	0.23 U	0.46 U	NA	NA	NA	NA	NA
	SB-60 (2-4')	3/22/2021	2-4	0.18 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
	SB-60 (4-6')	3/22/2021	4-6	0.13 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
SB-61	SB-61 (0-0.5')	3/22/2021	0-0.5	0.17 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
	SB-61 (0.5-2')	3/22/2021	0.5-2	0.14 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-61 (2-4')	3/22/2021	2-4	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
	SB-61 (4-6')	3/22/2021	4-6	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.20 U	0.39 U	NA	NA	NA	NA	NA
	SB-61 (6-8')	3/22/2021	6-8	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U	0.23 U	0.47 U	NA	NA	NA	NA	NA
	SB-61 (10-12')	3/22/2021	10-12	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.27 U	0.27 U	0.55 U	NA	NA	NA	NA	NA
	SB-61 (13-15')	3/22/2021	13-15	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.31 U	0.31 U	0.61 U	NA	NA	NA	NA	NA
	SB-61 (23-25')	3/22/2021	23-25	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U	0.28 U	0.57 U	NA	NA	NA	NA	NA
	SB-61 (28-30')	3/22/2021	28-30	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.25 U	0.25 U	0.49 U	NA	NA	NA	NA	NA
SB-62	SB-62 (0-0.5')	3/22/2021	0-0.5	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.43 U	NA	NA	NA	NA	NA
	SB-62 (0.5-2')	3/22/2021	0.5-2	0.10 I	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.19 U	0.19 U	0.38 U	NA	NA	NA	NA	NA
	SB-62 (2-4')	3/22/2021	2-4	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-62 (4-6')	3/22/2021	4-6	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
			Provisional Residential SCTL (µg/kg)	**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	**2**	**7**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-63	SB-63 (0-0.5')	3/23/2021	0-0.5	0.58 I	6.5	0.43 U	0.41 I	0.29 I	0.47 I	0.35 I	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
	SB-63 (0.5-2')	3/23/2021	0.5-2	0.20 I	2.0	0.39 U	0.20 I	0.22 I	0.19 U	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.097 U	0.097 U
	SB-63 (2-4')	3/23/2021	2-4	0.20 U	0.67 I	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
	SB-63 (4-6')	3/23/2021	4-6	0.20 U	0.22 I	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.099 U	0.099 U
	SB-63 (6-8')	3/23/2021	6-8	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	NA	0.095 U	0.095 U
	SB-63 (10-12')	3/23/2021	10-12	0.21 U	0.29 I	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
	SB-63 (13-15')	3/23/2021	13-15	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	NA	0.11 U	0.11 U
	SB-63 (23-25')	3/23/2021	23-25	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	NA	0.12 U	0.12 U
	SB-63 (33-35')	3/23/2021	33-35	0.29 U	0.29 U	0.58 U	0.29 U	0.29 U	0.29 U	0.29 U	0.58 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.58 U	0.29 U	NA	0.14 U	0.14 U
SB-64	SB-64 (0-0.5')	3/23/2021	0-0.5	0.46 I	5.2	0.40 U	0.40 I	0.26 I	0.40 I	0.21 I	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-64 (0.5-2')	3/23/2021	0.5-2	0.20 U	2.2	0.40 U	0.23 I	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.099 U	0.099 U
	SB-64 (2-4')	3/23/2021	2-4	0.20 U	3.4	0.40 U	0.20 I	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-64 (4-6')	3/23/2021	4-6	0.20 U	0.38 I	0.41 U	0.20 I	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
SB-65	SB-65 (0-0.5')	3/24/2021	0-0.5	0.20 U	4.4	0.40 U	0.45 I	0.50 I	0.20 U	0.20 U	0.40 U	0.29 I	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-65 (0.5-2')	3/24/2021	0.5-2	0.21 U	7.2	0.43 U	0.27 I	0.38 I	0.21 U	0.21 U	0.43 U	0.65 I	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.11 U
SB-66	SB-66 (0-0.5')	3/23/2021	0-0.5	0.19 U	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.097 U	0.097 U
	SB-66 (0.5-2')	3/23/2021	0.5-2	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-66 (2-4')	3/23/2021	2-4	0.20 U	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
	SB-66 (4-6')	3/23/2021	4-6	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
SB-67	SB-67 (0-0.5')	3/23/2021	0-0.5	0.21 U	0.68 I	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-67 (0.5-2')	3/23/2021	0.5-2	0.19 U	0.54 I	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	NA	0.094 U	0.094 U
	SB-67 (2-4')	3/23/2021	2-4	0.19 U	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.097 U	0.097 U
	SB-67 (4-6')	3/23/2021	4-6	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	NA	0.13 U	0.13 U
SB-68	SB-68 (0-0.5')	3/23/2021	0-0.5	0.20 U	0.32 I	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.098 U	0.098 U
	SB-68 (0.5-2')	3/23/2021	0.5-2	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-68 (2-4')	3/23/2021	2-4	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-68 (4-6')	3/23/2021	4-6	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
	SB-68 (6-8')	3/23/2021	6-8	0.24 U	0.24 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.48 U	0.24 U	NA	0.12 U	0.12 U
	SB-68 (10-12')	3/23/2021	10-12	0.30 U	0.30 U	0.60 U	0.30 U	0.30 U	0.30 U	0.30 U	0.60 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.60 U	0.30 U	NA	0.15 U	0.15 U
	SB-68 (13-15')	3/23/2021	13-15	0.26 U	0.26 U	0.53 U	0.26 U	0.26 U	0.26 U	0.26 U	0.53 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.53 U	0.26 U	NA	0.13 U	0.13 U
	SB-68 (23-25')	3/23/2021	23-25	0.27 U	0.27 U	0.54 U	0.27 U	0.27 U	0.27 U	0.27 U	0.54 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.54 U	0.27 U	NA	0.13 U	0.13 U
	SB-68 (32-34')	3/23/2021	32-34	0.26 U	0.26 U	0.51 U	0.26 U	0.26 U	0.26 U	0.26 U	0.51 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.51 U	0.26 U	NA	0.13 U	0.13 U
SB-69	SB-69 (0-0.5')	3/24/2021	0-0.5	0.20 U	1.4	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.24 I	0.54 I	0.42 I	0.22 I	0.20 U	0.40 U	0.20 U	NA	0.099 U	0.099 U
	SB-69 (0.5-2')	3/24/2021	0.5-2	0.21 U	4.5	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.27 I	0.25 I	0.26 I	0.21 U	0.21 U	0.43 I	0.21 U	NA	0.10 U	0.10 U
	SB-69 (2-4')	3/24/2021	2-4	0.23 U	0.41 I	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.87 I	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	NA	0.11 U	0.11 U
	SB-69 (4-6')	3/24/2021	4-6	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	NA	0.11 U	0.11 U
SB-70	SB-70 (0-0.5')	3/24/2021	0-0.5	0.21 U	**15**	0.43 U	0.21 U	0.25 I	0.23 I	0.21 U	0.43 U	0.53 I	0.23 I	1.1	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.11 U
	SB-70 (0.5-2')	3/24/2021	0.5-2	0.22 U	0.89	0.43 U	0.22 U	0.22 U	0.24 I	0.22 U	0.43 U	0.54 I	0.22 U	0.54 I	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
	SB-70 (2-4')	3/24/2021	2-4	0.23 U	0.99	0.46 U	0.23 U	0.23 U	0.25 I	0.23 U	0.46 U	1.1	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	NA	0.11 U	0.11 U
	SB-70 (4-6')	3/24/2021	4-6	0.25 U	0.97 I	0.49 U	0.63 I	0.80 I	0.85 I	0.25 U	0.49 U	0.36 I	0.25 U	0.25 U	0.25 U	0.25 U	0.49 U	0.25 U	NA	0.12 U	0.12 U
SB-71	SB-71 (0-0.5')	3/24/2021	0-0.5	0.19 U	0.67 I	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	NA	0.095 U	0.095 U
	SB-71 (0.5-2')	3/24/2021	0.5-2	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-71 (2-4')	3/24/2021	2-4	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	NA	0.095 U	0.095 U
	SB-71 (4-6')	3/24/2021	4-6	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	NA	0.11 U	0.11 U

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replcement	Replacement	Replacement	Replacement	Misc	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
			Provisional Residential SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-63	SB-63 (0-0.5')	3/23/2021	0-0.5	0.32 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.43 U	NA	NA	NA	NA	NA
	SB-63 (0.5-2')	3/23/2021	0.5-2	0.12 I	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.19 U	0.39 U	NA	NA	NA	NA	NA
	SB-63 (2-4')	3/23/2021	2-4	0.11 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.41 U	NA	NA	NA	NA	NA
	SB-63 (4-6')	3/23/2021	4-6	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-63 (6-8')	3/23/2021	6-8	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.19 U	0.19 U	0.38 U	NA	NA	NA	NA	NA
	SB-63 (10-12')	3/23/2021	10-12	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
	SB-63 (13-15')	3/23/2021	13-15	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.44 U	NA	NA	NA	NA	NA
	SB-63 (23-25')	3/23/2021	23-25	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U	0.23 U	0.46 U	NA	NA	NA	NA	NA
	SB-63 (33-35')	3/23/2021	33-35	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.29 U	0.29 U	0.58 U	NA	NA	NA	NA	NA
SB-64	SB-64 (0-0.5')	3/23/2021	0-0.5	0.22 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-64 (0.5-2')	3/23/2021	0.5-2	0.12 I	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-64 (2-4')	3/23/2021	2-4	0.11 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-64 (4-6')	3/23/2021	4-6	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.41 U	NA	NA	NA	NA	NA
SB-65	SB-65 (0-0.5')	3/24/2021	0-0.5	0.18 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-65 (0.5-2')	3/24/2021	0.5-2	0.23 I	0.11 U	0.11 U	0.21 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.43 U	NA	NA	NA	NA	NA
SB-66	SB-66 (0-0.5')	3/23/2021	0-0.5	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.19 U	0.39 U	NA	NA	NA	NA	NA
	SB-66 (0.5-2')	3/23/2021	0.5-2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-66 (2-4')	3/23/2021	2-4	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.41 U	NA	NA	NA	NA	NA
	SB-66 (4-6')	3/23/2021	4-6	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
SB-67	SB-67 (0-0.5')	3/23/2021	0-0.5	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
	SB-67 (0.5-2')	3/23/2021	0.5-2	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.19 U	0.19 U	0.38 U	NA	NA	NA	NA	NA
	SB-67 (2-4')	3/23/2021	2-4	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.19 U	0.39 U	NA	NA	NA	NA	NA
	SB-67 (4-6')	3/23/2021	4-6	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.25 U	0.25 U	0.50 U	NA	NA	NA	NA	NA
SB-68	SB-68 (0-0.5')	3/23/2021	0-0.5	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.20 U	0.39 U	NA	NA	NA	NA	NA
	SB-68 (0.5-2')	3/23/2021	0.5-2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-68 (2-4')	3/23/2021	2-4	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-68 (4-6')	3/23/2021	4-6	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.43 U	NA	NA	NA	NA	NA
	SB-68 (6-8')	3/23/2021	6-8	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.24 U	0.24 U	0.48 U	NA	NA	NA	NA	NA
	SB-68 (10-12')	3/23/2021	10-12	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.30 U	0.30 U	0.60 U	NA	NA	NA	NA	NA
	SB-68 (13-15')	3/23/2021	13-15	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.26 U	0.26 U	0.53 U	NA	NA	NA	NA	NA
	SB-68 (23-25')	3/23/2021	23-25	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.27 U	0.27 U	0.54 U	NA	NA	NA	NA	NA
	SB-68 (32-34')	3/23/2021	32-34	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.26 U	0.26 U	0.51 U	NA	NA	NA	NA	NA
SB-69	SB-69 (0-0.5')	3/24/2021	0-0.5	0.099 U	0.099 U	0.099 U	0.10 I	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-69 (0.5-2')	3/24/2021	0.5-2	0.15 I	0.10 U	0.10 U	0.18 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-69 (2-4')	3/24/2021	2-4	0.11 U	0.11 U	0.11 U	0.15 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.23 U	0.45 U	NA	NA	NA	NA	NA
	SB-69 (4-6')	3/24/2021	4-6	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.44 U	NA	NA	NA	NA	NA
SB-70	SB-70 (0-0.5')	3/24/2021	0-0.5	0.84	0.11 U	0.11 U	0.31 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.43 U	NA	NA	NA	NA	NA
	SB-70 (0.5-2')	3/24/2021	0.5-2	0.11 U	0.11 U	0.11 U	0.19 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.43 U	NA	NA	NA	NA	NA
	SB-70 (2-4')	3/24/2021	2-4	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.23 U	0.46 U	NA	NA	NA	NA	NA
	SB-70 (4-6')	3/24/2021	4-6	0.15 I	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.25 U	0.25 U	0.49 U	NA	NA	NA	NA	NA
SB-71	SB-71 (0-0.5')	3/24/2021	0-0.5	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.19 U	0.19 U	0.38 U	NA	NA	NA	NA	NA
	SB-71 (0.5-2')	3/24/2021	0.5-2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-71 (2-4')	3/24/2021	2-4	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.19 U	0.19 U	0.38 U	NA	NA	NA	NA	NA
	SB-71 (4-6')	3/24/2021	4-6	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.44 U	NA	NA	NA	NA	NA

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
			Provisional Residential SCTL (µg/kg)	**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	**2**	**7**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-72	SB-72 (0-0.5')	3/24/2021	0-0.5	0.21 U	0.38 I	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-72 (0.5-2')	3/24/2021	0.5-2	0.21 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	NA	0.11 U	0.11 U
	SB-72 (2-4')	3/24/2021	2-4	0.19 U	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.39 U	0.19 U	NA	0.097 U	0.097 U
	SB-72 (4-6')	3/24/2021	4-6	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
	SB-72 (6-8')	3/24/2021	6-8	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.11 U	0.11 U
	SB-72 (10-12')	3/24/2021	10-12	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.10 U	0.10 U
	SB-72 (13-15')	3/24/2021	13-15	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	NA	0.11 U	0.11 U
SB-72	SB-72 (23-25')	3/24/2021	23-25	0.27 U	0.27 U	0.54 U	0.27 U	0.27 U	0.27 U	0.27 U	0.54 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.54 U	0.27 U	NA	0.13 U	0.13 U
	SB-72 (33-35')	3/24/2021	33-35	0.34 U	1.2 I	0.69 U	0.34 U	0.34 U	0.34 U	0.34 U	0.69 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.69 U	0.34 U	NA	0.17 U	0.17 U
SB-73	SB-73 (0-0.5')	3/24/2021	0-0.5	0.20 U	0.73 I	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	NA	0.099 U	0.099 U
	SB-73 (0.5-2')	3/24/2021	0.5-2	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	NA	0.10 U	0.10 U
	SB-73 (2-4')	3/24/2021	2-4	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-73 (4-6')	3/24/2021	4-6	0.20 U	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41 U	0.20 U	NA	0.10 U	0.10 U
SB-74	SB-74 (0-0.5')	3/24/2021	0-0.5	0.21 U	0.41 I	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-74 (0.5-2')	3/24/2021	0.5-2	0.20 U	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39 U	0.20 U	NA	0.098 U	0.098 U
	SB-74 (2-4')	3/24/2021	2-4	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	NA	0.10 U	0.10 U
	SB-74 (4-6')	3/24/2021	4-6	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	NA	0.11 U	0.11 U
SB-75	SB-75 (0-0.5)	3/28/2022	0-0.5	0.25 U	2.0	0.50 U	0.67 I	0.25 U	0.25 U	0.25 U	0.50 U	0.32 I	0.68 I	0.25 U	0.41 I	0.25 U	2.0 U	0.25 U	0.25 U	0.12 U	0.12 U
	SB-75 (0.5-2)	3/28/2022	0.5-2	0.23 U	6.5	0.47 U	0.23 U	0.23 U	0.23 U	0.23 U	0.47 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	1.9 U	0.23 U	0.23 U	0.12 U	0.12 U
	SB-75 (2-4)	3/28/2022	2-4	0.22 U	4.6	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.8 U	0.22 U	0.22 U	0.11 U	0.11 U
SB-76	SB-76 (0-0.5)	3/28/2022	0-0.5	0.22 U	3.6	0.44 U	0.32 I	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.8 U	0.22 U	0.22 U	0.11 U	0.11 U
	SB-76 (0.5-2)	3/28/2022	0.5-2	0.23 U	2.0	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	1.8 U	0.23 U	0.23 U	0.11 U	0.11 U
	SB-76 (2-4)	3/28/2022	2-4	0.22 U	**12**	0.44 U	0.22 U	0.22 U	0.22 U	0.26 I	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.8 U	0.22 U	0.22 U	0.11 U	0.11 U
SB-77	SB-77 (0-0.5)	3/28/2022	0-0.5	0.22 U	1.1	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.8 U	0.22 U	0.22 U	0.11 U	0.11 U
	SB-77 (0.5-2)	3/28/2022	0.5-2	0.22 U	0.46 I	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.7 U	0.22 U	0.22 U	0.11 U	0.11 U
	SB-77 (2-4)	3/28/2022	2-4	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.7 U	0.22 U	0.22 U	0.11 U	0.11 U
SB-78	SB-78 (0-0.5')	12/6/2022	0-0.5'	0.21 U	1.7	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.7 U	0.21 U	0.21 U	0.11 U	0.11 U
	SB-78 (0.5-2')	12/6/2022	0.5-2'	0.21 U	1.2	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.7 U	0.21 U	0.21 U	0.11 U	0.11 U
	SB-78 (2.4')	12/6/2022	2-4'	0.21 U	0.60 I	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.7 U	0.21 U	0.21 U	0.10 U	0.10 U
SB-79	SB-79 (0-0.5')	12/6/2022	0-0.5'	0.22 U	**13**	0.45 U	0.23 I	0.22 U	0.22 U	0.22 U	0.45 U	0.22 U	0.27 I	2.0	0.22 U	0.22 U	1.8 U	0.22 U	0.22 U	0.11 U	0.11 U
	SB-79 (0.5-2')	12/6/2022	0.5-2'	0.22 U	6.6	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.7 U	0.22 U	0.22 U	0.11 U	0.11 U
	SB-79 (2.4')	12/6/2022	2-4'	0.22 U	**17**	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	2.4	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.7 U	0.22 U	0.22 U	0.11 U	0.11 U

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replcement	Replacement	Replacement	Replacement	Misc	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
			Provisional Residential SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL (µg/kg)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-72	SB-72 (0-0.5')	3/24/2021	0-0.5	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-72 (0.5-2')	3/24/2021	0.5-2	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.43 U	NA	NA	NA	NA	NA
	SB-72 (2-4')	3/24/2021	2-4	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.19 U	0.39 U	NA	NA	NA	NA	NA
	SB-72 (4-6')	3/24/2021	4-6	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
	SB-72 (6-8')	3/24/2021	6-8	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
	SB-72 (10-12')	3/24/2021	10-12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-72 (13-15')	3/24/2021	13-15	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.43 U	NA	NA	NA	NA	NA
SB-72	SB-72 (23-25')	3/24/2021	23-25	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.27 U	0.27 U	0.54 U	NA	NA	NA	NA	NA
	SB-72 (33-35')	3/24/2021	33-35	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.34 U	0.34 U	0.69 U	NA	NA	NA	NA	NA
SB-73	SB-73 (0-0.5')	3/24/2021	0-0.5	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.20 U	0.20 U	0.40 U	NA	NA	NA	NA	NA
	SB-73 (0.5-2')	3/24/2021	0.5-2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.42 U	NA	NA	NA	NA	NA
	SB-73 (2-4')	3/24/2021	2-4	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.27 I	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-73 (4-6')	3/24/2021	4-6	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.19 I	0.10 U	0.20 U	0.20 U	0.41 U	NA	NA	NA	NA	NA
SB-74	SB-74 (0-0.5')	3/24/2021	0-0.5	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-74 (0.5-2')	3/24/2021	0.5-2	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.20 U	0.39 U	NA	NA	NA	NA	NA
	SB-74 (2-4')	3/24/2021	2-4	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.41 U	NA	NA	NA	NA	NA
	SB-74 (4-6')	3/24/2021	4-6	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.23 U	0.46 U	NA	NA	NA	NA	NA
SB-75	SB-75 (0-0.5)	3/28/2022	0-0.5	0.42 I	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U	0.25 U	0.25 U	1.0 U
	SB-75 (0.5-2)	3/28/2022	0.5-2	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U	0.23 U	0.47 U	0.23 U	0.23 U	0.23 U	0.23 U	0.93 U
	SB-75 (2-4)	3/28/2022	2-4	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.88 U
SB-76	SB-76 (0-0.5)	3/28/2022	0-0.5	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.89 U
	SB-76 (0.5-2)	3/28/2022	0.5-2	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.91 U
	SB-76 (2-4)	3/28/2022	2-4	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.88 U
SB-77	SB-77 (0-0.5)	3/28/2022	0-0.5	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.90 U
	SB-77 (0.5-2)	3/28/2022	0.5-2	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.87 U
	SB-77 (2-4)	3/28/2022	2-4	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.86 U
SB-78	SB-78 (0-0.5')	12/6/2022	0-0.5'	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.85 U
	SB-78 (0.5-2')	12/6/2022	0.5-2'	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.84 U
	SB-78 (2.4')	12/6/2022	2-4'	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.83 U
SB-79	SB-79 (0-0.5')	12/6/2022	0-0.5'	0.53	0.11 U	0.11 U	0.23 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.89 U
	SB-79 (0.5-2')	12/6/2022	0.5-2'	0.12 I	0.11 U	0.53	0.12 I	0.11 U	0.11 U	0.12 I	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.89 U
	SB-79 (2.4')	12/6/2022	2-4'	0.21 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.87 U

TABLE 3: SOIL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Notes:

1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. ft BLS indicates feet below land surface.
3. U indicates that the compound was analyzed for but not detected (the laboratory method detection limit [MDL] is shown).
4. I indicates the result is between the laboratory MDL and the practical quantitation limit.
5. J indicates an estimated value and/or the analysis did not meet established quality control criteria.
6. SB-45 samples 0 to 4 ft BLS and SB-45 samples greater than 4 ft BLS were collected in separate boreholes. See Figure 12.
7. Grey shaded, bold text indicates an exceedance of the FDEP Provisional leachability soil cleanup target level (SCTL).
8. "--" indicates no screening criteria.
9. NA indicates constituent was not analyzed for.
10. PFAS indicates per- and polyfluoroalkyl substances.
11. PFCA indicates perfluoroalkyl carboxylic acids.
12. PFSA indicates perfluoroalkane sulfonic acids.
13. * indicates the analyte contains multiple perfluorinated sections.

Analyte	Acronym	Class	Carbon Chain Length
Perfluorooctanoic acid	PFOA	PFCA	8
Perfluorooctane sulfonate	PFOS	PFSA	8
Perfluorobutanoic acid	PFBA	PFCA	4
Perfluoropentanoic acid	PFPeA	PFCA	5
Perfluorohexanoic acid	PFHxA	PFCA	6
Perfluoroheptanoic acid	PFHpA	PFCA	7
Perfluorononanoic acid	PFNA	PFCA	9
Perfluorodecanoic acid	PFDA	PFCA	10
Perfluoroundecanoic acid	PFUnA	PFCA	11
Perfluorododecanoic acid	PFDoA	PFCA	12
Perfluorotridecanoic Acid	PFTriA	PFCA	13
Perfluorotetradecanoic acid	PFTeA	PFCA	14
4:2 Fluorotelomer sulfonate	4:2 FTS	PFCA Precursor	4
6:2 Fluorotelomer sulfonate	6:2 FTS	PFCA Precursor	6
8:2 Fluorotelomer sulfonate	8:2 FTS	PFCA Precursor	8
Perfluoropropanesulfonic acid	PFPrS	PFSA	3
Perfluorobutanesulfonic acid	PFBS	PFSA	4
Perfluoropentanesulfonic acid	PFPeS	PFSA	5
Perfluorohexanesulfonic acid	PFHxS	PFSA	6
Perfluoroheptanesulfonic acid	PFHpS	PFSA	7
Perfluorononanesulfonic acid	PFNS	PFSA	9
Perfluorodecanesulfonic acid	PFDS	PFSA	10
Perfluoro-1-butane sulfonamide	FBSA	PFSA Precursor	4
Perfluoro-1-hexane sulfonamide	FHxSA	PFSA Precursor	6
Perfluorooctane Sulfonamide	FOSA	PFSA Precursor	8
N-ethylperfluorooctanesulfonamidoacetic acid	NEtFOSAA	PFSA Precursor	8
N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA	PFSA Precursor	8
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	Replacement	*
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	Replacement	*
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	Replacement	*
Hexafluoropropylene oxide dimer acid	HFPO-DA	Replacement	*
Perfluoro-3-methoxypropanoic acid	PFMPA	Misc.	*
Perfluoro-4-methoxybutanoic acid	PFMBA	Misc.	*
Perfluoro-4-ethylcyclohexanesulfonic acid	PFECHS	Misc.	*
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	Misc.	*
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	Misc.	*

TABLE 4: WELL CONSTRUCTION DETAILS
Former Florida State Fire College

Well ID	Date Installed	Installation Method	Type	Top of Casing Elevation (ft NAVD 88)	Total Depth (ft BLS)	Screened Interval (ft BLS)	Well Diameter (inches)	Lithology of Screened Interval
DEPMW-1 (100-120')	5/18/2021	Sonic	Permanent	73.41	120	100-120	2	Limestone; voids present
DEPMW-2 (25-45')	5/19/2021			73.51	45	25-45		Sandy clay, clayey sand 25-34'; Limestone 34-45'
DEPMW-3 (100-120')	5/19/2021			71.77	120	100-120		Clayey sand 100-105'; Marly dolomitic limestone 105-120'
DEPMW-4 (25-45')	5/20/2021			71.83	45	25-45		Sandy clay, sand 25-28'; Limestone 28-29'; Clayey sand 29-34'; Limestone 34-45'
DEPMW-5 (100-120')	5/21/2021			73.36	120	100-120		Limestone; dolomitic from 110-120'
DEPMW-6 (25-45')	5/24/2021			73.44	45	25-45		Clay 25-35'; Limestone 35-45'
DEPMW-7 (100-120')	5/25/2021			69.40	120	100-120		Limestone; soft, voids present
DEPMW-8 (20-40')	5/26/2021			69.43	40	20-40		Sandy clay 20-30'; Limestone 30-40'
DEPMW-9 (150-170')	12/21/2022			73.79	170	150-170		Limestone; voids present
DEPMW-10 (160-180')	12/19/2022			72.92	180	160-180		Limestone with chert and clay
DEPMW-11 (165-185')	12/14/2022			73.21	185	165-185		Clayey sand with limestone fragments
DEPMW-12 (100-120')	11/16/2022			69.83	120	100-120		Limestone
DEPMW-13 (25-45')	11/15/2022			69.77	45	25-45		Sandy clay 25-27'. Limestone 27-45'
DEPMW-14 (100-120')	12/8/2022			74.81	120	100-120		Limestone

TABLE 4: WELL CONSTRUCTION DETAILS
Former Florida State Fire College

Well ID	Date Installed	Installation Method	Type	Top of Casing Elevation (ft NAVD 88)	Total Depth (ft BLS)	Screened Interval (ft BLS)	Well Diameter (inches)	Lithology of Screened Interval
DEPMW-15 (25-45')	12/7/2022	Sonic	Permanent	74.79	45	25-45	2	Sand with clay 25-30'. Sandy clay 30-32'. Limestone 32-45'
DEPMW-16 (100-120')	12/1/2022			73.69	120	100-120		Limestone
DEPMW-17 (25-45')	12/2/2022			73.63	45	25-45		Limestone
DEPMW-18 (100-120')	12/6/2022			73.18	120	100-120		Limestone
DEPMW-19 (25-45')	12/5/2022			73.42	45	25-45		Limestone
DEPMW-20 (100-120')	11/18/2022			73.53	120	100-120		Limestone
DEPMW-21 (25-45')	11/28/2022			73.61	45	25-45		Limestone
DEPMW-22 (100-120')	11/29/2022			71.74	120	100-120		Limestone 100-105'. Sand with limestone 105-110'. Limestone 110-120'
DEPMW-23 (25-45')	11/29/2022			71.68	45	25-45		Limestone
VISAMW [M-0200]	4/30/1989	HSA		74.97	40	30-40	4	NA
Irrigation Well (105-140')	NA	NA		76.14*	140	105-140		NA

Notes:

1. ft NAVD 88 indicates feet North American Vertical Datum 1988.
2. ft BLS indicates feet below land surface.
3. HSA indicates hollow stem auger.
4. NA indicates not available.
5. * indicates manually surveyed by Geosyntec on 17 June 2021.

TABLE 5: GROUNDWATER ELEVATION SUMMARY
Former Florida State Fire College

Well ID	DEPMW-1 (100-120')		DEPMW-2 (25-45')		DEPMW-3 (100-120')		DEPMW-4 (25-45')		DEPMW-5 (100-120')	
Diameter (inches)	2		2		2		2		2	
Total Depth (ft BTOC)	120		45		120		45		120	
Screen Interval (ft BTOC)	100-120		25-45		100-120		25-45		100-120	
TOC Elevation (ft NAVD)	73.41		73.51		71.77		71.83		73.36	
DATE	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**
6/14/2021	41.91	31.50	41.81	31.70	41.72	30.05	41.78	30.05	41.75	31.61
3/28/2022	42.20	31.21	42.21	31.30	42.08	29.69	42.11	29.72	42.12	31.24
1/3/2023	42.43	30.98	42.43	31.08	42.30	29.47	42.30	29.53	42.36	31.00

Well ID	DEPMW-6 (25-45')		DEPMW-7 (100-120')		DEPMW-8 (20-40')		DEPMW-9 (150-170')		DEPMW-10 (160-180')	
Diameter (inches)	2		2		2		2		2	
Total Depth (ft BTOC)	45		120		40		170		180	
Screen Interval (ft BTOC)	25-45		100-120		20-40		150-170		160-180	
TOC Elevation (ft NAVD)	73.44		69.40		69.43		73.79		72.92	
DATE	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**
6/14/2021	41.81	31.63	41.84	27.56	41.89	27.54	NI		NI	
3/28/2022	42.12	31.32	42.21	27.19	42.22	27.21				
1/3/2023	42.36	31.08	42.42	26.98	42.43	27.00	42.44	31.35	42.50	30.42

Well ID	DEPMW-11 (165-185')		DEPMW-12 (100-120')		DEPMW-13 (25-45')		DEPMW-14 (100-120')		DEPMW-15 (25-45')	
Diameter (inches)	2		2		2		2		2	
Total Depth (ft BTOC)	185		120		45		120		45	
Screen Interval (ft BTOC)	165-185		100-120		25-45		100-120		25-45	
TOC Elevation (ft NAVD)	73.21		69.83		69.77		74.81		74.79	
DATE	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**
6/14/2021	NI		NI		NI		NI		NI	
3/28/2022										
1/3/2023	42.38	30.83	42.48	27.35	42.47	27.30	42.35	32.46	42.35	32.44

TABLE 5: GROUNDWATER ELEVATION SUMMARY
Former Florida State Fire College

Well ID	DEPMW-16 (100-120')		DEPMW-17 (25-45')		DEPMW-18 (100-120')		DEPMW-19 (25-45')		DEPMW-20 (100-120')	
Diameter (inches)	2		2		2		2		2	
Total Depth (ft BTOC)	120		45		120		45		120	
Screen Interval (ft BTOC)	100-120		25-45		100-120		25-45		100-120	
TOC Elevation (ft NAVD)	73.69		73.63		73.18		73.42		73.53	
DATE	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**
6/14/2021	NI		NI		NI		NI		NI	
3/28/2022										
1/3/2023	42.34	31.35	42.33	31.30	42.41	30.77	42.40	31.02	42.45	31.08

Well ID	DEPMW-21 (25-45')		DEPMW-22 (100-120')		DEPMW-23 (25-45')		VISAMW [M-0200]		Irrigation Well	
Diameter (inches)	2		2		2		4		4	
Total Depth (ft BTOC)	45		120		45		40		140	
Screen Interval (ft BTOC)	25-45		100-120		25-45		30-40		105-140	
TOC Elevation (ft NAVD)	73.61		71.74		71.68		74.97		76.14*	
DATE	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**
6/14/2021	NI		NI		NI		41.84	33.13	--	--
3/28/2022							42.16	32.81	--	--
1/3/2023	42.48	31.13	42.29	29.45	42.28	29.40	42.38	32.59	--	--

Notes:

1. DTW indicates depth to groundwater measured in feet below top of casing (ft BTOC).
2. ELEV indicates groundwater elevation in feet relative to feet North American Vertical Datum 1988 (ft NAVD 88).
3. ft BLS indicates feet below land surface.
4. Top of casing (TOC) elevations are relative to ft NAVD 88.
5. * indicates manually surveyed by Geosyntec on 17 June 21.

TABLE 6: SCREEN POINT GROUNDWATER ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Screen Interval (ft BLS)	PFOA	PFOS	PFOA+PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	N/A	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	N/A	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
			Provisional GCTL (ng/L)	**70**	**70**	**70**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-1	SP-1 (36-40')	10/14/2020	36-40	24	**610**	**634**	NA	43	35	36	40	4.8 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	41	2.0 U	NA	25	16
SP-2	SP-2 (32-36')	10/12/2020	32-36	**120**	**5,900**	**6,020**	NA	210	200	190	68	4.6 I	2.0 U	2.0 U	2.0 U	2.0 U	7.0 I	560	1,200	NA	46	42
	SP-2 (46-50')	3/29/2021	46-50	**1,100**	**540**	**1,640**	110	320	390	130	4.7 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16	530	17	NA	180	210
	SP-2 (46-50') DUP	3/29/2021	46-50	**940**	**500**	**1,440**	110	320	360	160	4.9 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	17	490	17	NA	180	200
	SP-2 (66-70')	3/29/2021	66-70	**2,000**	**8,500**	**10,500**	750	2,600	2,500	1,600	58 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	190	13,000	14	NA	600	730
	SP-2 (86-90')	3/29/2021	86-90	**85**	**630**	**715**	35	110	100	79	3.1 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.5 I	390	23	NA	30	33
SP-3	SP-3 (31-35')	10/13/2020	31-35	**260**	**3,500**	**3,760**	NA	340	320	450 I	98	6.3 I	2.0 U	2.0 U	2.0 U	2.0 U	12	950	910	NA	48	48
	SP-3 (31-35') DUP	10/13/2020	31-35	**250**	**3,600**	**3,850**	NA	360	360	440	91	5.2 I	2.0 U	2.0 U	2.0 U	2.0 U	13	1,000	900	NA	49	47
	SP-3 (46-50')	3/26/2021	46-50	**140**	**1,400**	**1,540**	73	200	200	210	39	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.1 I	340	240	NA	30	26
	SP-3 (66-70')	3/26/2021	66-70	**3,800**	**12,000**	**15,800**	11,000	39,000	23,000	17,000	140	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	760	17,000	280	NA	1,500	2,000
	SP-3 (66-70') DUP	3/26/2021	66-70	**3,900**	**14,000**	**17,900**	12,000	44,000	26,000	19,000	150	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	780	18,000	300	NA	1,600	2,100
	SP-3 (86-90')	3/26/2021	86-90	**640**	**2,800**	**3,440**	1,400	4,800	3,400	2,400	57	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	120	1,900	210	NA	280	290
SP-4	SP-4 (33-37')	10/12/2020	33-37	**130**	**2,700**	**2,830**	NA	180	240	130	76	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	82	24	NA	76	90
SP-5	SP-5 (31-35')	10/13/2020	31-35	**250**	**71,000**	**71,250**	NA	300	3,400	320	6.4 I	41	17	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	39 I	NA	42	73
	SP-5 (46-50')	3/29/2021	46-50	**150**	**66,000**	**66,150**	74	240	4,600	140	8.8	6.2 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	45	10	NA	95	100
	SP-5 (66-70')	4/8/2021	66-70	**420**	**3,900**	**4,320**	390	4,955	1,400	360	52	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	110	2,600	42	NA	560	700
	SP-5 (82-86')	4/8/2021	82-86	**160**	**10,000**	**10,160**	150	430	1,500	210	18	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	23	540	6.9 I	NA	180	220
	SP-5 (82-86') DUP	4/8/2021	82-86	**120**	**4,700**	**4,820**	140	390	510	210	18	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20	430	8.3	NA	160	210
SP-6	SP-6 (31-35')	10/13/2020	31-35	18	**2,700**	**2,718**	NA	28	33	20	7.2 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	6.8 I	NA	28	21
SP-7	SP-7 (31-35')	10/14/2020	31-35	**97**	**930**	**1,027**	NA	97	110	73	54	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	15 I	2.9 I	NA	31	33
SP-8	SP-8 (32-36')	3/24/2021	32-36	21	**480**	**501**	17	28	29	25	47	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	21	11
	SP-8 (46-50')	3/24/2021	46-50	26	**260**	**286**	19	38	43	30	28	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	27	14
	SP-8 (66-70')	3/25/2021	66-70	18	**270**	**288**	13 I	31	26	26	7.6 I	4.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	18	17
	SP-8 (86-90')	3/25/2021	86-90	7.2 I	**78**	**85.2**	5.9 I	12	13	8.7	2.8 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	6.6	7.8
SP-9	SP-9 (31-35')	3/22/2021	31-35	22	**230**	**252**	17	28	30	23	7.2 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	29	14
	SP-9 (31-35') DUP	3/22/2021	31-35	22	**200**	**222**	18	25	31	24	5.6 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	27	13
	SP-9 (46-50')	3/22/2021	46-50	13	**160**	**173**	10 I	23	25	14	3.8 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	25	14
	SP-9 (61-65')	3/22/2021	61-65	14	**140**	**154**	15 I	22	26	16	5.5 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	25	12
SP-10	SP-10 (36-40')	3/23/2021	36-40	11	**110**	**121**	14 I	24	24	14	3.7 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	24	11
	SP-10 (46-50')	3/23/2021	46-50	12	**130**	**142**	11 I	25	27	16	4.6 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	23	12
	SP-10 (66-70')	3/23/2021	66-70	7.3 I	**150**	**157.3**	6.0 I	12	15	7.1 I	3.4 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	15	14
	SP-10 (86-90')	3/23/2021	86-90	14	**180**	**194**	12 I	26	30	16	3.5 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	25	13
SP-11	SP-11 (31-35')	3/30/2021	31-35	9.0	**74**	**83.0**	4.6 I	12	11	7.5 I	2.0 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	13	5.8
	SP-11 (46-50')	3/30/2021	46-50	8.0 I	**91**	**99.0**	5.7 I	11	13	6.0 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	22	12
	SP-11 (66-70')	3/30/2021	66-70	5.4 I	**130**	**135.4**	4.0 U	7.8 I	9.3	4.9 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	6.4 I	2.0 U	NA	8.6	4.3
	SP-11 (81-85')	3/30/2021	81-85	9.0	**110**	**119.0**	7.1 I	12	15	7.4 I	2.6 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	9.4 I	5.6 I	NA	14	9.3
SP-12	SP-12 (36-40')	4/1/2021	36-40	5.9 I	**75**	**80.9**	4.7 I	6.4 I	8.7	6.3 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	12	8.0
	SP-12 (36-40') DUP	4/1/2021	36-40	5.7 I	**72**	**77.7**	4.1 I	6.7 I	9.2	5.6 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	12	7.7
	SP-12 (46-50')	4/1/2021	46-50	3.5 I	66 J	69.5	4.3 I	5.6 I	7.5 I	4.3 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	11	7.9
	SP-12 (66-70')	4/1/2021	66-70	4.6 I	**110**	**114.6**	4.0 U	6.2 I	9.0	4.3 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	11	5.6
SP-13	SP-13 (46-50')	4/1/2021	46-50	3.7 I	**110**	**113.7**	4.0 U	4.6 I	8.3	4.4 I	2.1 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	8.9	5.5
	SP-13 (66-70')	4/1/2021	66-70	10	**190**	**200**	6.5 I	15	26	12	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	19	19
SP-14	SP-14 (36-40')	4/5/2021	36-40	2.0 U	4.5 I	4.5	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	1.9	0.40 U
	SP-14 (46-50')	4/5/2021	46-50	25 UJ	25 UJ	50 UJ	50 UJ	25 UJ	25 UJ	25 UJ	25 UJ	50 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	50 UJ	25 UJ	NA	5.0 UJ	5.0 UJ
	SP-14 (46-50') DUP	4/5/2021	46-50	25 UJ	25 UJ	50 UJ	50 UJ	25 UJ	25 UJ	25 UJ	25 UJ	50 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	50 UJ	25 UJ	NA	5.0 UJ	5.0 UJ
	SP-14 (66-70')	4/5/2021	66-70	25 UJ	25 UJ	50 UJ	50 UJ	25 UJ	25 UJ	25 UJ	25 UJ	50 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	50 UJ	25 UJ	NA	5.0 UJ	5.0 UJ
	SP-14 (86-90')	4/5/2021	86-90	25 UJ	25 UJ	50 UJ	50 UJ	25 UJ	25 UJ	25 UJ	25 UJ	50 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	50 UJ	25 UJ	NA	5.0 UJ	5.0 UJ

TABLE 6: SCREEN POINT GROUNDWATER ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Screen Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replacement	Replacement	Replacement	Replacement	Misc.	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
			Provisional GCTL (ng/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-1	SP-1 (36-40')	10/14/2020	36-40	130	4.5	0.40 U	0.40 U	NA	NA	NA	0.80 U	0.80 U	NA	NA	NA	4.0 U	NA	NA	NA	NA	NA
SP-2	SP-2 (32-36')	10/12/2020	32-36	570	27	3.4	0.40 U	NA	NA	NA	0.80 U	0.80 U	NA	NA	NA	4.0 U	NA	NA	NA	NA	NA
	SP-2 (46-50')	3/29/2021	46-50	2,200	38	0.40 U	0.40 U	98	500	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-2 (46-50') DUP	3/29/2021	46-50	2,100	36	0.40 U	0.40 U	100	520	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-2 (66-70')	3/29/2021	66-70	11,000	530	0.40 U	0.40 U	620	2,100	0.78 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-2 (86-90')	3/29/2021	86-90	420	17	0.40 U	0.40 U	23	69	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-3	SP-3 (31-35')	10/13/2020	31-35	600	37	5.2	0.40 U	NA	NA	NA	0.80 U	0.80 U	NA	NA	NA	4.0 U	NA	NA	NA	NA	NA
	SP-3 (31-35') DUP	10/13/2020	31-35	670	35	4.9	0.40 U	NA	NA	NA	0.80 U	0.80 U	NA	NA	NA	4.0 U	NA	NA	NA	NA	NA
	SP-3 (46-50')	3/26/2021	46-50	300	12	0.51 I	0.40 U	22	96	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-3 (66-70')	3/26/2021	66-70	13,000	330	0.40 U	0.40 U	290	360	13	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-3 (66-70') DUP	3/26/2021	66-70	14,000	320	0.40 U	0.40 U	300	360	14	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-3 (86-90')	3/26/2021	86-90	2,000	75	0.64 I	0.40 U	75	130	1.8	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-4	SP-4 (33-37')	10/12/2020	33-37	930	69	0.40 U	0.40 U	NA	NA	NA	0.80 U	0.80 U	NA	NA	NA	4.0 U	NA	NA	NA	NA	NA
SP-5	SP-5 (31-35')	10/13/2020	31-35	3,100	46	680	300	NA	NA	NA	8.0 U	8.0 U	NA	NA	NA	4.0 U	NA	NA	NA	NA	NA
	SP-5 (46-50')	3/29/2021	46-50	2,800	130	230	49	180	15,000	200	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-5 (66-70')	4/8/2021	66-70	4,500	420	0.40 U	0.40 U	200	390	1.7	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-5 (82-86')	4/8/2021	82-86	1,500	75	14	7.9	120	2,700	57	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-5 (82-86') DUP	4/8/2021	82-86	950	44	13	4.5	97	800	28	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-6	SP-6 (31-35')	10/13/2020	31-35	290	18	1.1 I	1.9	NA	NA	NA	0.80 U	0.80 U	NA	NA	NA	4.0 U	NA	NA	NA	NA	NA
SP-7	SP-7 (31-35')	10/14/2020	31-35	280	26	0.40 U	0.94 I	NA	NA	NA	0.80 U	0.80 U	NA	NA	NA	4.0 U	NA	NA	NA	NA	NA
SP-8	SP-8 (32-36')	3/24/2021	32-36	110	5.7	1.6	1.3 I	3.9	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-8 (46-50')	3/24/2021	46-50	150	4.2	0.40 U	0.40 U	6.6	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-8 (66-70')	3/25/2021	66-70	130	3.5	0.40 U	0.40 U	14	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-8 (86-90')	3/25/2021	86-90	53	1.7 I	0.40 U	0.40 U	4.3	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-9	SP-9 (31-35')	3/22/2021	31-35	130	2.8 I	0.40 U	0.40 U	4.6	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-9 (31-35') DUP	3/22/2021	31-35	130	2.8 I	0.40 U	0.40 U	3.8	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-9 (46-50')	3/22/2021	46-50	100	1.8 I	0.40 U	2.8	13	8.6	0.46 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-9 (61-65')	3/22/2021	61-65	91	2.0 I	0.40 U	0.98 I	5.3	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-10	SP-10 (36-40')	3/23/2021	36-40	99	2.3 I	0.40 U	1.1 I	3.0	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-10 (46-50')	3/23/2021	46-50	94	2.4 I	0.40 U	1.3 I	5.2	0.61 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-10 (66-70')	3/23/2021	66-70	110	4.4	0.40 U	2.3	11	1.9	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-10 (86-90')	3/23/2021	86-90	96	2.2 I	0.40 U	0.64 I	6.9	0.40 U	0.40 U	0.80 U	0.80 UJ	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-11	SP-11 (31-35')	3/30/2021	31-35	44	0.97 I	0.40 U	0.40 U	3.3	0.44 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-11 (46-50')	3/30/2021	46-50	92	1.2 I	0.40 U	0.40 U	2.1	0.90 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-11 (66-70')	3/30/2021	66-70	34	0.94 I	0.40 U	0.40 U	2.2	24	1.1 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-11 (81-85')	3/30/2021	81-85	56	1.5 I	0.40 U	0.40 U	3.4	15	0.78 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-12	SP-12 (36-40')	4/1/2021	36-40	65	1.6 I	0.40 U	0.40 U	1.3 I	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-12 (36-40') DUP	4/1/2021	36-40	66	1.5 I	0.40 U	0.40 U	1.2 I	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-12 (46-50')	4/1/2021	46-50	57	1.0 I	0.40 U	0.40 U	1.8	0.40 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-12 (66-70')	4/1/2021	66-70	47	1.4 I	0.40 U	0.40 U	1.2 I	5.9	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-13	SP-13 (46-50')	4/1/2021	46-50	52	1.4 I	0.40 U	0.40 U	1.3 I	2.6	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-13 (66-70')	4/1/2021	66-70	150	5.8	0.40 U	0.40 U	7.6	3.0	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-14	SP-14 (36-40')	4/5/2021	36-40	1.6 I	0.80 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-14 (46-50')	4/5/2021	46-50	10 UJ	10 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	10 UJ	10 UJ	5.0 UJ	25 UJ	25 UJ	50 UJ	NA	NA	NA	NA	NA
	SP-14 (46-50') DUP	4/5/2021	46-50	10 UJ	10 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	10 UJ	10 UJ	5.0 UJ	25 UJ	25 UJ	50 UJ	NA	NA	NA	NA	NA
	SP-14 (66-70')	4/5/2021	66-70	10 UJ	10 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	10 UJ	10 UJ	5.0 UJ	25 UJ	25 UJ	50 UJ	NA	NA	NA	NA	NA
	SP-14 (86-90')	4/5/2021	86-90	10 UJ	10 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	10 UJ	10 UJ	5.0 UJ	25 UJ	25 UJ	50 UJ	NA	NA	NA	NA	NA

TABLE 6: SCREEN POINT GROUNDWATER ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Screen Interval (ft BLS)	PFOA	PFOS	PFOA+PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	N/A	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	N/A	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
			Provisional GCTL (ng/L)	**70**	**70**	**70**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-15	SP-15 (41-45')	3/25/2021	41-45	48	**3,600**	**3,648**	28	62	190	35	8.5	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100	20	NA	58	61
	SP-15 (46-50')	3/25/2021	46-50	**100**	**7,800**	**7,900**	44	97	430	56	18	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	110	40	NA	110	120
	SP-15 (46-50') DUP	3/25/2021	46-50	**88**	**8,700**	**8,788**	42	98	400	60	19	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	96	40	NA	100	120
	SP-15 (66-70')	3/25/2021	66-70	**180**	**5,000**	**5,180**	110	250	410	160	20	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.2 I	300	30	NA	240	250
	SP-15 (86-90')	3/25/2021	86-90	**88**	**550**	**638**	120	370	310	150	27	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	9.5	410	7.2 I	NA	98	140
SP-16	SP-16 (36-40')	4/6/2021	36-40	50	**1,800**	**1,850**	31	78	130	65	14	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	120	46	NA	46	54
	SP-16 (46-50')	4/6/2021	46-50	**120**	**1,300**	**1,420**	120	370	310	180	25	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	7.1 I	300	50	NA	110	120
	SP-16 (66-70')	4/6/2021	66-70	**130**	**2,500**	**2,630**	95	260	320	170	30	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.2 I	340	52	NA	120	150
	SP-16 (78-82')	4/6/2021	78-82	57	**540**	**597**	77	230	180	100	16	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	120	7.0 I	NA	60	66
SP-17	SP-17 (36-40')	3/31/2021	36-40	11	**520**	**531**	6.6 I	12	28	13	3.5 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	11 I	2.5 I	NA	18	15
	SP-17 (46-50')	3/31/2021	46-50	20	**1,200**	**1,220**	12 I	22	62	21	6.4 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	28	8.6	NA	29	24
	SP-17 (66-70')	3/31/2021	66-70	24	**440**	**464**	22	65	71	35	4.6 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	17	2.0 U	NA	33	34
	SP-17 (82-86')	3/31/2021	82-86	15	**510**	**525**	14 I	34	58	21	4.3 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	10 I	4.2 I	NA	23	21
SP-18	SP-18 (36-40')	4/6/2021	36-40	59	**2,000**	**2,059**	42	110	140	89	25	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	120	150	NA	40	46
	SP-18 (46-50')	4/6/2021	46-50	**270**	**2,600**	**2,870**	210	590	560	400	74	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.5 I	690	120	NA	120	150
	SP-18 (66-70')	4/6/2021	66-70	2.0 U	56	56	4.0 U	2.6 I	2.6 I	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.4 I	3.3 I	NA	0.64 I	0.69 I
	SP-18 (82-86')	4/6/2021	82-86	2.0 U	30	30	4.0 U	2.2 I	2.3 I	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	0.78 I	0.96 I
SP-19	SP-19 (35-39')	3/23/2021	35-39	9.3	**100**	**109.3**	7.7 I	13	14	9.1	3.2 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	12	7.1
	SP-19 (46-50')	3/23/2021	46-50	7.3 I	**80**	**87.3**	9.7 I	9.6	12	6.9 I	2.8 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	13	7.2
	SP-19 (66-70')	3/23/2021	66-70	3.0 I	49	52.0	5.3 I	6.5 I	10	3.6 I	2.2 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	8.6	3.8
	SP-19 (86-90')	3/23/2021	86-90	7.8 I	**80**	**87.8**	8.5 I	10	15	7.6 I	2.1 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	11	5.2
SP-20	SP-20 (36-40')	4/7/2021	36-40	**130**	**3,100**	**3,230**	81	220	270	190	44	5.5 I	2.0 U	2.0 U	2.0 U	2.0 U	2.2 I	530	180	NA	51	61
	SP-20 (46-50')	4/7/2021	46-50	**110**	**2,400**	**2,510**	61	160	210	150	36	4.2 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	400	140	NA	39	45
	SP-20 (66-70')	4/7/2021	66-70	**97**	**2,000**	**2,097**	61	170	190	140	26	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.1 I	320	83	NA	42	46
	SP-20 (86-90')	4/7/2021	86-90	48	**650**	**698**	32	83	110	64	13	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.1 I	180	37	NA	22	22
SP-21	SP-21 (36-40')	4/7/2021	36-40	9.3	**150**	**159.3**	12 I	25	23	15	4.3 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	13	13
	SP-21 (46-50')	4/7/2021	46-50	11	**140**	**151**	10 I	28	25	19	5.0 I	4.0 U	2.8 I	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	15	12
	SP-21 (66-70')	4/7/2021	66-70	11	**120**	**131**	11 I	25	22	16	3.9 I	4.0 U	2.0 I	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	13	12
	SP-21 (86-90')	4/7/2021	86-90	10	**160**	**170**	13 I	31	30	18	4.4 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	17	14
SP-22	SP-22 (36-40')	3/31/2021	36-40	**94**	**250**	**344**	23	33	40	36	12	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	14	12
	SP-22 (46-50')	3/31/2021	46-50	37	**150**	**187**	12 I	23	29	24	7.6 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	15	11
	SP-22 (66-70')	3/31/2021	66-70	43	**140**	**183**	10 I	23	28	26	7.7 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	12	9.1
	SP-22 (86-90')	3/31/2021	86-90	67	36	**103**	19	38	48	37	8.0	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	14	5.1
	SP-22 (86-90') DUP	3/31/2021	86-90	70	40	**110**	20	37	51	39	8.2	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	14	5.1
SP-23	SP-23 (36-40')	4/5/2021	36-40	4.9 I	49	53.9	6.1 I	13	11	5.9 I	2.2 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	11	7.5
	SP-23 (46-50')	4/8/2021	46-50	6.3 I	**88**	**94.3**	7.7 I	19	18	8.9	3.0 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	16	12
	SP-23 (66-70')	4/8/2021	66-70	8.8	**86**	**94.8**	9.7 I	20	19	10	3.6 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	20	11
	SP-23 (66-70') DUP	4/8/2021	66-70	9.5	**85**	**94.5**	9.5 I	21	20	9.1	3.6 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	20	11
	SP-23 (78-82')	4/8/2021	78-82	2.0 U	5.1 I	5.1	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	0.67 I	0.40 U
SP-24	SP-24 (36-40')	4/2/2021	36-40	29	**610**	**639**	21	53	75	45	9.6	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	70	33	NA	17	13
	SP-24 (46-50')	4/2/2021	46-50	44	**720**	**764**	29	75	90	63	12	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	120	29	NA	20	23
	SP-24 (66-70')	4/2/2021	66-70	**72**	**690**	**762**	58	170	170	94	16	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 I	220	29	NA	31	33
	SP-24 (78-82')	4/2/2021	78-82	41	**790**	**831**	29	77	89	59	13	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	120	32	NA	20	19
SP-25	SP-25 (36-40')	3/30/2021	36-40	7.3 I	11	18.3	8.5 I	13	8.8	7.2 I	2.3 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	1.5 I	0.40 U
	SP-25 (46-50')	3/30/2021	46-50	6.7 I	13	19.7	9.5 I	15	11	8.4	2.1 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	1.4 I	0.40 U
	SP-25 (66-70')	3/30/2021	66-70	9.9	23	32.9	9.2 I	14	12	13	2.8 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	2.0	0.40 U
SP-26	SP-26 (36-40)	3/29/2022	36-40	**82**	**1,400**	**1,482**	37	99	110	82	18	4.3 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	170	120	5.6 I	26	27
	SP-26 (46-50)	3/29/2022	46-50	**100**	**1,600**	**1,700**	55	140	140	140	26	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	300	120	6.5 I	31	40
	SP-26 (66-70')	3/29/2022	66-70	57	**1,700**	**1,757**	33	73	77	68	35	7.9 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	150	180	7.9 U	19	17
	SP-26 (86-90')	3/30/2022	86-90	22	**180**	**202**	13 I	31	25	23	3.6 I	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	31 I	3.2 I	4.1 U	9.1	11

TABLE 6: SCREEN POINT GROUNDWATER ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Screen Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replacement	Replacement	Replacement	Replacement	Misc.	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
			Provisional GCTL (ng/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-15	SP-15 (41-45')	3/25/2021	41-45	520	36	0.62 I	0.40 U	71	470	1.1 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-15 (46-50')	3/25/2021	46-50	1,100	78	1.6	0.40 U	150	830	2.5	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-15 (46-50') DUP	3/25/2021	46-50	1,200	81	1.7	0.40 U	130	750	2.5	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-15 (66-70')	3/25/2021	66-70	1,700	120	0.40 U	0.40 U	230	430	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-15 (86-90')	3/25/2021	86-90	360	36	0.40 U	0.40 U	99	170	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-16	SP-16 (36-40')	4/6/2021	36-40	510	28	0.40 U	0.40 U	49	200	0.72 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-16 (46-50')	4/6/2021	46-50	780	28	0.40 U	0.40 U	64	84	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-16 (66-70')	4/6/2021	66-70	1,300	71	0.40 U	0.40 U	85	140	0.42 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-16 (78-82')	4/6/2021	78-82	470	20	0.40 U	0.40 U	29	30	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-17	SP-17 (36-40')	3/31/2021	36-40	220	6.9	0.40 U	0.40 U	12	56	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-17 (46-50')	3/31/2021	46-50	390	13	0.40 U	0.40 U	24	140	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-17 (66-70')	3/31/2021	66-70	290	12	0.40 U	0.40 U	20	23	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-17 (82-86')	3/31/2021	82-86	240	8.0	0.40 U	0.40 U	13	49	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-18	SP-18 (36-40')	4/6/2021	36-40	500	21	0.93 I	0.40 U	45	220	2.3	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-18 (46-50')	4/6/2021	46-50	1,500	62	0.40 U	0.40 U	72	170	0.51 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-18 (66-70')	4/6/2021	66-70	6.4	0.80 U	0.40 U	0.40 U	0.40 U	0.83 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-18 (82-86')	4/6/2021	82-86	6.7	0.80 U	0.40 U	0.40 U	0.40 U	0.72 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-19	SP-19 (35-39')	3/23/2021	35-39	69	1.5 I	0.40 U	0.40 U	3.5	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-19 (46-50')	3/23/2021	46-50	54	1.3 I	0.40 U	4.6	5.7	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-19 (66-70')	3/23/2021	66-70	37	0.80 U	0.40 U	2.3	0.77 I	2.8	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-19 (86-90')	3/23/2021	86-90	55	1.4 I	0.40 U	1.1 I	2.1	0.40 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-20	SP-20 (36-40')	4/7/2021	36-40	860	38	0.40 U	0.40 U	72	260	1.4 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-20 (46-50')	4/7/2021	46-50	640	30	0.40 U	0.40 U	41	240	1.5 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-20 (66-70')	4/7/2021	66-70	560	29	0.40 U	0.40 U	35	200	1.5 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-20 (86-90')	4/7/2021	86-90	310	13	0.40 U	0.40 U	17	130	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-21	SP-21 (36-40')	4/7/2021	36-40	96	2.7 I	0.40 U	0.40 U	7.4	1.5 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-21 (46-50')	4/7/2021	46-50	89	2.3 I	0.40 U	0.40 U	5.9	3.1	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-21 (66-70')	4/7/2021	66-70	94	2.7 I	0.40 U	0.40 U	6.9	1.5 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-21 (86-90')	4/7/2021	86-90	110	2.7 I	0.40 U	0.40 U	8.4	4.0	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-22	SP-22 (36-40')	3/31/2021	36-40	110	3.1 I	0.40 U	0.40 U	4.3	1.3 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-22 (46-50')	3/31/2021	46-50	97	1.8 I	0.40 U	0.40 U	5.3	1.9	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-22 (66-70')	3/31/2021	66-70	76	1.7 I	0.40 U	0.40 U	4.4	4.8	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-22 (86-90')	3/31/2021	86-90	58	0.80 U	0.40 U	0.40 U	0.67 I	1.6	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-22 (86-90') DUP	3/31/2021	86-90	59	0.80 U	0.40 U	0.40 U	0.61 I	1.4 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-23	SP-23 (36-40')	4/5/2021	36-40	44	1.1 I	0.40 U	0.40 U	2.2	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-23 (46-50')	4/8/2021	46-50	71	1.7 I	0.40 U	0.40 U	4.7	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-23 (66-70')	4/8/2021	66-70	69	1.5 I	0.40 U	0.40 U	5.2	3.1	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-23 (66-70') DUP	4/8/2021	66-70	67	1.5 I	0.40 U	0.40 U	5.4	3.5	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-23 (78-82')	4/8/2021	78-82	1.7 I	0.80 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-24	SP-24 (36-40')	4/2/2021	36-40	190	5.8	0.40 U	0.40 U	11	49	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-24 (46-50')	4/2/2021	46-50	300	9.0	0.40 U	0.40 U	19	83	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-24 (66-70')	4/2/2021	66-70	430	16	0.40 U	0.40 U	20	73	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-24 (78-82')	4/2/2021	78-82	300	12	0.40 U	0.40 U	14	95	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-25	SP-25 (36-40')	3/30/2021	36-40	2.4 I	0.80 U	0.40 U	0.40 U	0.58 I	2.5	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-25 (46-50')	3/30/2021	46-50	2.3 I	0.80 U	0.40 U	0.40 U	0.51 I	1.1 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	SP-25 (66-70')	3/30/2021	66-70	4.0	0.80 U	0.40 U	0.40 U	0.40 U	2.8	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
SP-26	SP-26 (36-40)	3/29/2022	36-40	340	10	0.43 U	0.43 U	34	340	1.7 I	0.85 U	0.85 U	0.43 U	2.1 U	2.1 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.5 U
	SP-26 (46-50)	3/29/2022	46-50	520	16	0.40 U	0.40 U	45	370	1.2 I	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-26 (66-70')	3/29/2022	66-70	290	13	0.79 U	0.79 U	14	110	0.79 U	1.6 U	1.6 U	0.79 U	4.0 U	4.0 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	16 U
	SP-26 (86-90')	3/30/2022	86-90	92	4.1	0.41 U	0.41 U	6.5	16	0.41 U	0.81 U	0.81 U	0.41 U	2.0 U	2.0 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	8.1 U

TABLE 6: SCREEN POINT GROUNDWATER ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Screen Interval (ft BLS)	PFOA	PFOS	PFOA+PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	N/A	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	N/A	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
			Provisional GCTL (ng/L)	**70**	**70**	**70**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-27	SP-27 (36-40)	3/28/2022	36-40	8.6	70	**78.6**	6.7 I	20	15	9.4	2.0 U	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.1 U	12	8.4
	SP-27 (46-50)	3/28/2022	46-50	7.6 I	**77**	**84.6**	6.2 I	20	14	7.8 I	2.2 U	4.4 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	18 U	2.2 U	4.4 U	11	9.7
	SP-27 (46-50)_DUP	3/28/2022		6.3 I	**77**	**83.3**	6.8 I	17	16	8.5 I	2.2 U	4.4 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	18 U	2.2 U	4.4 U	11	9.7
	SP-27 (66-70)	3/28/2022	66-70	6.0 I	**84**	**90.0**	4.5 U	15	11	8.8 I	2.2 U	4.5 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	18 U	2.2 U	4.5 U	10	8.8
	SP-27 (74-78)	3/28/2022	74-78	5.4 I	**72**	**77.4**	8.8 I	16	12 I	7.6 I	3.2 U	6.4 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	26 U	3.2 U	6.4 U	14	6.6
SP-28	SP-28 (41-45)	3/29/2022	41-45	10	**98**	**108**	9.5 I	28	24	13	3.2 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	16	13
	SP-28 (46-50)	3/29/2022	46-50	11	**110**	**121**	8.8 I	28	23	15	2.7 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	19	15
	SP-28 (66-70)	3/29/2022	66-70	9.7	**120**	**129.7**	8.8 I	29	19	14	2.2 U	4.4 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	18 U	2.2 U	4.4 U	20	18
	SP-28 (86-90)	3/29/2022	86-90	8.7 I	**150**	**158.7**	13 I	34	27	18	4.9 I	4.4 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	18 U	2.2 U	4.4 U	22	25
SP-29	SP-29 (36-40')	3/30/2022	36-40	4.0 I	5.8 I	9.8	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	3.9	1.6
	SP-29 (46-50')	3/30/2022	46-50	5.3 I	54	59.3	5.8 I	14	12	5.1 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	14	7.4
	SP-29 (66-70')	3/30/2022	66-70	8.0 I	58	66.0	4.8 U	13	13	7.3 I	2.4 U	4.8 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	19 U	2.4 U	4.8 U	15	7.2
SP-30	SP-30 (41-45')	3/31/2022	41-45	2.7 U	4.9 I	4.9	5.4 U	2.7 U	2.7 U	2.7 U	2.7 U	5.4 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	22 U	2.7 U	5.4 U	1.1 I	0.54 U
	SP-30 (46-50')	3/31/2022	46-50	2.7 I	13	15.7	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	8.5 I	2.4	1.8
	SP-30 (66-70')	3/31/2022	66-70	2.1 U	2.1 U	4.2 U	4.3 U	2.1 U	2.1 U	2.1 U	2.1 U	4.3 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	4.3 U	0.43 U	0.43 U
	SP-30 (66-70') DUP	3/31/2022		2.1 U	2.1 U	4.2 U	4.3 U	2.1 U	2.1 U	2.1 U	2.1 U	4.3 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	4.3 U	0.43 U	0.43 U
	SP-30 (86-90')	3/31/2022	86-90	2.8 U	20	20	5.6 U	2.8 U	2.8 U	2.8 U	2.8 U	5.6 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	22 U	2.8 U	5.6 U	3.5	2.9
SP-31	SP-31 (41-45')	4/1/2022	41-45	7.3 I	60	67.3	4.0 U	7.8 I	6.9 I	7.0 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.6 I	6.1	2.4
	SP-31 (46-50')	4/1/2022	46-50	2.0 U	4.1 I	4.1	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.1 U	1.0 I	0.41 U
	SP-31 (66-70')	4/1/2022	66-70	2.1 U	4.8 I	4.8	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	4.2 U	1.2 I	0.42 U
	SP-31 (82-86')	4/1/2022	82-86	3.0 U	38	38	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	24 U	3.0 U	7.6 I	5.6	1.2 I
SP-32	SP-32 (36-40)	4/4/2022	36-40	3.3 I	45	48.3	4.5 I	9.7	7.3 I	5.6 I	2.0 U	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.1 U	6.9	4.1
	SP-32 (46-50)	4/4/2022	46-50	3.5 I	41	44.5	4.3 I	7.8 I	3.8 I	5.0 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	6.4	6.2
	SP-32 (66-70)	4/4/2022	66-70	4.6 I	**89**	**93.6**	6.9 I	19	13	4.7 I	2.4 U	4.8 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	19 U	2.4 U	4.8 U	11	8.9
	SP-32 (86-90)	4/4/2022	86-90	2.5 I	48	50.5	4.5 U	11	6.8 I	6.4 I	2.2 U	4.5 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	18 U	2.2 U	4.5 U	8.7	6.8
SP-33	SP-33 (36-40)	4/4/2022	36-40	6.2 I	41	47.2	4.5 I	13	7.6 I	6.6 I	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	4.2 U	12	4.1
	SP-33 (46-50)	4/4/2022	46-50	3.6 I	30	33.6	4.0 U	6.8 I	3.0 I	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	8.6	2.2
	SP-33 (46-50)_DUP	4/4/2022		3.6 I	35	38.6	4.0 U	6.6 I	3.5 I	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	10	2.0
	SP-33 (66-70)	4/4/2022	66-70	2.5 I	40	42.5	4.3 U	5.7 I	6.4 I	3.8 I	2.2 U	4.3 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	17 U	2.2 U	4.3 U	9.0	2.0
	SP-33 (86-90)	4/4/2022	86-90	6.1 I	43	49.1	4.7 I	11	9.4	2.3 U	2.3 U	4.5 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	18 U	2.3 U	4.5 U	11	3.4
SP-34	SP-34 (36-40)	4/5/2022	36-40	2.2 U	12	12	4.3 U	2.2 U	2.2 U	2.2 U	2.2 U	4.3 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	17 U	2.2 U	4.3 U	4.5	1.5 I
	SP-34 (46-50)	4/5/2022	46-50	2.3 U	6.1 I	6.1	4.5 U	2.3 U	2.3 U	2.3 U	2.3 U	4.5 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	18 U	2.3 U	4.5 U	0.45 U	0.76 I
	SP-34 (66-70)	4/5/2022	66-70	2.3 U	2.3 U	4.6 U	4.5 U	2.3 U	2.3 U	2.3 U	2.3 U	4.5 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	18 U	2.3 U	4.5 U	0.45 U	0.45 U
	SP-34 (86-90)	4/5/2022	86-90	2.1 U	5.0 I	5.0	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	4.2 U	4.3	1.4 I
SP-35	SP-35 (36-40)	4/6/2022	36-40	4.1 I	19	23.1	4.0 U	2.4 I	2.0 U	3.5 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	6.0	1.3 I
	SP-35 (46-50)	4/6/2022	46-50	2.1 U	2.1 U	4.2 U	4.2 U	2.1 U	2.1 U	2.2 I	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	4.2 U	4.8	0.85 I
	SP-35 (66-70)	4/6/2022	66-70	2.1 U	2.1 U	4.2 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	4.2 U	0.42 U	0.42 U
	SP-35 (78-82)	4/6/2022	78-82	2.0 U	6.6 I	6.6	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.1 U	0.41 U	0.41 U
	SP-35 (78-82)_DUP	4/6/2022		2.0 U	6.0 I	6.0	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.1 U	0.41 U	0.41 U
SP-36	SP-36 (36-40)	4/6/2022	36-40	8.1 I	30	38.1	4.2 U	3.2 I	2.4 I	4.3 I	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	7.4 I	8.8	1.6 I
	SP-36 (46-50)	4/6/2022	46-50	2.0 U	42	42	4.4 I	9.8	7.7 I	6.4 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	11	4.8
	SP-36 (66-70)	4/7/2022	66-70	8.1 I	48	56.1	5.4 I	8.6	9.2	5.7 I	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	4.2 U	13	5.2
	SP-36 (81-85)	4/7/2022	81-85	6.5 I	48	54.5	4.1 I	6.2 I	7.2 I	5.0 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	13	6.2
SP-37	SP-37 (36-40)	4/7/2022	36-40	4.2 I	67	**71.2**	6.4 I	17	11	8.6	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	15	5.9
	SP-37 (46-50)	4/7/2022	46-50	2.0 U	48	48	4.1 I	6.3 I	7.0 I	4.3 I	2.0 U	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.1 U	8.7	6.4
	SP-37 (46-50)_DUP	4/7/2022		2.0 U	49	49	4.4 I	6.1 I	7.3 I	4.1 I	2.0 U	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.1 U	9.1	6.1
	SP-37 (66-70)	4/7/2022	66-70	2.1 U	9.4	9.4	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	4.2 U	2.5	0.42 U

TABLE 6: SCREEN POINT GROUNDWATER ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Screen Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replacement	Replacement	Replacement	Replacement	Misc.	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
			Provisional GCTL (ng/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-27	SP-27 (36-40)	3/28/2022	36-40	44	0.92 I	0.41 U	0.41 U	7.4	2.2 I	0.41 U	0.82 U	0.82 U	0.41 U	2.0 U	2.0 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	8.2 U
	SP-27 (46-50)	3/28/2022	46-50	61	0.95 I	0.44 U	0.44 U	10	0.88 U	0.44 U	0.88 U	0.88 U	0.44 U	2.2 U	2.2 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	8.8 U
	SP-27 (46-50)_DUP	3/28/2022		53	0.88 I	0.44 U	0.44 U	9.8	0.88 U	0.44 U	0.88 U	0.88 U	0.44 U	2.2 U	2.2 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	8.8 U
	SP-27 (66-70)	3/28/2022	66-70	50	1.0 I	0.45 U	0.45 U	10	6.1	0.45 U	0.89 U	0.89 U	0.45 U	2.2 U	2.2 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	8.9 U
	SP-27 (74-78)	3/28/2022	74-78	41	1.3 U	0.64 U	0.64 U	6.2	1.6 I	0.64 U	1.3 U	1.3 U	0.64 U	3.2 U	3.2 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	13 U
SP-28	SP-28 (41-45)	3/29/2022	41-45	76	1.5 I	0.40 U	0.40 U	12	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-28 (46-50)	3/29/2022	46-50	84	1.5 I	0.40 U	0.40 U	12	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-28 (66-70)	3/29/2022	66-70	87	1.6 I	0.44 U	0.44 U	17	0.88 U	0.44 U	1.2 I	0.95 I	0.44 U	2.2 U	2.2 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	8.8 U
	SP-28 (86-90)	3/29/2022	86-90	130	2.3 I	0.44 U	0.44 U	29	0.88 U	0.44 U	0.88 U	0.88 U	0.44 U	2.2 U	2.2 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	8.8 U
SP-29	SP-29 (36-40')	3/30/2022	36-40	5.1	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-29 (46-50')	3/30/2022	46-50	41	0.80 U	0.40 U	0.40 U	2.4 I	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-29 (66-70')	3/30/2022	66-70	48	1.1 I	0.48 U	0.48 U	2.9 I	0.96 U	0.48 U	0.96 U	0.96 U	0.48 U	2.4 U	2.4 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	9.6 U
SP-30	SP-30 (41-45')	3/31/2022	41-45	1.1 U	1.1 U	0.54 U	0.54 U	1.1 U	1.1 U	0.54 U	1.1 U	1.1 U	0.54 U	2.7 U	2.7 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	11 U
	SP-30 (46-50')	3/31/2022	46-50	12	0.80 U	0.40 U	0.40 U	0.84 I	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-30 (66-70')	3/31/2022	66-70	0.85 U	0.85 U	0.43 U	0.43 U	0.85 U	0.85 U	0.43 U	0.85 U	0.85 U	0.43 U	2.1 U	2.1 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.5 U
	SP-30 (66-70') DUP	3/31/2022		0.85 U	0.85 U	0.43 U	0.43 U	0.85 U	0.85 U	0.43 U	0.85 U	0.85 U	0.43 U	2.1 U	2.1 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.5 U
	SP-30 (86-90')	3/31/2022	86-90	16	1.1 U	0.56 U	0.56 U	1.5 I	1.1 U	0.56 U	1.1 U	1.1 U	0.56 U	2.8 U	2.8 U	5.6 U	5.6 U	5.6 UJ	5.6 U	5.6 U	11 U
SP-31	SP-31 (41-45')	4/1/2022	41-45	21	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-31 (46-50')	4/1/2022	46-50	1.9 I	0.81 U	0.41 U	0.41 U	0.81 U	0.81 U	0.41 U	0.81 U	0.81 U	0.41 U	2.0 U	2.0 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	8.1 U
	SP-31 (66-70')	4/1/2022	66-70	1.5 I	0.85 U	0.42 U	0.42 U	0.85 U	0.85 U	0.42 U	0.85 U	0.85 U	0.42 U	2.1 U	2.1 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	8.5 U
	SP-31 (82-86')	4/1/2022	82-86	15	1.2 U	0.60 U	0.60 U	1.2 U	1.2 U	0.60 U	1.2 U	1.2 U	0.60 U	3.0 U	3.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	12 U
SP-32	SP-32 (36-40)	4/4/2022	36-40	32	0.82 U	0.41 U	0.41 U	0.82 U	0.82 U	0.41 U	0.82 U	0.82 U	0.41 U	2.0 U	2.0 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	8.2 U
	SP-32 (46-50)	4/4/2022	46-50	41	0.80 U	0.40 U	0.40 U	4.3	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-32 (66-70)	4/4/2022	66-70	55	1.7 I	0.48 U	0.48 U	5.1	0.96 U	0.48 U	0.96 U	0.96 U	0.48 U	2.4 U	2.4 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	9.6 U
	SP-32 (86-90)	4/4/2022	86-90	43	0.89 U	0.45 U	0.45 U	4.0	0.89 U	0.45 U	0.89 U	0.89 U	0.46 I	2.2 U	9.8	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	8.9 U
SP-33	SP-33 (36-40)	4/4/2022	36-40	26	0.83 U	0.42 U	0.42 U	0.83 U	0.83 U	0.42 U	0.83 U	0.83 U	0.42 U	2.1 U	2.1 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	8.3 U
	SP-33 (46-50)	4/4/2022	46-50	18	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-33 (46-50)_DUP	4/4/2022		22	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-33 (66-70)	4/4/2022	66-70	16	0.87 U	0.43 U	0.43 U	0.87 U	0.87 U	0.43 U	0.87 U	0.87 U	0.43 U	2.2 U	2.2 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.7 U
	SP-33 (86-90)	4/4/2022	86-90	24	0.90 U	0.45 U	0.45 U	0.90 U	0.90 U	0.45 U	0.90 U	0.90 U	0.45 U	2.3 U	2.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	9.0 U
SP-34	SP-34 (36-40)	4/5/2022	36-40	12	0.86 U	0.43 U	0.43 U	0.86 U	0.86 U	0.43 U	0.86 U	0.86 U	0.43 U	2.2 U	2.2 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 U
	SP-34 (46-50)	4/5/2022	46-50	4.0	0.90 U	0.45 U	0.45 U	0.90 U	0.90 U	0.45 U	0.90 U	0.90 U	0.45 U	2.3 U	2.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	9.0 U
	SP-34 (66-70)	4/5/2022	66-70	0.90 U	0.90 U	0.45 U	0.45 U	0.90 U	0.90 U	0.45 U	0.90 U	0.90 U	0.45 U	2.3 U	2.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	9.0 U
	SP-34 (86-90)	4/5/2022	86-90	7.1	0.84 U	0.42 U	0.42 U	0.84 U	0.84 U	0.42 U	0.84 U	0.84 U	0.42 U	2.1 U	2.1 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	8.4 U
SP-35	SP-35 (36-40)	4/6/2022	36-40	9.6	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-35 (46-50)	4/6/2022	46-50	7.9	0.83 U	0.42 U	0.42 U	0.83 U	0.83 U	0.42 U	0.83 U	0.83 U	0.42 U	2.1 U	2.1 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	8.3 U
	SP-35 (66-70)	4/6/2022	66-70	0.83 U	0.83 U	0.42 U	0.42 U	0.83 U	0.83 U	0.42 U	0.83 U	0.83 U	0.42 U	2.1 U	2.1 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	8.3 U
	SP-35 (78-82)	4/6/2022	78-82	1.6 I	0.81 U	0.41 U	0.41 U	0.81 U	0.81 U	1.0 I	0.81 U	0.81 U	0.41 U	2.0 U	2.0 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	8.1 U
	SP-35 (78-82)_DUP	4/6/2022		1.4 I	0.81 U	0.41 U	0.41 U	0.81 U	0.81 U	1.0 I	0.81 U	0.81 U	0.41 U	2.0 U	2.0 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	8.1 U
SP-36	SP-36 (36-40)	4/6/2022	36-40	15	0.83 U	0.42 U	0.42 U	0.83 U	0.83 U	0.42 U	0.83 U	0.83 U	0.42 U	2.1 U	2.1 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	8.3 U
	SP-36 (46-50)	4/6/2022	46-50	31	0.81 U	0.40 U	0.40 U	1.3 I	0.81 U	0.40 U	0.81 U	0.81 U	0.44 I	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.1 U
	SP-36 (66-70)	4/7/2022	66-70	38	0.83 U	0.42 U	0.42 U	1.2 I	0.83 U	0.42 U	0.83 U	0.83 U	0.46 I	2.1 U	2.1 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	8.3 U
	SP-36 (81-85)	4/7/2022	81-85	41	1.3 I	0.40 U	0.40 U	1.4 I	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
SP-37	SP-37 (36-40)	4/7/2022	36-40	52	1.6 I	0.40 U	0.40 U	4.5	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	SP-37 (46-50)	4/7/2022	46-50	40	0.82 U	0.41 U	0.41 U	3.8	0.82 U	0.41 U	0.82 U	0.82 U	0.41 U	2.0 U	2.0 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	8.2 U
	SP-37 (46-50)_DUP	4/7/2022		46	0.82 U	0.41 U	0.41 U	3.6	0.82 U	0.41 U	0.82 U	0.82 U	0.41 U	2.0 U	2.0 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	8.2 U
	SP-37 (66-70)	4/7/2022	66-70	6.1	0.85 U	0.42 U	0.42 U	0.85 U	0.85 U	0.42 U	0.85 U	0.85 U	0.42 U	2.1 U	2.1 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	8.5 U

TABLE 6: SCREEN POINT GROUNDWATER ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Notes:

1. Results and screening criteria are presented in nanograms per liter (ng/L).
2. ft BLS indicates feet below land surface.
3. PFOA + PFOS indicates the summation of PFOA and PFOS concentrations calculated based on guidance provided by the Florida Department of Environmental Protection on 16 November 2022. For results where both PFOA and PFOS were detected, PFOA+PFOS was calculated by summing the two detections. For results where either PFOA or PFOS was detected and the other was not, PFOA+PFOS was calculated by assuming the non-detect result was 0. For results where neither PFOA nor PFOS were detected, the PFOA+PFOS value presented is the sum of the method detection limits (MDLs) for each constituent.
4. Blue shaded, bold text indicates an exceedance of the Florida Department of Environmental Protection Provisional Groundwater Cleanup Target Level (GCTL).
5. -- indicates no applicable cleanup target level.
6. U indicates analyte was not detected in the specified sample. The reported value for individual analytes is the MDL for the sample analyzed. For PFOA+PFOS calculations presented with a "U", this indicates neither PFOS nor PFOA were detected in the specified sample and thus the calculated value is the sum of the two MDLs (see Note 3).
7. I indicates the reported value is between the laboratory MDL and the laboratory practical quantitation limit.
8. J indicates estimated value and/or the analysis did not meet the quality control criteria.
9. NA indicates constituent was not analyzed for.
10. PFAS indicates per- and polyfluoroalkyl substances.
11. PFCA indicates perfluoroalkyl carboxylic acids.
12. PFSA indicates perfluoroalkane sulfonic acids.
13. * indicates the analyte contains multiple perfluorinated sections.

Analyte	Acronym	Class	Carbon Chain Length
Perfluorooctanoic acid	PFOA	PFCA	8
Perfluorooctane sulfonate	PFOS	PFSA	8
Perfluorobutanoic acid	PFBA	PFCA	4
Perfluoropentanoic acid	PFPeA	PFCA	5
Perfluorohexanoic acid	PFHxA	PFCA	6
Perfluoroheptanoic acid	PFHpA	PFCA	7
Perfluorononanoic acid	PFNA	PFCA	9
Perfluorodecanoic acid	PFDA	PFCA	10
Perfluoroundecanoic acid	PFUnA	PFCA	11
Perfluorododecanoic acid	PFDoA	PFCA	12
Perfluorotridecanoic Acid	PFTriA	PFCA	13
Perfluorotetradecanoic acid	PFTeA	PFCA	14
4:2 Fluorotelomer sulfonate	4:2 FTS	PFCA Precursor	4
6:2 Fluorotelomer sulfonate	6:2 FTS	PFCA Precursor	6
8:2 Fluorotelomer sulfonate	8:2 FTS	PFCA Precursor	8
Perfluoropropanesulfonic acid	PFPrS	PFSA	3
Perfluorobutanesulfonic acid	PFBS	PFSA	4
Perfluoropentanesulfonic acid	PFPeS	PFSA	5
Perfluorohexanesulfonic acid	PFHxS	PFSA	6
Perfluoroheptanesulfonic acid	PFHpS	PFSA	7
Perfluorononanesulfonic acid	PFNS	PFSA	9
Perfluorodecanesulfonic acid	PFDS	PFSA	10
Perfluoro-1-butane sulfonamide	FBSA	PFSA Precursor	4
Perfluoro-1-hexane sulfonamide	FHxSA	PFSA Precursor	6
Perfluorooctane Sulfonamide	FOSA	PFSA Precursor	8
N-ethylperfluorooctanesulfonamidoacetic acid	NEtFOSAA	PFSA Precursor	8
N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA	PFSA Precursor	8
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	Replacement	*
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	Replacement	*
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	Replacement	*
Hexafluoropropylene oxide dimer acid	HFPO-DA	Replacement	*
Perfluoro-3-methoxypropanoic acid	PFMPA	Misc.	*
Perfluoro-4-methoxybutanoic acid	PFMBA	Misc.	*
Perfluoro-4-ethylcyclohexanesulfonic acid	PFECHS	Misc.	*
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	Misc.	*
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	Misc.	*

TABLE 7: GROUNDWATER MONITORING WELL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Screen Interval (ft BLS)	PFOA	PFOS	PFOA+PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS
			Class	PFCA	PFSA	N/A	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA
			Carbon Chain Length	8	8	N/A	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4
			Provisional GCTL (ng/L)	**70**	**70**	**70**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DEPMW-1	DEPMW-1 (100-120')	6/14/2021	100-120	12	**100**	**112**	9.9 I	26	26	16	4.2 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	NA	13
	DEPMW-1 (100-120)	3/29/2022		11	**120**	**131**	11 I	26	18	19	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	14
	DEPMW-1 [100-120']	1/4/2023		9.9	**110**	**119.9**	6.9 I	23	16	16	2.6 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	14
DEPMW-2	DEPMW-2 (25-45')	6/14/2021	25-45	5.2 I	**100**	**105.2**	7.2 I	12	16	8.2	2.7 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	NA	15
	DEPMW-2 (25-45)	3/29/2022		6.8 I	**96**	**102.8**	4.8 I	12	11	7.1 I	2.6 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	17
	DEPMW-2 [25-45']	1/4/2023		4.4 I	**83**	**87.4**	4.0 U	12	8.3	5.3 I	2.1 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	17
DEPMW-3	DEPMW-3 (100-120')	6/14/2021	100-120	22	**95**	**117**	24	63	54	35	2.2 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	NA	13
	DEPMW-3 (100-120)	3/29/2022		18	**140**	**158**	17	46	26	23	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	46 I	2.0 U	4.0 U	8.5
	DEPMW-3 [100-120']	1/5/2023		14	**87**	**101**	16	48	29	31	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	10
DEPMW-4	DEPMW-4 (25-45')	6/14/2021	25-45	2.0 U	5.9 I	5.9	4.1 I	2.2 I	3.1 I	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	NA	0.85 I
	DEPMW-4 (25-45)	3/28/2022		2.0 U	6.0 I	6.0	12 I	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	1.1 I
	DEPMW-4 [25-45']	1/5/2023		2.0 U	3.1 I	3.1	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	0.48 I
DEPMW-5	DEPMW-5 (100-120')	6/14/2021	100-120	20	**420**	**440**	17	44	46	25	6.0 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	NA	22
	DEPMW-5 (100-120)	3/29/2022		20	**320**	**340**	16	48	35	29	4.2 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.2 I	21
	DEPMW-5 [100-120']	1/5/2023		18	**380**	**398**	13 I	49	32	26	4.4 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 I	2.0 U	4.0 U	19
DEPMW-6	DEPMW-6 (25-45')	6/14/2021	25-45	12	**530**	**542**	7.7 I	17	35	15	3.5 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.3 I	NA	20
	DEPMW-6 (25-45)	3/29/2022		12	**450**	**462**	7.0 I	18	21	9.7	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	20
	DEPMW-6 (25-45) DUP	3/29/2022		12	**430**	**442**	7.8 I	18	25	9.7	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	19
	DEPMW-6 [25-45']	1/5/2023		7.4 I	**470**	**477.4**	4.4 I	12	11	8.9	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	19
	DEPMW-6 [25-45']DUP	1/5/2023		7.0 I	**480**	**487.0**	4.3 I	13	9.3	9.7	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	17
DEPMW-7	DEPMW-7 (100-120')	6/14/2021	100-120	12	**87**	**99**	11 I	25	26	14	3.5 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	NA	15
	DEPMW-7 (100-120)	3/29/2022		12	**100**	**112**	11 I	28	20	16	2.9 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	15
	DEPMW-7 [100-120']	1/5/2023		9.2	**93**	**102.2**	6.5 I	23	13	15	3.0 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	13
DEPMW-8	DEPMW-8 (20-40')	6/14/2021	20-40	49	**11,000**	**11,049**	32	58	160	39	14	6.8 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	4.2 I	NA	49
	DEPMW-8 (20-40') DUP	6/14/2021		46	**12,000**	**12,046**	33	58	160	38	13	6.4 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	4.2 I	NA	48
	DEPMW-8 (20-40)	3/29/2022		25	**3,900**	**3,925**	24	37	57	24	8.1	4.1 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	25
	DEPMW-8 [20-40']	1/5/2023		33	**5,200**	**5,233**	22	40	67	23	9.8	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	8.8 I	32
DEPMW-9	DEPMW-9 [150-170']	1/5/2023	150-170	7.4 I	**85**	**92.4**	8.5 I	24	16	15	2.1 I	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	17 U	2.1 U	4.2 U	14
	DEPMW-9 [150-170']DUP	1/5/2023		7.8 I	**91**	**98.8**	8.3 I	25	18	14	2.2 I	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.1 U	14
DEPMW-10	DEPMW-10 [160-180']	1/5/2023	160-180	2.0 U	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	0.40 U
DEPMW-11	DEPMW-11 [165-185']	1/5/2023	165-185	2.0 U	5.8 I	5.8	4.0 U	2.0 U	3.5 I	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	75	2.0 U	4.0 U	0.40 U
DEPMW-12	DEPMW-12 [100-120']	1/4/2023	100-120	9.5	**90**	**99.5**	7.5 I	31	20	14	2.9 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	14
DEPMW-13	DEPMW-13 [25-45']	1/4/2023	25-45	9.9	**110**	**119.9**	9.2 I	32	21	19	2.1 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	15
DEPMW-14	DEPMW-14[100-120']	1/4/2023	100-120	2.0 U	2.0 U	4.0 U	4.0 U	3.2 I	3.0 I	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	0.40 U
DEPMW-15	DEPMW-15 [25-45']	1/4/2023	25-45	2.6 I	2.2 I	4.8	4.0 U	12	7.4 I	5.4 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	20
DEPMW-16	DEPMW-16 [100-120']	1/4/2023	100-120	6.4 I	48	54.4	5.6 I	19	14	9.5	2.0 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	14
DEPMW-17	DEPMW-17 [25-45']	1/4/2023	25-45	6.6 I	16	22.6	4.0 U	22	12	7.5 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	1.2 I
DEPMW-18	DEPMW-18 [100-120']	1/4/2023	100-120	4.8 I	55	59.8	4.0 U	14	14	7.8 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	15
DEPMW-19	DEPMW-19 [25-45']	1/4/2023	25-45	4.4 I	32	36.4	4.0 U	12	7.9 I	6.0 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	10
DEPMW-20	DEPMW-20 [100-120']	1/4/2023	100-120	2.0 U	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	0.40 U
DEPMW-21	DEPMW-21 [25-45']	1/4/2023	25-45	2.0 U	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	0.40 U
DEPMW-22	DEPMW-22 [100-120']	1/3/2023	100-120	34	**270**	**304**	42	20	13	28	7.5 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	7.9
DEPMW-23	DEPMW-23 [25-45']	1/3/2023	25-45	14	**78**	**92**	11 I	31	18	20	2.1 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 I	2.0 U	4.0 U	4.2
VISAMW [M-0200]	VISAMW (M-200)	6/14/2021	30-40	5.4 I	**140**	**145.4**	4.0 I	6.2 I	9.3	4.0 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	NA	11
	VISAMW (M-200)	3/29/2022		2.4 I	**98**	**100.4**	4.0 U	8.0 I	7.2 I	4.1 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	11
	UISAMW [M-200]	1/5/2023		2.0 U	**72**	**72**	4.0 U	4.5 I	4.3 I	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	7.3
Irrigation Well	Irrigation Well	3/23/2021	105-140	9.7	**110**	**119.7**	9.4 I	24	23	15	4.1 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	NA	16
	Irrigation Well (105-140')	3/31/2022		7.3 I	**82**	**89.3**	7.7 I	28	17	9.7	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	13
	Irrigation Well [105-140']	1/3/2023		19	**140**	**159**	10 I	50	29	23	7.2 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	15
	Irrigation Well [105-140']DUP	1/3/2023		19	**130**	**149**	10 I	49	30	24	6.4 I	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	14

TABLE 7: GROUNDWATER MONITORING WELL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Screen Interval (ft BLS)	PFPeS	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replacement	Replacement	Replacement	Replacement	Misc.	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	5	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
			Provisional GCTL (ng/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DEPMW-1	DEPMW-1 (100-120')	6/14/2021	100-120	9.5	73	1.7 I	0.40 U	0.40 U	6.5	0.42 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	DEPMW-1 (100-120)	3/29/2022		13	79	1.3 I	0.40 U	0.40 U	11	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	DEPMW-1 [100-120']	1/4/2023		8.8	78	1.8 I	0.40 U	0.40 U	8.1	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-2	DEPMW-2 (25-45')	6/14/2021	25-45	13	75	1.2 I	0.40 U	0.40 U	6.5	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	DEPMW-2 (25-45)	3/29/2022		15	77	1.1 I	0.40 U	0.40 U	7.5	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	DEPMW-2 [25-45']	1/4/2023		10	75	1.4 I	0.40 U	0.40 U	6.0	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-3	DEPMW-3 (100-120')	6/14/2021	100-120	19	130	2.4 I	0.40 U	0.40 U	3.8	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	DEPMW-3 (100-120)	3/29/2022		13	73	1.9 I	0.40 U	0.40 U	5.8	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	DEPMW-3 [100-120']	1/5/2023		10	110	1.8 I	0.40 U	0.40 U	3.5	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-4	DEPMW-4 (25-45')	6/14/2021	25-45	0.40 U	2.1 I	0.80 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	DEPMW-4 (25-45)	3/28/2022		0.40 U	1.7 I	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	DEPMW-4 [25-45']	1/5/2023		0.40 U	1.0 I	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-5	DEPMW-5 (100-120')	6/14/2021	100-120	20	210	4.5	0.45 I	0.40 U	16	6.3	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	DEPMW-5 (100-120)	3/29/2022		22	160	3.2 I	0.40 U	0.40 U	20	7.1	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	DEPMW-5 [100-120']	1/5/2023		16	180	4.1	0.40 U	0.40 U	17	4.2	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-6	DEPMW-6 (25-45')	6/14/2021	25-45	14	260	5.7	0.40 U	0.40 U	11	52	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	DEPMW-6 (25-45)	3/29/2022		14	210	3.7	0.40 U	0.40 U	14	62	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	DEPMW-6 (25-45) DUP	3/29/2022		14	200	3.4	0.40 U	0.40 U	15	60	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	DEPMW-6 [25-45']	1/5/2023		11	160	3.7	0.40 U	0.40 U	7.8	18	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
	DEPMW-6 [25-45']DUP	1/5/2023		10	160	3.8	0.40 U	0.40 U	8.4	21	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-7	DEPMW-7 (100-120')	6/14/2021	100-120	10	79	1.4 I	0.40 U	0.40 U	5.6	0.53 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	DEPMW-7 (100-120)	3/29/2022		14	76	1.2 I	0.40 U	0.40 U	9.3	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	DEPMW-7 [100-120']	1/5/2023		7.4	68	1.2 I	0.40 U	0.40 U	5.9	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-8	DEPMW-8 (20-40')	6/14/2021	20-40	64	1,400	58	5.6	0.40 U	89	1,800	13	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	DEPMW-8 (20-40') DUP	6/14/2021		64	1,600	57	5.5	0.40 U	76	2,000	13	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	DEPMW-8 (20-40)	3/29/2022		37	440	14	0.40 U	0.40 U	44	600	5.2	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	DEPMW-8 [20-40']	1/5/2023		34	900	33	1.9	0.40 U	65	760	7.4	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-9	DEPMW-9 [150-170']	1/5/2023	150-170	9.0	80	1.4 I	0.42 U	0.42 U	7.3	0.83 U	0.42 U	0.83 U	0.83 U	0.42 U	2.1 U	2.1 U	4.2 U	0.83 U	0.83 U	0.83 U	0.83 U	8.3 U
	DEPMW-9 [150-170']DUP	1/5/2023		10	87	1.3 I	0.41 U	0.41 U	7.0	0.82 U	0.41 U	0.82 U	0.82 U	0.41 U	2.0 U	2.0 U	4.1 U	0.82 U	0.82 U	0.82 U	0.82 U	8.2 U
DEPMW-10	DEPMW-10 [160-180']	1/5/2023	160-180	0.40 U	0.80 U	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-11	DEPMW-11 [165-185']	1/5/2023	165-185	0.40 U	3.6	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-12	DEPMW-12 [100-120']	1/4/2023	100-120	11	99	1.5 I	0.40 U	0.40 U	13	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-13	DEPMW-13 [25-45']	1/4/2023	25-45	9.7	100	1.4 I	0.40 U	0.40 U	9.8	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-14	DEPMW-14[100-120']	1/4/2023	100-120	0.40 U	3.0 I	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-15	DEPMW-15 [25-45']	1/4/2023	25-45	3.1	11	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-16	DEPMW-16 [100-120']	1/4/2023	100-120	5.7	56	0.80 U	0.40 U	0.40 U	4.3	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-17	DEPMW-17 [25-45']	1/4/2023	25-45	0.77 I	7.9	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-18	DEPMW-18 [100-120']	1/4/2023	100-120	7.2	57	0.80 U	0.40 U	0.40 U	3.5	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-19	DEPMW-19 [25-45']	1/4/2023	25-45	2.4	25	0.80 U	0.40 U	0.40 U	0.92 I	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-20	DEPMW-20 [100-120']	1/4/2023	100-120	0.40 U	0.80 U	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-21	DEPMW-21 [25-45']	1/4/2023	25-45	0.40 U	0.80 U	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-22	DEPMW-22 [100-120']	1/3/2023	100-120	8.4	110	2.5 I	0.40 U	0.40 U	5.1	0.84 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
DEPMW-23	DEPMW-23 [25-45']	1/3/2023	25-45	2.0	33	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
VISAMW [M-0200]	VISAMW (M-200)	6/14/2021	30-40	7.8	64	1.1 I	0.40 U	0.40 U	1.9	0.88 I	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	VISAMW (M-200)	3/29/2022		7.9	52	1.0 I	0.40 U	0.40 U	1.7 I	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	UISAMW [M-200]	1/5/2023		3.3	37	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
Irrigation Well	Irrigation Well	3/23/2021	105-140	12	91	1.4 I	0.40 U	0.40 U	7.0	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	NA	NA	NA	NA	NA
	Irrigation Well (105-140')	3/31/2022		8.6	60	0.80 U	0.40 U	0.40 U	8.0	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
	Irrigation Well [105-140']	1/3/2023		9.9	86	1.5 I	0.40 U	0.40 U	8.0	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U
	Irrigation Well [105-140']DUP	1/3/2023		9.9	88	1.5 I	0.40 U	0.40 U	7.7	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U	8.0 U

TABLE 7: GROUNDWATER MONITORING WELL ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Notes:

1. Results and screening criteria are presented in nanograms per liter (ng/L).
2. ft BLS indicates feet below land surface.
3. PFOA + PFOS indicates the summation of PFOA and PFOS concentrations calculated based on guidance provided by the Florida Department of Environmental Protection on 16 November 2022. For results where both PFOA and PFOS were detected, PFOA+PFOS was calculated by summing the two detections. For results where either PFOA or PFOS was detected and the other was not, PFOA+PFOS was calculated by assuming the non-detect result was 0. For results where neither PFOA nor PFOS were detected, the PFOA+PFOS value presented is the sum of the method detection limits (MDLs) for each constituent.
4. Blue shaded, bold text indicates an exceedance of the Florida Department of Environmental Protection Provisional Groundwater Cleanup Target Level (GCTL).
5. -- indicates no applicable cleanup target level.
6. U indicates analyte was not detected in the specified sample. The reported value for individual analytes is the MDL for the sample analyzed. For PFOA+PFOS calculations presented with a “U”, this indicates neither PFOS nor PFOA were detected in the specified sample and thus the calculated value is the sum of the two MDLs (see Note 3).
7. I indicates the reported value is between the laboratory MDL and the laboratory practical quantitation limit.
8. NA indicates constituent was not analyzed for.
9. PFAS indicates per- and polyfluoroalkyl substances.
10. PFCA indicates perfluoroalkyl carboxylic acids.
11. PFSA indicates perfluoroalkane sulfonic acids.
12. * indicates the analyte contains multiple perfluorinated sections.

Analyte	Acronym	Class	Carbon Chain Length
Perfluorooctanoic acid	PFOA	PFCA	8
Perfluorooctane sulfonate	PFOS	PFSA	8
Perfluorobutanoic acid	PFBA	PFCA	4
Perfluoropentanoic acid	PFPeA	PFCA	5
Perfluorohexanoic acid	PFHxA	PFCA	6
Perfluoroheptanoic acid	PFHpA	PFCA	7
Perfluorononanoic acid	PFNA	PFCA	9
Perfluorodecanoic acid	PFDA	PFCA	10
Perfluoroundecanoic acid	PFUnA	PFCA	11
Perfluorododecanoic acid	PFDoA	PFCA	12
Perfluorotridecanoic Acid	PFTriA	PFCA	13
Perfluorotetradecanoic acid	PFTeA	PFCA	14
4:2 Fluorotelomer sulfonate	4:2 FTS	PFCA Precursor	4
6:2 Fluorotelomer sulfonate	6:2 FTS	PFCA Precursor	6
8:2 Fluorotelomer sulfonate	8:2 FTS	PFCA Precursor	8
Perfluoropropanesulfonic acid	PFPrS	PFSA	3
Perfluorobutanesulfonic acid	PFBS	PFSA	4
Perfluoropentanesulfonic acid	PFPeS	PFSA	5
Perfluorohexanesulfonic acid	PFHxS	PFSA	6
Perfluoroheptanesulfonic acid	PFHpS	PFSA	7
Perfluorononanesulfonic acid	PFNS	PFSA	9
Perfluorodecanesulfonic acid	PFDS	PFSA	10
Perfluoro-1-butane sulfonamide	FBSA	PFSA Precursor	4
Perfluoro-1-hexane sulfonamide	FHxSA	PFSA Precursor	6
Perfluorooctane Sulfonamide	FOSA	PFSA Precursor	8
N-ethylperfluorooctanesulfonamidoacetic acid	NEtFOSAA	PFSA Precursor	8
N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA	PFSA Precursor	8
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	Replacement	*
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	Replacement	*
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	Replacement	*
Hexafluoropropylene oxide dimer acid	HFPO-DA	Replacement	*
Perfluoro-3-methoxypropanoic acid	PFMPA	Misc.	*
Perfluoro-4-methoxybutanoic acid	PFMBA	Misc.	*
Perfluoro-4-ethylcyclohexanesulfonic acid	PFECHS	Misc.	*
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	Misc.	*
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	Misc.	*

TABLE 8: SURFACE WATER ANALYTICAL RESULTS FOR PFAS

Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	PFOA	PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
		Class	PFCA	PFSA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
		Carbon Chain Length	8	8	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
		Provisional Surface Water Screening Level (ng/L)	**500**	**10**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-1	SW-1	3/28/2022	4.4 I	**37**	12 I	29	13	7.3 I	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	8.9	6.4
SW-2	SW-2	3/28/2022	4.4 I	4.8 I	20	35	16	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	0.98 I	0.40 U
SW-3	SW-3	3/28/2022	2.4 I	3.4 I	8.8 I	18	8.0	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	16 U	2.0 U	4.0 U	0.86 I	0.40 U

TABLE 8: SURFACE WATER ANALYTICAL RESULTS FOR PFAS

Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
		Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replacement	Replacement	Replacement	Replacement	Misc.	Misc.	Misc.	Misc.	Misc.
		Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
		Provisional Surface Water Screening Level (ng/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-1	SW-1	3/28/2022	39	0.80 U	0.40 U	0.40 U	4.7	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
SW-2	SW-2	3/28/2022	3.2	0.80 U	0.40 U	0.40 U	0.80 U	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U
SW-3	SW-3	3/28/2022	1.4 I	0.80 U	0.40 U	0.40 U	0.86 I	0.80 U	0.40 U	0.80 U	0.80 U	0.40 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U

TABLE 8: SURFACE WATER ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Notes:

1. Results and screening criteria are presented in nanograms per liter (ng/L).
2. SW indicates surface water.
3. Blue shaded, bold text indicates an exceedance of the Florida Department of Environmental Protection Provisional Surface Water Screening Level based on the consumption of freshwater and estuarine finfish and shellfish.
4. -- indicates no applicable cleanup target level.
5. U indicates material was analyzed for but not detected. The reported value is the method detection limit (MDL) for the sample analyzed.
6. I indicates the reported value is between the laboratory MDL and the laboratory practical quantitation limit.
7. NA or indicates constituent was not analyzed for.
8. PFAS indicates per- and polyfluoroalkyl substances.
9. PFCA indicates perfluoroalkyl carboxylic acids.
10. PFSA indicates perfluoroalkane sulfonic acids.
11. * indicates the analyte contains multiple perfluorinated sections.

Analyte	Acronym	Class	Carbon Chain Length
Perfluorooctanoic acid	PFOA	PFCA	8
Perfluorooctane sulfonate	PFOS	PFSA	8
Perfluorobutanoic acid	PFBA	PFCA	4
Perfluoropentanoic acid	PFPeA	PFCA	5
Perfluorohexanoic acid	PFHxA	PFCA	6
Perfluoroheptanoic acid	PFHpA	PFCA	7
Perfluorononanoic acid	PFNA	PFCA	9
Perfluorodecanoic acid	PFDA	PFCA	10
Perfluoroundecanoic acid	PFUnA	PFCA	11
Perfluorododecanoic acid	PFDoA	PFCA	12
Perfluorotridecanoic Acid	PFTriA	PFCA	13
Perfluorotetradecanoic acid	PFTeA	PFCA	14
4:2 Fluorotelomer sulfonate	4:2 FTS	PFCA Precursor	4
6:2 Fluorotelomer sulfonate	6:2 FTS	PFCA Precursor	6
8:2 Fluorotelomer sulfonate	8:2 FTS	PFCA Precursor	8
Perfluoropropanesulfonic acid	PFPrS	PFSA	3
Perfluorobutanesulfonic acid	PFBS	PFSA	4
Perfluoropentanesulfonic acid	PFPeS	PFSA	5
Perfluorohexanesulfonic acid	PFHxS	PFSA	6
Perfluoroheptanesulfonic acid	PFHpS	PFSA	7
Perfluorononanesulfonic acid	PFNS	PFSA	9
Perfluorodecanesulfonic acid	PFDS	PFSA	10
Perfluoro-1-butane sulfonamide	FBSA	PFSA Precursor	4
Perfluoro-1-hexane sulfonamide	FHxSA	PFSA Precursor	6
Perfluorooctane Sulfonamide	FOSA	PFSA Precursor	8
N-ethylperfluorooctanesulfonamidoacetic acid	NEtFOSAA	PFSA Precursor	8
N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA	PFSA Precursor	8
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	Replacement	*
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	Replacement	*
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	Replacement	*
Hexafluoropropylene oxide dimer acid	HFPO-DA	Replacement	*
Perfluoro-3-methoxypropanoic acid	PFMPA	Misc.	*
Perfluoro-4-methoxybutanoic acid	PFMBA	Misc.	*
Perfluoro-4-ethylcyclohexanesulfonic acid	PFECHS	Misc.	*
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	Misc.	*
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	Misc.	*

TABLE 9: SEDIMENT ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFBA	PFPeA	PFHxA	PFHpA	PFNA	PFDA	PFUnA	PFDoA	PFTriA	PFTeA	4:2 FTS	6:2 FTS	8:2 FTS	PFPrS	PFBS	PFPeS
			Class	PFCA	PFSA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA	PFCA Precursor	PFCA Precursor	PFCA Precursor	PFSA	PFSA	PFSA
			Carbon Chain Length	8	8	4	5	6	7	9	10	11	12	13	14	4	6	8	3	4	5
Sed-1	Sed-1 (0-1)	3/28/2022	0-1	0.31 U	0.31 U	0.63 U	0.31 U	0.31 U	0.31 U	0.31 U	0.63 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	2.5 U	0.31 U	0.31 U	0.16 U	0.16 U
Sed-2	Sed-2 (0-1)	3/28/2022	0-1	0.37 U	2.9	0.73 U	0.37 U	0.37 U	0.37 U	0.37 U	0.73 U	0.53 I	0.37 U	0.37 U	0.37 U	0.37 U	2.9 U	0.37 U	0.37 U	0.18 U	0.18 U
Sed-3	Sed-3 (0-1)	3/28/2022	0-1	0.63 U	12	1.3 U	0.63 U	0.63 U	0.63 U	0.63 U	1.3 U	2.4 I	0.63 U	1.9 I	0.63 U	0.63 U	5.1 U	0.63 U	0.63 U	0.32 U	0.32 U

TABLE 9: SEDIMENT ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Sample Location	Field Sample ID	Sample Date	Sample Interval (ft BLS)	PFHxS	PFHpS	PFNS	PFDS	FBSA	FHxSA	FOSA	NEtFOSAA	NMeFOSAA	ADONA	11Cl-PF3OUdS	9Cl-PF3ONS	HFPO-DA	PFMPA	PFMBA	PFECHS	PFEESA	NFDHA
			Class	PFSA	PFSA	PFSA	PFSA	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	PFSA Precursor	Replcement	Replacement	Replacement	Replacement	Misc	Misc.	Misc.	Misc.	Misc.
			Carbon Chain Length	6	7	9	10	4	6	8	8	8	*	*	*	*	*	*	*	*	*
Sed-1	Sed-1 (0-1)	3/28/2022	0-1	0.16 U	0.16 U	0.16 U	0.37 I	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.31 U	0.31 U	0.63 U	0.31 U	0.31 U	0.31 U	0.31 U	1.3 U
Sed-2	Sed-2 (0-1)	3/28/2022	0-1	0.18 U	0.18 U	0.18 U	0.85	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.37 U	0.37 U	0.73 U	0.37 U	0.37 U	0.37 U	0.37 U	1.5 U
Sed-3	Sed-3 (0-1)	3/28/2022	0-1	0.32 U	0.32 U	0.32 U	2.0	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.63 U	0.63 U	1.3 U	0.63 U	0.63 U	0.63 U	0.63 U	2.5 U

TABLE 9: SEDIMENT ANALYTICAL RESULTS FOR PFAS
Former Florida State Fire College

Notes:

1. Results are presented in micrograms per kilogram (µg/kg).
2. Provisional cleanup target levels have not been established for sediment.
3. ft BLS indicates feet below land surface.
4. Sed indicates sediment.
5. U indicates that the compound was analyzed for but not detected (the laboratory method detection limit (MDL) is shown).
6. I indicates the result is between the laboratory MDL and the practical quantitation limit.
7. NA indicates constituent was not analyzed for.
8. PFAS indicates per- and polyfluoroalkyl substances.
9. PFCA indicates perfluoroalkyl carboxylic acids.
10. PFSA indicates perfluoroalkane sulfonic acids.
11. * indicates the analyte contains multiple perfluorinated sections.

Analyte	Acronym	Class	Carbon Chain Length
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Perfluorooctane sulfonate	PFOS	PFSA	8
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Perfluoropentanoic acid	PFPeA	PFCA	5
Perfluorohexanoic acid	PFHxA	PFCA	6
Perfluoroheptanoic acid	PFHpA	PFCA	7
Perfluorononanoic acid	PFNA	PFCA	9
Perfluorodecanoic acid	PFDA	PFCA	10
Perfluoroundecanoic acid	PFUnA	PFCA	11
Perfluorododecanoic acid	PFDoA	PFCA	12
Perfluorotridecanoic Acid	PFTriA	PFCA	13
Perfluorotetradecanoic acid	PFTeA	PFCA	14
4:2 Fluorotelomer sulfonate	4:2 FTS	PFCA Precursor	4
6:2 Fluorotelomer sulfonate	6:2 FTS	PFCA Precursor	6
8:2 Fluorotelomer sulfonate	8:2 FTS	PFCA Precursor	8
Perfluoropropanesulfonic acid	PFPrS	PFSA	3
Perfluorobutanesulfonic acid	PFBS	PFSA	4
Perfluoropentanesulfonic acid	PFPeS	PFSA	5
Perfluorohexanesulfonic acid	PFHxS	PFSA	6
Perfluoroheptanesulfonic acid	PFHpS	PFSA	7
Perfluorononanesulfonic acid	PFNS	PFSA	9
Perfluorodecanesulfonic acid	PFDS	PFSA	10
Perfluoro-1-butane sulfonamide	FBSA	PFSA Precursor	4
Perfluoro-1-hexane sulfonamide	FHxSA	PFSA Precursor	6
Perfluorooctane Sulfonamide	FOSA	PFSA Precursor	8
N-ethylperfluorooctanesulfonamidoacetic acid	NEtFOSAA	PFSA Precursor	8
N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA	PFSA Precursor	8
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	Replacement	*
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	Replacement	*
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	Replacement	*
Hexafluoropropylene oxide dimer acid	HFPO-DA	Replacement	*
Perfluoro-3-methoxypropanoic acid	PFMPA	Misc.	*
Perfluoro-4-methoxybutanoic acid	PFMBA	Misc.	*
Perfluoro-4-ethylcyclohexanesulfonic acid	PFECHS	Misc.	*
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	Misc.	*
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	Misc.	*

FIGURES

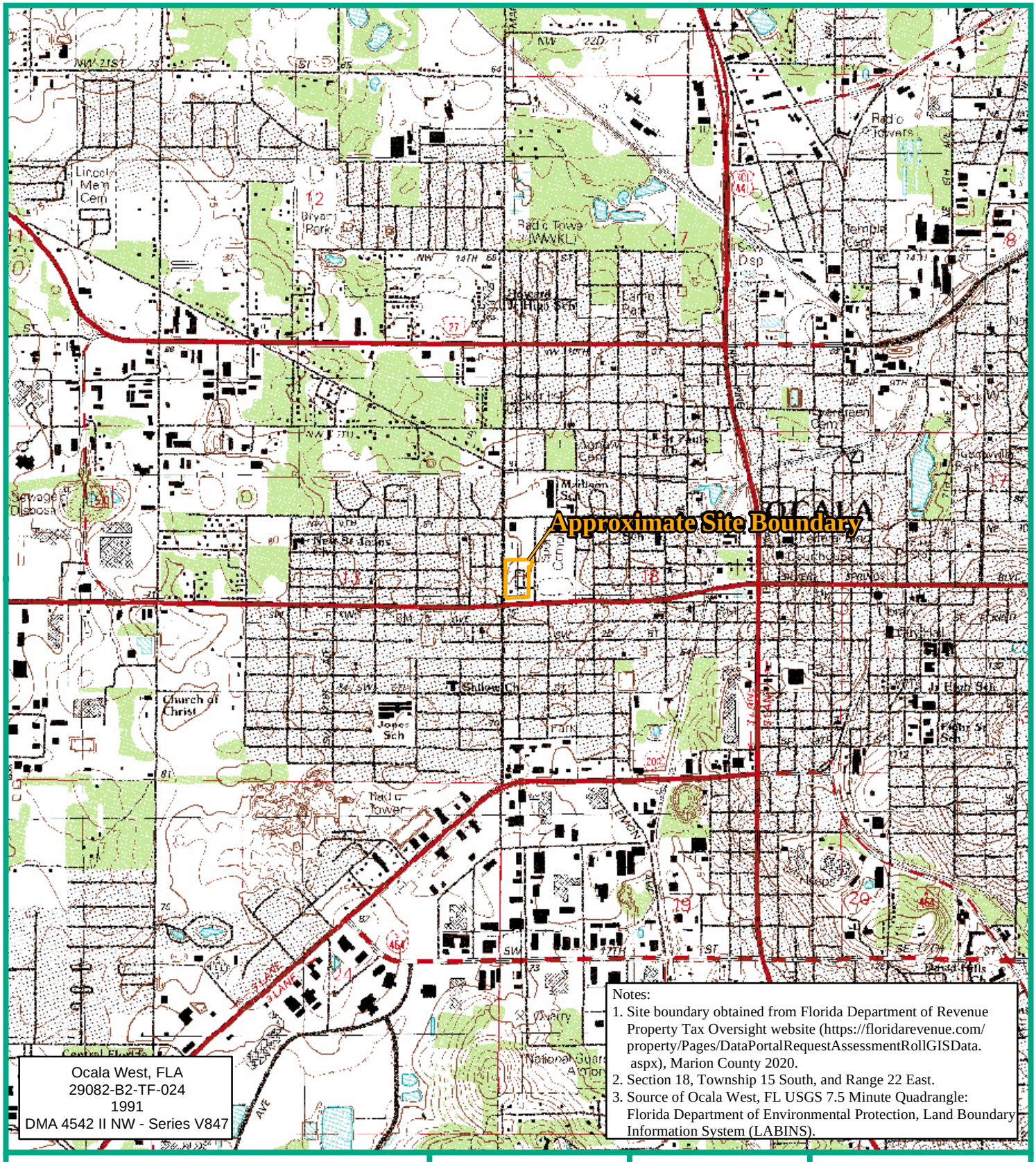

Figure 1
USGS Site Topographic Map
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Date: January 13, 2023

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Figure 2
Site Vicinity
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
2. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: January 13, 2023

N

160 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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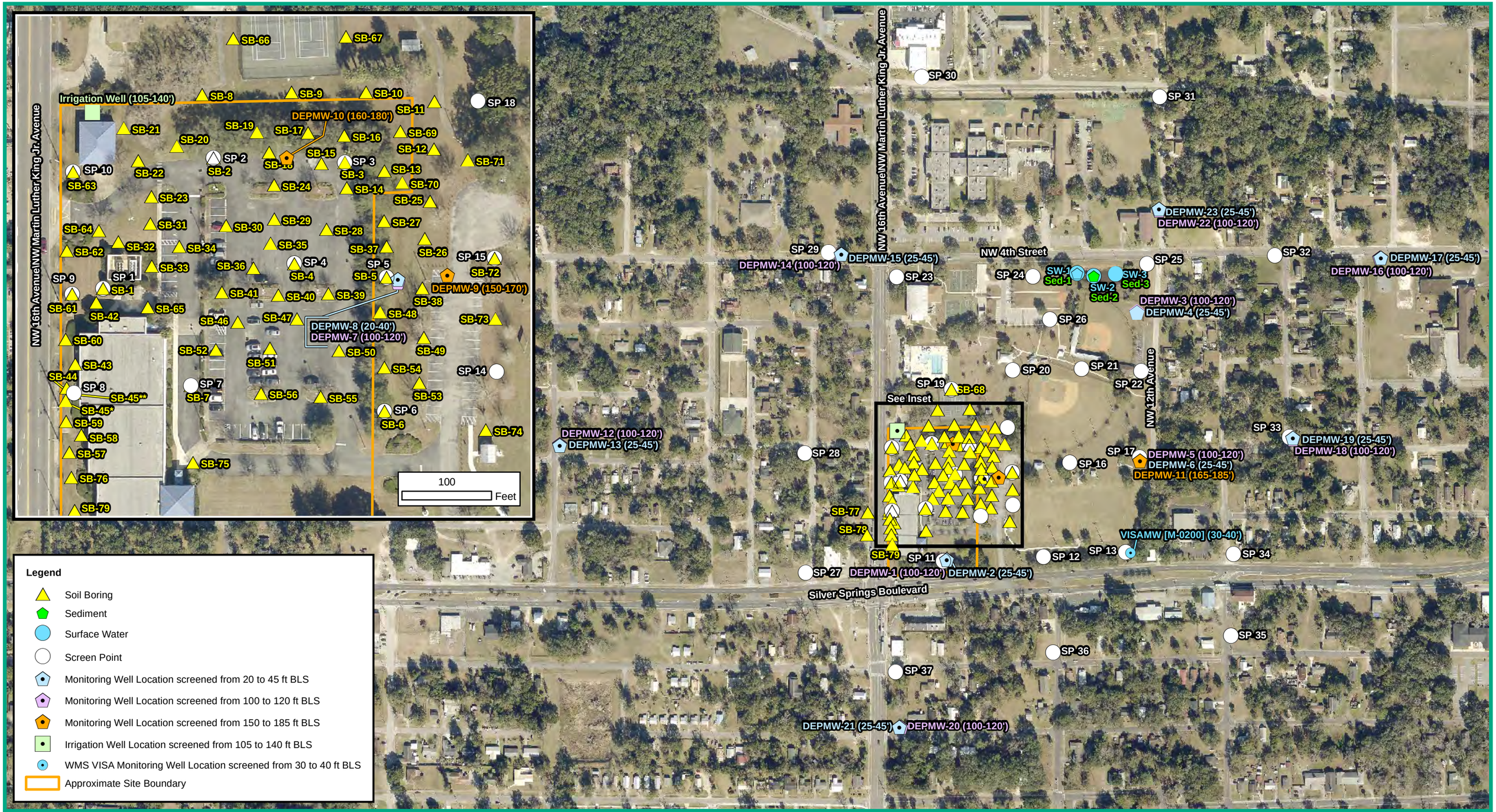


Legend

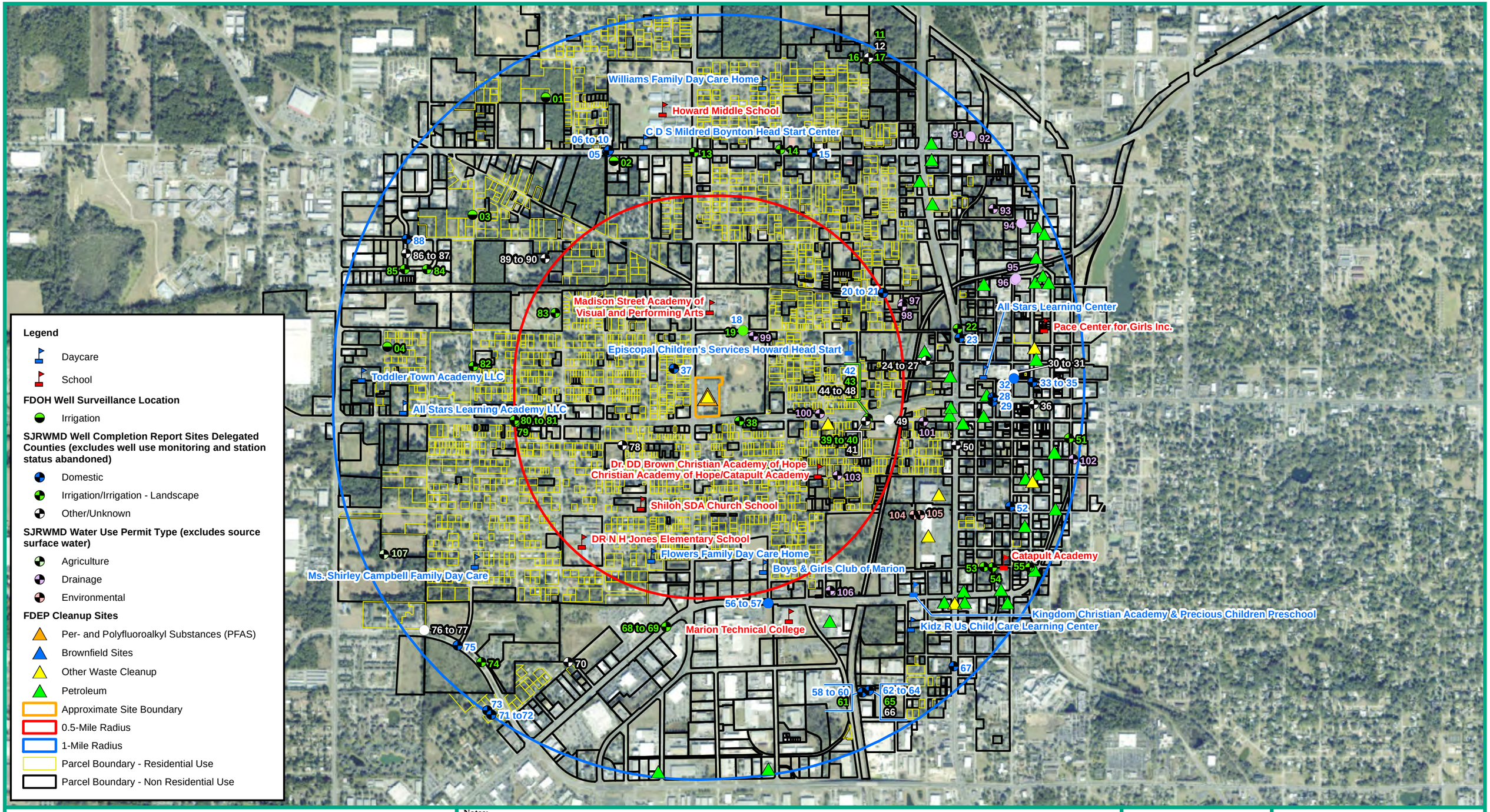
- Soil Boring
- Sediment
- Surface Water
- Screen Point
- Monitoring Well Location screened from 20 to 45 ft BLS
- Monitoring Well Location screened from 100 to 120 ft BLS
- Monitoring Well Location screened from 150 to 185 ft BLS
- Irrigation Well Location screened from 105 to 140 ft BLS
- WMS VISA Monitoring Well Location screened from 30 to 40 ft BLS
- Approximate Site Boundary

Figure 3
Sampling Locations
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:

1. ft BLS indicates feet below land surface.
2. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
3. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
4. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
5. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 06, 2023



Legend

- Daycare
- School

FDOH Well Surveillance Location

- Irrigation

SJRWMD Well Completion Report Sites Delegated Counties (excludes well use monitoring and station status abandoned)

- Domestic
- Irrigation/Irrigation - Landscape
- Other/Unknown

SJRWMD Water Use Permit Type (excludes source surface water)

- Agriculture
- Drainage
- Environmental

FDEP Cleanup Sites

- Per- and Polyfluoroalkyl Substances (PFAS)
- Brownfield Sites
- Other Waste Cleanup
- Petroleum
- Approximate Site Boundary
- 0.5-Mile Radius
- 1-Mile Radius
- Parcel Boundary - Residential Use
- Parcel Boundary - Non Residential Use

Figure 4
Water Wells, Daycares, and Schools Within a 1-Mile Radius
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:

1. Florida Department of Health (FDOH) well surveillance locations were obtained from FDOH website (https://www.floridahealth.gov/environmental-health/drinking-water/well-surveys.html), file dated 3 March 2023.
2. St. Johns River Water Management District (SJRWMD) Well Completion Report Sites Delegated Counties were obtained from SJRWMD Geospatial Open Data portal, file dated 16 February 2023.
3. SJRWMD Water Use Permit Type locations were obtained from SJRWMD Geospatial Open Data portal (https://data-floridaswater.opendata.arcgis.com/datasets/floridaswater::wup-permit-type-1), file dated 16 February 2023.
4. Florida Department of Environmental Protection (FDEP) Cleanup Sites obtained from FDEP Geospatial Open Data portal, dated 29 November 2022.
5. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
6. 2021 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: March 15, 2023

N

1,300 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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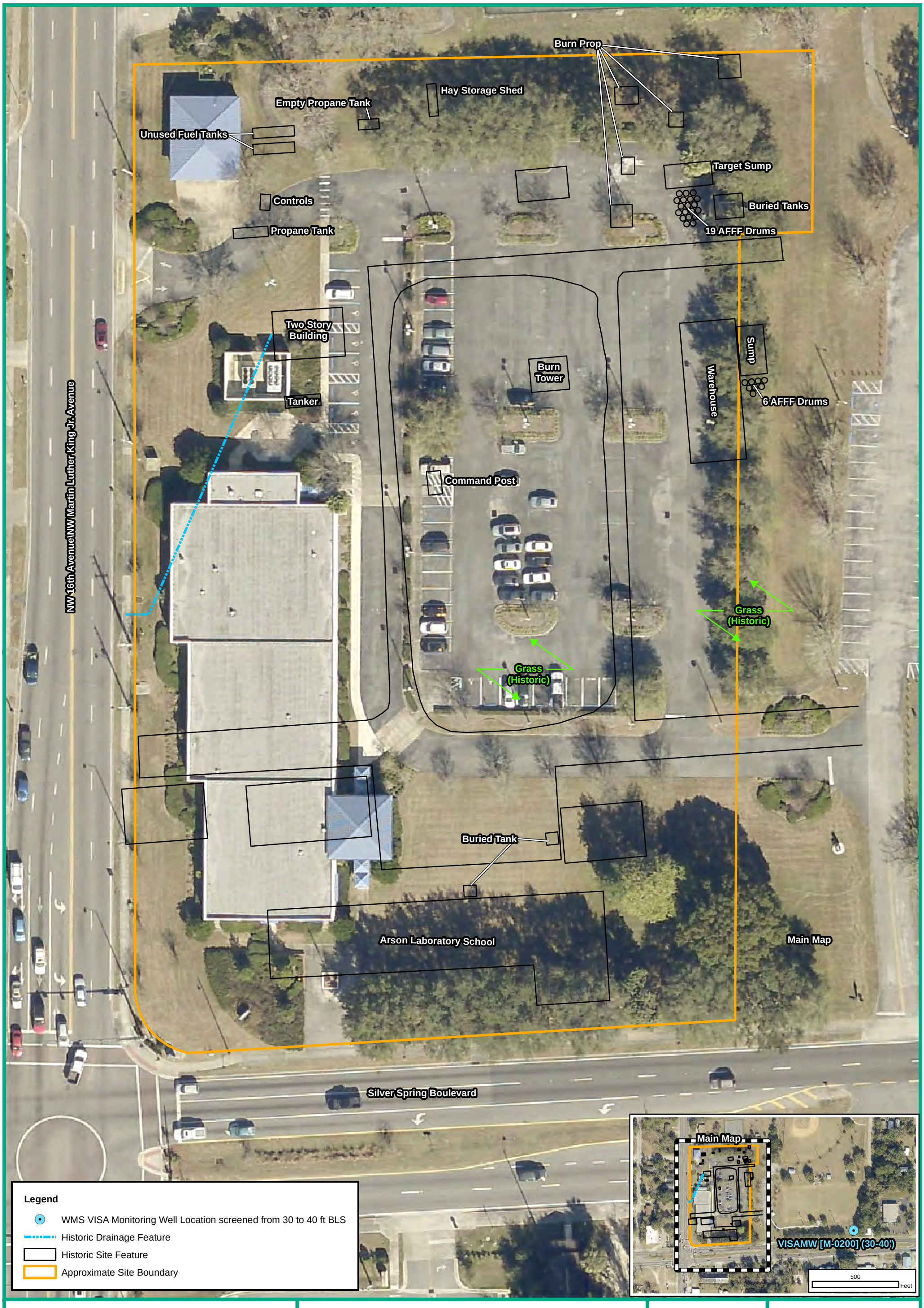

Figure 5
Site Location Map
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. **ft BLS indicates feet below land surface.**
2. **Historic site features provided by Florida Department of Environmental Protection (FDEP).**
3. **Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.**
4. **2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.**

Date: March 06, 2023

N

50 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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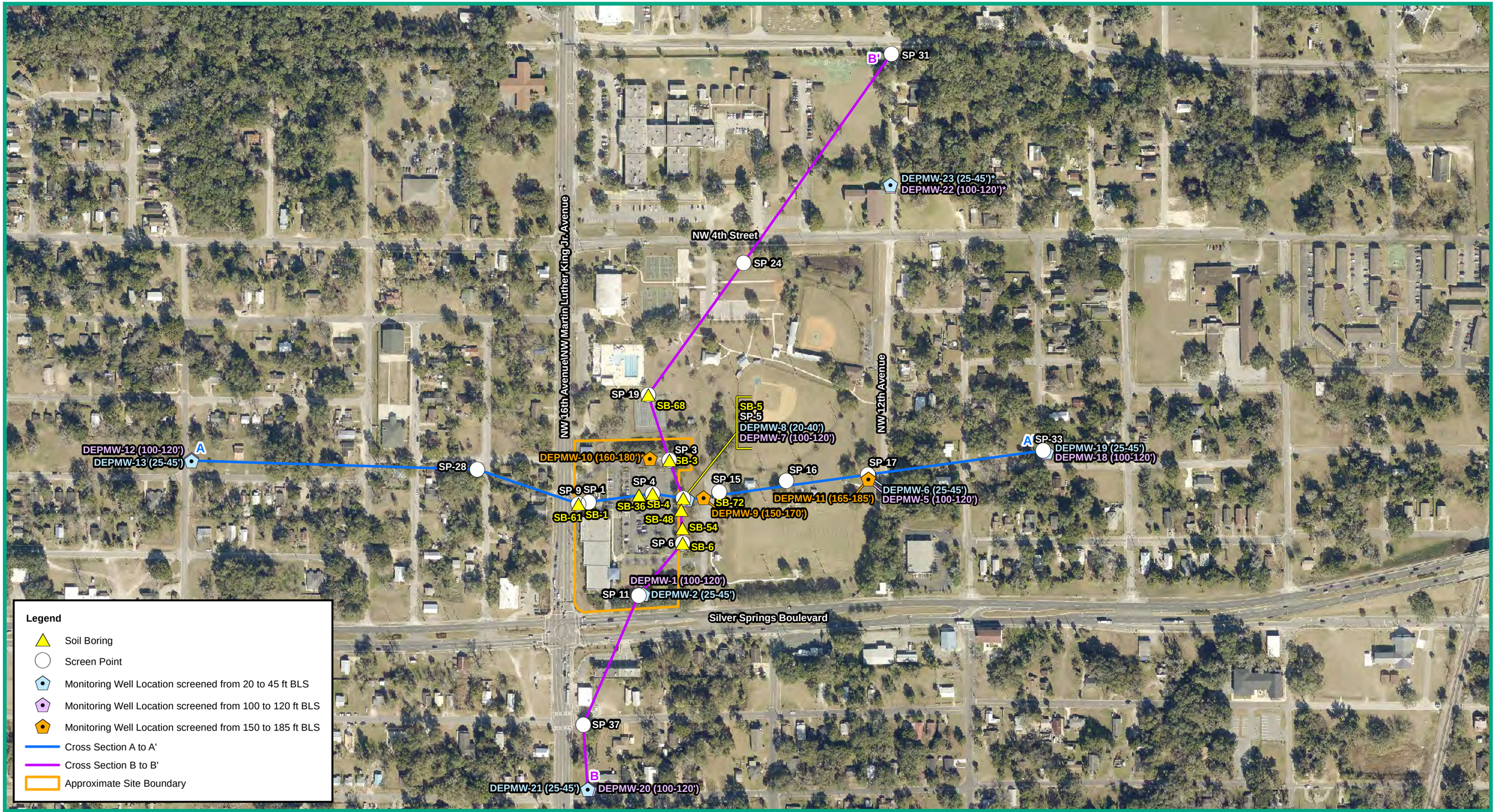


Figure 6
Cross Section Transects Layout
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. ft BLS indicates feet below land surface.
2. Only locations on cross section transects are presented.
3. * indicates projected onto transect.
4. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
5. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

300 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) \\Titusville-01\Data\GIS\FR7522_FormerFSFC\MXDs\202301\CrossSectionTransectLayout_202301.mxd 15 March 2023. Last Edited by: mhensley

A (West)

A' (East)

DEPMW-12 (100-120')
DEPMW-13 (25-45')
SB-28
SP-9
SB-61
SP-1
SB-1
SB-36
DEPMW-8 (20-40')
DEPMW-7 (100-120')
SP-4
SB-4
SP-5
SB-5
DEPMW-9 (150-170')
SB-72 (projected onto transect)
SP-15 (projected onto transect)
SP-16 (projected onto transect)
DEPMW-6 (25-45')
SP-17
DEPMW-11 (165-185')
DEPMW-5 (100-120')
DEPMW-19 (25-45')
DEPMW-18 (100-120')
SP-33

Void
100 to 120 ft BLS

Void
160 to 200 ft BLS

Depth (feet below land surface)

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Legend

- Approximate Water Table
- Inferred Lithology

Lithology

- SAND with Silt/Clay Nodules
- Interbedded Sandy CLAY and Clayey SAND with locally present chert
- LIMESTONE

Figure 7
Cross Section A-A'
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Note:
Cross section transect presented on Figure 6.

Date: March 07, 2023

Soil Boring

Screen Point
Screen Interval

Monitoring Well
Screen Interval

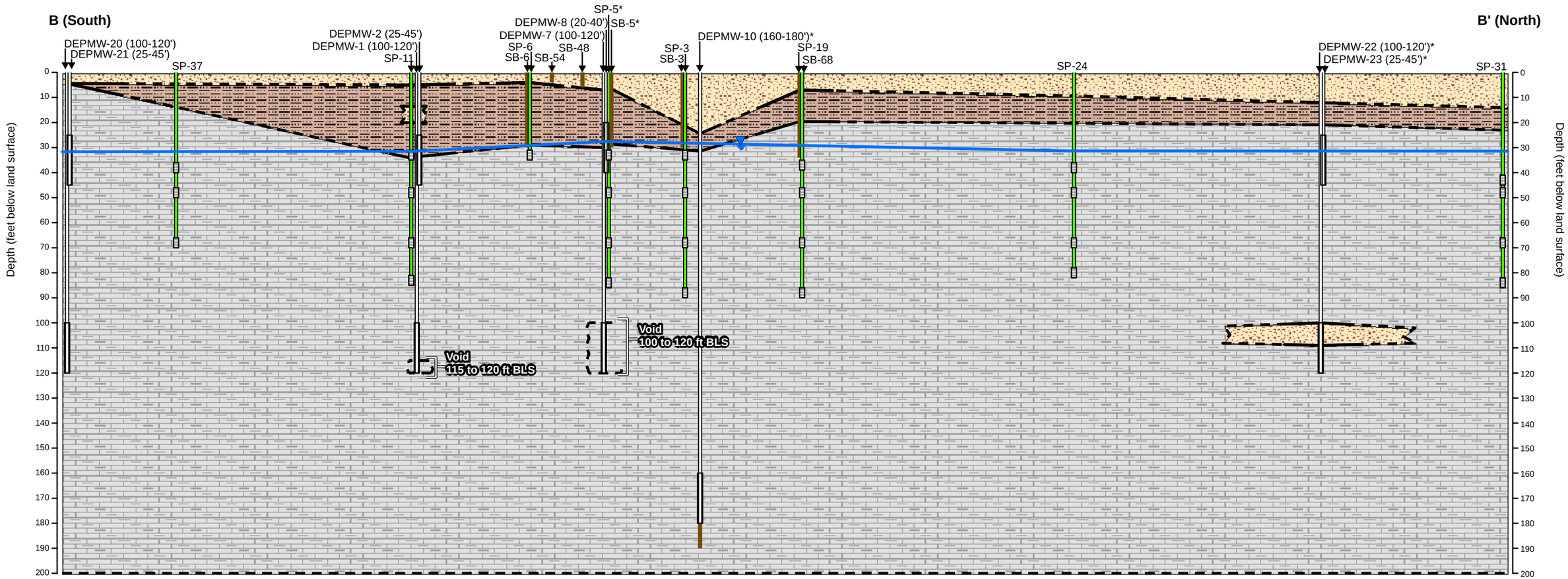
N

130 Feet

Vertical Exaggeration = 5

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) \\Titusville-01\Data\0GIS\FR7522_FormerFSFC\MXDs\202302\CrossSection_AA_202302.mxd 07 March 2023. Last Edited by: csaville



Legend

- Approximate Water Table
- Inferred Lithology

Lithology

- SAND with Silt/Clay Nodules
- Interbedded Sandy CLAY and Clayey SAND with locally present chert
- LIMESTONE

Figure 8
Cross Section B-B'
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Cross section transect presented on Figure 6.
2. * indicates projected onto transect.

Date: March 09, 2023

Soil Boring

Screen Point
Screen Interval

Monitoring Well
Screen Interval

N

200 Feet

Vertical Exaggeration = 5

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) \\Titusville-01\Data\0GIS\FR7522_FormerFSFC\MXDs\202302\CrossSection_BB_202302.mxd 09 March 2023. Last Edited by: csaville

DEPMW-23 (25-45')
[42.28]

DEPMW-15 (25-45')
[42.35]

NW 4th Street

42.30

DEPMW-17 (25-45')
[42.33]

DEPMW-4 (25-45')
[42.30]

42.35

NW 12th Avenue

DEPMW-13 (25-45')
[42.47]

NW Martin Luther King Jr. Avenue

DEPMW-6 (25-45')
[42.36]

DEPMW-19 (25-45')
[42.40]

DEPMW-8 (20-40')
[42.43]

NW 16th Avenue

DEPMW-2 (25-45')
[42.43]

42.40

VISAMW [M-0200] (30-40')
[42.38]

Silver Springs Boulevard

42.45

DEPMW-21 (25-45')
[42.48]

Legend

- Monitoring Well Location screened from 20 to 45 ft BLS
- WMS VISA Monitoring Well Location screened from 30 to 40 ft BLS
- Groundwater Flow Direction
- Groundwater Elevation Contour (dashed where inferred)
- Approximate Site Boundary
- [42.21] Groundwater Elevation (feet NAVD88)

Figure 9
Groundwater Elevation Contour Map from 20 to 45 ft BLS - 3 January 2023
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. NAVD88 indicates North American Vertical Datum of 1988
2. ft BLS indicates feet below land surface.
3. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
4. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

260 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) \\Titusville-01\Data\0GIS\FR7522_FormerFSFC\MXDs\202301\GW_elev_20to45ftBLS_Jan2023.mxd 15 March 2023. Last Edited by: mhensley

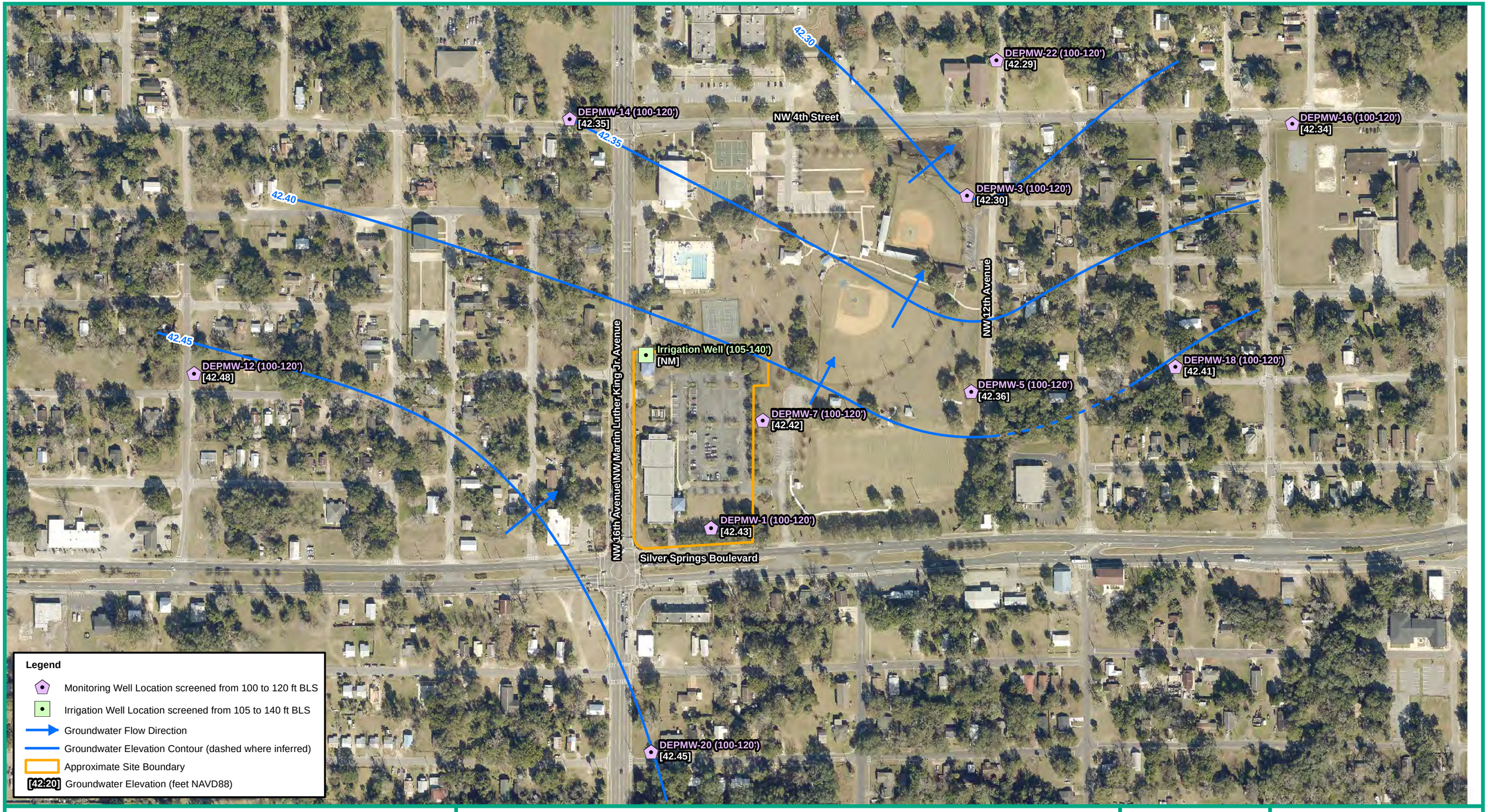


Figure 10
Groundwater Elevation Contour Map from 100 to 120 ft BLS - 3 January 2023
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. NAVD88 indicates North American Vertical Datum of 1988
2. ft BLS indicates feet below land surface.
3. NM indicates not measured.
4. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
5. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

260 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) \\Titusville-01\Data\0GIS\FR7522_FormerFSFC\MXDs\202301\GW_elev_100to120ftBLS_Jan2023.mxd 15 March 2023. Last Edited by: mhensley

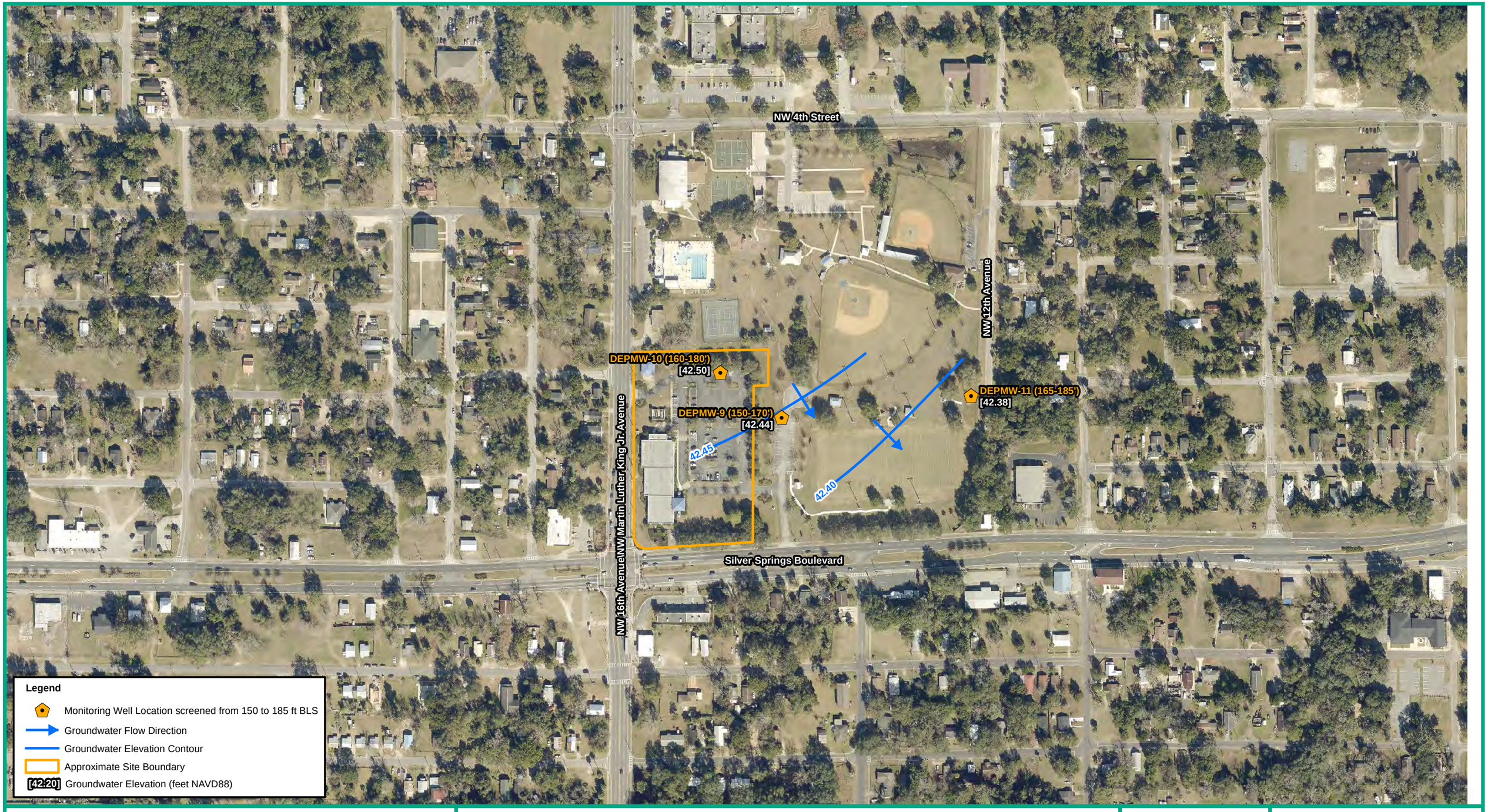


Figure 11
Groundwater Elevation Contour Map from 150 to 185 ft BLS - 3 January 2023
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. NAVD88 indicates North American Vertical Datum of 1988
2. ft BLS indicates feet below land surface.
3. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
4. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

260 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) \\Titusville-01\Data\GIS\FR7522_FormerFSFC\MXDs\202301\GW_elev_150to185ftBLS_Jan2023.mxd 15 March 2023. Last Edited by: mhensley

SB-68			
Date	Depth	PFOS	PFOA
3/23/2021	0-0.5	0.32 I	0.20 U
	0.5-2	0.20 U	0.20 U
	2-4	0.21 U	0.21 U
	4-6	0.22 U	0.22 U
	6-8	0.24 U	0.24 U
	10-12	0.30 U	0.30 U
	13-15	0.26 U	0.26 U
	23-25	0.27 U	0.27 U
	32-34	0.26 U	0.26 U

SB-18			
Date	Depth	PFOS	PFOA
10/12/2020	0-0.5	6.4	0.73
	0.5-2	3.1	0.19 I
	2-4	**8.1**	0.25 I

SB-66			
Date	Depth	PFOS	PFOA
3/23/2021	0-0.5	0.19 U	0.19 U
	0.5-2	0.20 U	0.20 U
	2-4	0.20 U	0.20 U
	4-6	0.21 U	0.21 U

SB-67			
Date	Depth	PFOS	PFOA
3/23/2021	0-0.5	0.68 I	0.21 U
	0.5-2	0.54 I	0.19 U
	2-4	0.19 U	0.19 U
	4-6	0.25 U	0.25 U

SB-2			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	**23**	**3.3**
	2-4	**42**	**2.8**
	4-6	**120**	1.9
	6-8	**180**	**2.8**
	10-12	**150**	1.3
	13-15	**70**	0.099 U
	23-25	**21**	**5.5**
	28-30	**18**	0.21 I

SB-19			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	**31**	0.68
	0.5-2	**16**	0.96
	2-4	**8.1**	0.21 I

SB-16			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	3.3	0.37 I
	0.5-2	2.7	0.28 I
	2-4	1.2	0.095 U

SB-3			
Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	**47**	**17**
	2-4	4.4	0.90
	4-6	**36**	**3.3**
	6-8	**8.9**	0.81
	10-12	**110**	**4.4**
	13-15	**69**	**3.1**
	23-25	**22**	1.5
	28-30	**68**	1.5

SB-8			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	2.8	0.20 I
	0.5-2	1.7	0.098 U
3/23/2021	2-4	0.20 U	0.20 U
	4-6	0.20 I	0.19 U

SB-9			
Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	1.3	0.16 I
	0.5-2	**11**	0.49
3/23/2021	2-4	3.1	0.20 U
	4-6	1.1	0.21 U

SB-10			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	1.5	0.12 I
	0.5-2	0.20 U	0.10 U
3/23/2021	2-4	0.46 I	0.22 U
	4-6	0.22 I	0.22 U

SB-69			
Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	1.4	0.20 U
	0.5-2	4.5	0.21 U
	2-4	0.41 I	0.23 U
	4-6	0.22 U	0.22 U

SB-13			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	**24**	2.0
	0.5-2	**24**	**2.5**
	2-4	7.4	2.4

SB-11			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	1.6	0.13 I
	0.5-2	1.1	0.098 U

SB-70			
Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	**15**	0.21 U
	0.5-2	0.89	0.22 U
	2-4	0.99	0.23 U
	4-6	0.97 I	0.25 U

SB-17			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	**11**	0.51
	0.5-2	**10**	0.70
	2-4	1.6	0.097 U

SB-15			
Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	**73**	**4.2**
	2-4	**56**	1.3

SB-71			
Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	0.67 I	0.19 U
	0.5-2	0.21 U	0.21 U
	2-4	0.19 U	0.19 U
	4-6	0.22 U	0.22 U

SB-12			
Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	2.8	0.18 I
	0.5-2	1.5	0.10 U

SB-21			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	1.3	0.16 I
	0.5-2	2.8	0.099 U
	2-4	0.81 I	0.10 U

SB-20			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	2.6	0.10 U
	0.5-2	3.4	0.15 I
	2-4	5.3	0.098 U

SB-22			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	3.4	0.31 I
	0.5-2	2.8	0.10 U
	2-4	0.64 I	0.10 U

SB-24			
Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	2.5	0.67
	0.5-2	6.4	0.10 U
	2-4	**16**	0.10 U

SB-27			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	**15**	0.87
	0.5-2	5.8	0.27 I
	2-3	**14**	0.23 I
3/24/2021	4-6	0.71 I	0.28 U

SB-63			
Date	Depth	PFOS	PFOA
3/23/2021	0-0.5	6.5	0.58 I
	0.5-2	2.0	0.20 I
	2-4	0.67 I	0.20 U
	4-6	0.22 I	0.20 U
	6-8	0.19 U	0.19 U
	10-12	0.29 I	0.21 U
	13-15	0.22 U	0.22 U
	23-25	0.23 U	0.23 U
	33-35	0.29 U	0.29 U

SB-23			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	4.5	0.38 I
	0.5-2	**8.6**	0.11 U
	2-4	**7.6**	0.10 U

SB-34			
Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	**24**	0.98
	2-4	6.8	0.10 U

SB-25			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	1.2	0.13 I
	0.5-2	0.90	0.10 U

SB-64			
Date	Depth	PFOS	PFOA
3/23/2021	0-0.5	5.2	0.46 I
	0.5-2	2.2	0.20 U
	2-4	3.4	0.20 U
	4-6	0.38 I	0.20 U

SB-31			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	2.5	0.22 I
	0.5-2	1.8	0.12 I
	2-4	0.81 I	0.10 U

SB-29			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	**25**	**27**
	2-4	**15**	**12**

SB-14			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	7.3	**8.2**
	2-4	7.2	0.16 I

SB-26			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	2.4	0.23 I
	0.5-2	0.53 I	0.10 U

SB-4			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	7.4	2.4
	2-4	2.9	0.33 I
	4-6	0.83 I	0.10 U
	6-8	0.66 I	0.094 U
	10-12	0.52 I	0.13 U
	13-15	0.62 I	0.14 U
	23-25	0.30 U	0.15 U
	30-32	0.44 I	0.13 U

SB-30			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	**19**	**4.7**
	2-4	**65**	2.4

SB-28			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	6.2	**3.3**
	2-4	2.5	0.59

SB-72			
Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	0.38 I	0.21 U
	0.5-2	0.21 U	0.21 U
	2-4	0.19 U	0.19 U
	4-6	0.21 U	0.21 U
	6-8	0.21 U	0.21 U
	10-12	0.20 U	0.20 U
	13-15	0.22 U	0.22 U
	23-25	0.27 U	0.27 U
	33-35	1.2 I	0.34 U

SB-1			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	3.8	0.23 I
	0.5-2	**8.3**	0.20 I
	2-4	**22**	0.12 I
	4-6	**8.0**	0.31 I
	6-8	1.9	0.13 I
	10-12	1.9	0.11 I
	13-15	0.64 I	0.10 U
	23-25	**11**	0.15 I
	33-35	3.1	0.16 U

SB-33			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	3.7	0.25 I
	0.5-2	6.5	0.21 I
	2-4	**9.8**	0.13 I

SB-35			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	3.4	**2.6**
	2-3	7.0	**5.0**

SB-36			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	4.8	**2.7**
	2-4	1.1	0.10 U

SB-38			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	4.5	0.54
	0.5-2	1.4	0.096 U

SB-73			
Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	0.73 I	0.20 U
	0.5-2	0.21 U	0.21 U
	2-4	0.21 U	0.21 U
	4-6	0.20 U	0.20 U

SB-65			
Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	4.4	0.20 U
	0.5-2	7.2	0.21 U

SB-41			
Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	7.0	0.89
	0.5-2	**8.4**	0.26 I
	2-4	1.6	0.10 U

SB-5			
Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	**14**	0.49 I
	0.5-2	**28**	1.0
	2-4	5.8	0.14 U
	4-6	2.2	0.17 I
	6-8	6.0	0.13 U
	10-12	4.1	0.11 U
	13-15	1.2	0.11 U
	23-25	**8.0**	0.12 U
	28-30	**250**	0.12 U

SB-42			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	**12**	0.32 I
	0.5-2	6.4	0.13 I
	2-4	**9.5**	0.25 I
	4-6	**7.5 J**	0.26 IJ

SB-60			
Date	Depth	PFOS	PFOA
3/22/2021	0-0.5	2.5	0.20 U
	0.5-2	2.9	0.23 U
	2-4	3.4	0.21 U
	4-6	1.5	0.21 U

SB-46			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	1.3	0.65
	2-4	0.33 I	0.23 I

SB-47			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	1.1	0.49
	2-4	0.22 U	0.15 I

SB-50			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	3.4	0.22 I
	2-4	4.2	0.40 I

SB-49			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	4.1	0.41
	0.5-2	1.3	0.13 I

SB-52			
Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	1.0	0.15 I
	2-4	0.21 U	0.14 I

SB-51			
Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	1.3	0.22 I
	2-4	0.29 U	0.15 U

SB-54			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	4.2	0.52
	0.5-2	0.69 I	0.15 I
	2-4	0.51 I	0.15 I

SB-53			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	4.1	0.52
	0.5-2	0.42 I	0.11 U

SB-7			
Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	6.3	0.10 U
	2-4	4.9	0.17 I
10/14/2020	4-6	3.2	0.98
	6-8	1.4	0.41 I
	10-12	0.34 I	0.31 I
	13-15	0.27 U	0.13 U
	23-25	0.61 I	0.12 U
	28-30	2.3	0.12 U

SB-55			
Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	2.0	0.32 I
	0.5-2	1.4	0.11 U
	2-4	7.1	0.18 I

SB-6			
Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	2.9	0.17 I
	0.5-2	1.0	0.10 U
	2-4	0.60 I	0.10 U
	4-6	0.97	0.11 U
	6-8	0.46 I	0.11 U
	10-12	0.25 I	0.12 U
	13-15	0.23 U	0.12 U
	23-25	0.28 U	0.14 U
	28-30	0.59 I	0.15 U

SB-56			
Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	1.2 I	0.16 U
	0.5-2	2.0	0.16 I
	2-4	0.78 I	0.19 I

SB-39			
Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	3.3	0.36 I
	0.5-2	2.7	0.10 U
	2-4	3.8	0.11 U

SB-40			
Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	1.5	0.11 I
	2-4	2.1	0.12 I

SB-74			
Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	0.41 I	0.21 U
	0.5-2	0.20 U	0.20 U
	2-4	0.21 U	0.21 U
	4-6	0.23 U	0.23 U

SB-48			
Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	**13**	0.99
	0.5-2	**13**	1.3
	2-3	**10**	0.61
3/23/2021	4-6	0.69 I	0.22 U

SB-75			
Date	Depth	PFOS	PFOA
3/28/2022	0-0.5	2.0	0.25 U
	0.5-2	6.5	0.23 U
	2-4	4.6	0.22 U

SB-58			
Date	Depth	PFOS	PFOA
3/22/2021	0-0.5	3.9	0.20 I
	0.5-2	**58**	0.33 I
	2-4	**13**	0.85 I
	4-6	3.2	0.53 I

SB-77			
Date	Depth	PFOS	PFOA
3/28/2022	0-0.5	1.1	0.22 U
	0.5-2	0.46 I	0.22 U
	2-4	0.22 U	0.22 U

SB-78			
Date	Depth	PFOS	PFOA
12/6/2022	0-0.5	1.7	0.21 U
	0.5-2	1.2	0.21 U
	2-4	0.60 I	0.21 U

SB-57			
Date	Depth	PFOS	PFOA
3/22/2021	0-0.5	2.9	0.20 U
	0.5-2	2.7	0.20 U
	2-4	**8.9**	0.21 U
	4-6	1.5	0.20 U

SB-76			
Date	Depth	PFOS	PFOA
3/28/2022	0-0.5	3.6	0.22 U
	0.5-2	2.0	0.23 U
	2-4	**12**	0.22 U

SB-43			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	4.8	0.45 I
	0.5-2	2.5	0.16 I
	2-4	2.0 J	0.14 UJ
	4-6	3.9	0.11 U

SB-59			
Date	Depth	PFOS	PFOA
3/22/2021	0-0.5	3.2	0.29 I
	0.5-2	2.6	0.19 U
	2-4	5.6	0.21 U
	4-6	0.80 I	0.20 U

SB-79			
Date	Depth	PFOS	PFOA
12/6/2022	0-0.5	**13**	0.22 U
	0.5-2	6.6	0.22 U
	2-4	**17**	0.22 U

SB-44			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	1.7	0.15 I
	0.5-2	7.0	0.33 I
	2-4	2.4	0.14 I
	4-6	0.71 I	0.098 U

SB-45**			
Date	Depth	PFOS	PFOA
3/24/2021	4-6	0.92	0.21 U
	6-8	0.69 I	0.21 U
	10-12	0.91 I	0.23 U
	13-15	0.55 I	0.23 U
	23-25	0.29 U	0.29 U
	28-30	0.61 I	0.26 U

SB-45*			
Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	3.3	0.25 I
	0.5-2	7.2	0.15 I
	2-4	**16**	0.15 I

Legend

- Soil Sample with All Results Less than Provisional Leachability SCTL
- Soil Sample with at Least One Result Greater than Provisional Leachability SCTL
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

Screening Criteria		
Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)	Perfluorooctanoic acid (PFOA)
Leachability SCTL	7	2
Residential SCTL	1,300	1,300
Industrial SCTL	25,000	25,000

Figure 12
Summary of Analytical Results in Soil
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:

1. **Results and screening criteria are presented in micrograms per kilogram (µg/kg).**
2. **Sample depths are presented in feet below land surface.**
3. **I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.**
4. **J indicates estimated value and/or the analysis did not meet established quality control criteria.**
5. **U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.**
6. *** indicates SB-45 hand auger samples collected from 0 to 4 ft BLS.**
7. **** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.**
8. **Grey shaded, bold text indicates an exceedance of the FDEP provisional leachability soil cleanup target level (SCTL).**
9. **Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.**
10. **Historic site features provided by Florida Department of Environmental Protection.**
11. **2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.**

Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)	Perfluorooctanic acid (PFOA)
Leachability SCTL	7	2
Residential SCTL	1,300	1,300
Industrial SCTL	25,000	25,000

Date: March 15, 2023

N

60 Feet

Path: (Tlausville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202301\Soil_Summary_202301.mxd 15 March 2023. Last Edited by: mhensley

Legend

Summary of PFOS in Soil

- Result Less than Provisional Leachability SCTL
- Result Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- PFOS Greater than the FDEP Provisional Leachability SCTL Isocontour
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

SB-68 (0.32 I)
SB-66 (0.19 U)
SB-67 (0.68 I)
SB-8 (2.8)
SB-9 (1.3)
SB-10 (1.5)
SB-11 (1.6)
SB-21 (1.3)
SB-19 (31)
SB-17 (11)
SB-16 (3.3)
SB-69 (1.4)
SB-20 (2.6)
SB-12 (2.8)
SB-2
SB-15
Target Sump
SB-22 (3.4)
SB-18 (6.4)
SB-3
SB-71 (0.67 I)
SB-63 (6.5)
SB-13 (24)
SB-24 (2.5)
SB-70 (15)
SB-14
SB-23 (4.5)
SB-25 (1.2)
SB-29
SB-31 (2.5)
SB-30
SB-27 (15)
SB-64 (5.2)
SB-28
SB-32 (13)
SB-26 (2.4)
SB-62 (2.5)
SB-34
SB-35
SB-37 (12)
Warehouse Sump
SB-72 (0.38 I)
SB-33 (3.7)
SB-36
SB-4
SB-5 (14)
SB-1 (3.8)
SB-38 (4.5)
SB-61 (4.7)
SB-41 (7.0)
SB-39 (3.3)
SB-42 (12)
SB-40
SB-65 (4.4)
SB-48 (13)
SB-46
SB-47
SB-73 (0.73 I)
SB-60 (2.5)
SB-49 (4.1)
SB-52
SB-51
SB-50
SB-43 (4.8)
SB-54 (4.2)
SB-44 (1.7)
SB-7
SB-53 (4.1)
SB-45**
SB-56 (1.2 I)
SB-77 (1.1)
SB-55 (2.0)
SB-45* (3.3)
SB-6 (2.9)
SB-59 (3.2)
SB-74 (0.41 I)
SB-58 (3.9)
SB-57 (2.9)
SB-75 (2.0)
SB-78 (1.7)
SB-76 (3.6)
SB-79 (13)

NW 16th Avenue/NW Martin Luther King Jr. Avenue

Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 13
Summary of PFOS in Soil from 0 to 0.5 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. Historic site features provided by Florida Department of Environmental Protection.
9. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Legend

Summary of PFOS in Soil

- Result Less than Provisional Leachability SCTL
- Result Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- PFOS Greater than the FDEP Provisional Leachability SCTL Isocontour
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue/NW Martin Luther King Jr. Avenue

SB-68 (0.20 U)
SB-66 (0.20 U)
SB-67 (0.54 I)
SB-8 (1.7)
SB-9 (11)
SB-10 (0.20 U)
SB-11 (1.1)
SB-21 (2.8)
SB-19 (16)
SB-17 (10)
SB-16 (2.7)
SB-69 (4.5)
SB-20 (3.4)
SB-18 (3.1)
Target Sump
SB-12 (1.5)
SB-22 (2.8)
SB-2 (23)
SB-15 (73)
SB-3 (47)
SB-71 (0.21 U)
SB-63 (2.0)
SB-13 (24)
SB-24 (6.4)
SB-70 (0.89)
SB-14 (7.3)
SB-23 (8.6)
SB-25 (0.90)
SB-29 (25)
SB-31 (1.8)
SB-30 (19)
SB-27 (5.8)
SB-64 (2.2)
SB-28 (6.2)
SB-26 (0.53 I)
SB-32 (2.7)
SB-34 (24)
SB-35 (3.4)
SB-37 (3.9)
SB-62 (2.6)
Warehouse Sump
SB-72 (0.21 U)
SB-33 (6.5)
SB-36 (4.8)
SB-4 (7.4)
SB-5 (28)
SB-1 (8.3)
SB-41 (8.4)
SB-38 (1.4)
SB-61 (5.1)
SB-40 (1.5)
SB-39 (2.7)
SB-42 (6.4)
SB-65 (7.2)
SB-48 (13)
SB-46 (1.3)
SB-47 (1.1)
SB-73 (0.21 U)
SB-60 (2.9)
SB-49 (1.3)
SB-52 (1.0)
SB-51 (1.3)
SB-50 (3.4)
SB-43 (2.5)
SB-54 (0.69 I)
SB-44 (7.0)
SB-7 (6.3)
SB-53 (0.42 I)
SB-77 (0.46 I)
SB-45**
SB-56 (2.0)
SB-55 (1.4)
SB-45* (7.2)
SB-6 (1.0)
SB-59 (2.6)
SB-74 (0.20 U)
SB-58 (58)
SB-57 (2.7)
SB-75 (6.5)
SB-78 (1.2)
SB-76 (2.0)
SB-79 (6.6)

Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 14
Summary of PFOS in Soil from 0.5 to 2 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. Historic site features provided by Florida Department of Environmental Protection.
9. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Legend

Summary of PFOS in Soil

- Result Less than Provisional Leachability SCTL
- Result Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- PFOS Greater than the FDEP Provisional Leachability SCTL Isocontour (dashed where inferred)
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue/NW Martin Luther King Jr. Avenue

SB-68 (0.21 U)
SB-66 (0.20 U)
SB-67 (0.19 U)
SB-8 (0.20 U)
SB-9 (3.1)
SB-10 (0.46 I)
SB-11
SB-21 (0.81 I)
SB-19 (8.1)
SB-17 (1.6)
SB-16 (1.2)
SB-69 (0.41 I)
SB-20 (5.3)
SB-18 (8.1)
Target Sump
SB-12
SB-22 (0.64 I)
SB-2 (42)
SB-15 (56)
SB-3 (4.4)
SB-71 (0.19 U)
SB-63 (0.67 I)
SB-13 (7.4)
SB-24 (16)
SB-70 (0.99)
SB-14 (7.2)
SB-23 (7.6)
SB-25
SB-29 (15)
SB-27 (14)
SB-30 (65)
SB-64 (3.4)
SB-31 (0.81 I)
SB-28 (2.5)
SB-26
SB-32 (4.1)
SB-62 (0.21 U)
SB-34 (6.8)
SB-35 (7.0)
SB-37 (17)
SB-72 (0.19 U)
SB-33 (9.8)
SB-36 (1.1)
SB-4 (2.9)
Warehouse Sump
SB-5 (5.8)
SB-1 (22)
SB-38
SB-61 (0.66 I)
SB-41 (1.6)
SB-40 (2.1)
SB-39 (3.8)
SB-42 (9.5)
SB-65
SB-48 (10)
SB-46 (0.33 I)
SB-47 (0.22 U)
SB-73 (0.21 U)
SB-60 (3.4)
SB-49
SB-52 (0.21 U)
SB-51 (0.29 U)
SB-50 (4.2)
SB-43 (2.0 J)
SB-54 (0.51 I)
SB-44 (2.4)
SB-45**
SB-7 (4.9)
SB-53
SB-56
SB-77 (0.22 U)
SB-55 (7.1)
SB-45 (16)
SB-6 (0.60 I)
SB-59 (5.6)
SB-74 (0.21 U)
SB-58 (13)
SB-57 (8.9)
SB-75 (4.6)
SB-78 (0.60 I)
SB-76 (12)
SB-79 (17)

Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 15
Summary of PFOS in Soil from 2 to 4 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. J indicates estimated value and/or the analysis did not meet established quality control criteria.
4. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
5. SCTL indicates soil cleanup target level.
6. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
7. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
8. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
9. Historic site features provided by Florida Department of Environmental Protection.
10. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Legend

Summary of PFOS in Soil

- Result Less than Provisional Leachability SCTL
- Result Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- PFOS Greater than the FDEP Provisional Leachability SCTL Isocontour
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue/NW Martin Luther King Jr. Avenue

SB-68 (0.22 U)
SB-66 (0.21 U)
SB-67 (0.25 U)
SB-8 (0.20 I)
SB-9 (1.1)
SB-10 (0.22 I)
SB-11
SB-21
SB-19
SB-17
SB-16
SB-69 (0.22 U)
SB-20
SB-18
Target Sump
SB-12
SB-22
SB-2 (120)
SB-15
SB-3 (36)
SB-71 (0.22 U)
SB-63 (0.22 I)
SB-13
SB-24
SB-70 (0.97 I)
SB-14
SB-23
SB-25
SB-29
SB-27 (0.71 I)
SB-31
SB-30
SB-28
SB-64 (0.38 I)
SB-26
SB-32
SB-35
SB-37 (1.9)
SB-62 (0.21 U)
SB-34
Warehouse Sump
SB-33
SB-36
SB-4 (0.83 I)
SB-72 (0.21 U)
SB-5 (2.2)
SB-1 (8.0)
SB-61 (0.28 I)
SB-41
SB-40
SB-39
SB-38
SB-42 (7.5 J)
SB-48 (0.69 I)
SB-73 (0.20 U)
SB-46
SB-47
SB-60 (1.5)
SB-49
SB-52
SB-51
SB-50
SB-43 (3.9)
SB-54
SB-44 (0.71 I)
SB-7 (3.2)
SB-53
SB-45** (0.92)
SB-56
SB-55
SB-77
SB-45*
SB-6 (0.97)
SB-59 (0.80 I)
SB-74 (0.23 U)
SB-58 (3.2)
SB-57 (1.5)
SB-75
SB-78
SB-76
SB-79

Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 16
Summary of PFOS in Soil from 4 to 6 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. J indicates estimated value and/or the analysis did not meet established quality control criteria.
4. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
5. SCTL indicates soil cleanup target level.
6. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
7. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
8. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
9. Historic site features provided by Florida Department of Environmental Protection.
10. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Legend

Summary of PFOS in Soil

- Result Less than Provisional Leachability SCTL
- Results Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue/NW Martin Luther King Jr. Avenue

SB-68
(6-8 ft BLS) 0.24 U
(10-12 ft BLS) 0.30 U
(13-15 ft BLS) 0.26 U

SB-66 SB-67

SB-8 SB-9 SB-10 SB-11 SB-21 SB-19 SB-17 SB-16 SB-69 SB-20 SB-18 SB-12 SB-22 SB-71 SB-15 SB-13 SB-24 SB-14 SB-70 SB-23 SB-25 SB-29 SB-31 SB-30 SB-27 SB-64 SB-28 SB-32 SB-35 SB-26 SB-34 SB-37 SB-62 SB-33 SB-36 SB-38 SB-41 SB-40 SB-39 SB-42 SB-65 SB-48 SB-73 SB-46 SB-47 SB-60 SB-49 SB-52 SB-51 SB-50 SB-43 SB-54 SB-44 SB-53 SB-77 SB-45* SB-56 SB-55 SB-59 SB-74 SB-58 SB-57 SB-75 SB-78 SB-76 SB-79

Target Sump

SB-3
(6-8 ft BLS) 8.9
(10-12 ft BLS) 110
(13-15 ft BLS) 69

SB-2
(6-8 ft BLS) 180
(10-12 ft BLS) 150
(13-15 ft BLS) 70

SB-63
(6-8 ft BLS) 0.19 U
(10-12 ft BLS) 0.29 I
(13-15 ft BLS) 0.22 U

Warehouse Sump

SB-72
(6-8 ft BLS) 0.21 U
(10-12 ft BLS) 0.20 U
(13-15 ft BLS) 0.22 U

SB-4
(6-8 ft BLS) 0.66 I
(10-12 ft BLS) 0.52 I
(13-15 ft BLS) 0.62 I

SB-1
(6-8 ft BLS) 1.9
(10-12 ft BLS) 1.9
(13-15 ft BLS) 0.64 I

SB-61
(6-8 ft BLS) 0.30 I
(10-12 ft BLS) 0.27 U
(13-15 ft BLS) 0.31 U

SB-5
(6-8 ft BLS) 6.0
(10-12 ft BLS) 4.1
(13-15 ft BLS) 1.2

SB-45**
(6-8 ft BLS) 0.69 I
(10-12 ft BLS) 0.91 I
(13-15 ft BLS) 0.55 I

SB-7
(6-8 ft BLS) 1.4
(10-12 ft BLS) 0.34 I
(13-15 ft BLS) 0.27 U

SB-6
(6-8 ft BLS) 0.46 I
(10-12 ft BLS) 0.25 I
(13-15 ft BLS) 0.23 U

Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 17
Summary of PFOS in Soil from 6 to 15 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. Historic site features provided by Florida Department of Environmental Protection.
9. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Legend

Summary of PFOS in Soil

- Result Less than Provisional Leachability SCTL
- Result Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue/NW Martin Luther King Jr. Avenue

SB-68 (23-25 ft BLS) 0.27 U (32-34 ft BLS) 0.26 U

SB-66

SB-67

SB-8

SB-9

SB-10

SB-11

SB-21

SB-19

SB-17

SB-16

SB-69

SB-20

Target Sump

SB-3 (23-25 ft BLS) 22 (28-30 ft BLS) 68

SB-12

SB-18

SB-22

SB-2 (23-25 ft BLS) 21 (28-30 ft BLS) 18

SB-15

SB-71

SB-63 (23-25 ft BLS) 0.23 U (33-35 ft BLS) 0.29 U

SB-13

SB-24

SB-70

SB-14

SB-23

SB-25

SB-29

SB-31

SB-30

SB-27

SB-64

SB-28

SB-32

SB-35

SB-26

SB-62

SB-34

SB-37

SB-4 (23-25 ft BLS) 0.30 U (30-32 ft BLS) 0.44 I

Warehouse Sump

SB-72 (23-25 ft BLS) 0.27 U (33-35 ft BLS) 1.2 I

SB-33

SB-36

SB-1 (23-25 ft BLS) 11 (33-35 ft BLS) 3.1

SB-5 (23-25 ft BLS) 8.0 (28-30 ft BLS) 250

SB-38

SB-61 (23-25 ft BLS) 0.28 U (28-30 ft BLS) 0.25 U

SB-41

SB-40

SB-39

SB-42

SB-65

SB-48

SB-73

SB-46

SB-47

SB-60

SB-49

SB-52

SB-51

SB-50

SB-43

SB-54

SB-44

SB-53

SB-45** (23-25 ft BLS) 0.29 U (28-30 ft BLS) 0.61 I

SB-7 (23-25 ft BLS) 0.61 I (28-30 ft BLS) 2.3

SB-77

SB-45*

SB-56

SB-55

SB-6 (23-25 ft BLS) 0.28 U (28-30 ft BLS) 0.59 I

SB-59

SB-74

SB-58

SB-57

SB-75

SB-78

SB-76

SB-79

Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 18
Summary of PFOS in Soil from 16 to 35 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:

1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. Historic site features provided by Florida Department of Environmental Protection.
9. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202301\Soil_PFOS_16_35ftBLS_202301.mxd 15 March 2023. Last Edited by: mhensley

Legend

Summary of PFOA in Soil

- Result Less than Provisional Leachability SCTL
- No Data for this Depth Interval
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue
NW Martin Luther King Jr. Avenue

SB-68 (0.20 U)
SB-66 (0.19 U)
SB-67 (0.21 U)
SB-8 (0.20 I)
SB-9 (0.16 I)
SB-10 (0.12 I)
SB-11 (0.13 I)
SB-21 (0.16 I)
SB-19 (0.68)
SB-17 (0.51)
SB-16 (0.37 I)
SB-69 (0.20 U)
SB-20 (0.10 U)
SB-18 (0.73)
Target Sump
SB-12 (0.18 I)
SB-22 (0.31 I)
SB-2
SB-15
SB-3
SB-71 (0.19 U)
SB-63 (0.58 I)
SB-13 (2.0)
SB-24 (0.67)
SB-70 (0.21 U)
SB-14
SB-23 (0.38 I)
SB-25 (0.13 I)
SB-31 (0.22 I)
SB-30
SB-29
SB-27 (0.87)
SB-64 (0.46 I)
SB-28
SB-26 (0.23 I)
SB-32 (0.30 I)
SB-35
SB-62 (0.22 I)
SB-34
SB-37 (0.39 I)
Warehouse Sump
SB-33 (0.25 I)
SB-36
SB-4
SB-72 (0.21 U)
SB-5 (0.49 I)
SB-61 (0.40 I)
SB-1 (0.23 I)
SB-41 (0.89)
SB-40
SB-39 (0.36 I)
SB-38 (0.54)
SB-42 (0.32 I)
SB-65 (0.20 U)
SB-48 (0.99)
SB-73 (0.20 U)
SB-46
SB-47
SB-60 (0.20 U)
SB-49 (0.41)
SB-52
SB-51
SB-50
SB-54 (0.52)
SB-43 (0.45 I)
SB-53 (0.52)
SB-44 (0.15 I)
SB-7
SB-45**
SB-56 (0.16 U)
SB-55 (0.32 I)
SB-77 (0.22 U)
SB-45* (0.25 I)
SB-6 (0.17 I)
SB-59 (0.29 I)
SB-74 (0.21 U)
SB-58 (0.20 I)
SB-57 (0.20 U)
SB-75 (0.25 U)
SB-78 (0.21 U)
SB-76 (0.22 U)
SB-79 (0.22 U)

Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 19
Summary of PFOA in Soil from 0 to 0.5 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. Historic site features provided by Florida Department of Environmental Protection.
9. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Legend

Summary of PFOA in Soil

- Result Less than Provisional Leachability SCTL
- Result Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- PFOA Greater than the FDEP Provisional Leachability SCTL Isocontour
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue/NW Martin Luther King Jr. Avenue

SB-68 (0.20 U)
SB-66 (0.20 U)
SB-67 (0.19 U)
SB-8 (0.098 U)
SB-9 (0.49)
SB-10 (0.10 U)
SB-11 (0.098 U)
SB-21 (0.099 U)
SB-19 (0.96)
SB-17 (0.70)
SB-16 (0.28 I)
SB-69 (0.21 U)
SB-20 (0.15 I)
SB-18 (0.19 I)
SB-12 (0.10 U)
SB-2 (3.3)
Target Sump
SB-15 (4.2)
SB-3 (17)
SB-71 (0.21 U)
SB-22 (0.10 U)
SB-63 (0.20 I)
SB-13 (2.5)
SB-24 (0.10 U***)
SB-70 (0.22 U)
SB-14 (8.2)
SB-23 (0.11 U)
SB-25 (0.10 U)
SB-29 (27)
SB-31 (0.12 I)
SB-30 (4.7)
SB-27 (0.27 I)
SB-64 (0.20 U)
SB-28 (3.3)
SB-26 (0.10 U)
SB-32 (0.19 I)
SB-35 (2.6)
SB-37 (0.19 I)
SB-62 (0.25 I)
SB-34 (0.98)
Warehouse Sump
SB-72 (0.21 U)
SB-33 (0.21 I)
SB-36 (2.7)
SB-4 (2.4)
SB-5 (1.0)
SB-61 (0.26 I)
SB-1 (0.20 I)
SB-41 (0.26 I)
SB-40 (0.11 I)
SB-39 (0.10 U)
SB-38 (0.096 U)
SB-42 (0.13 I)
SB-65 (0.21 U)
SB-48 (1.3)
SB-73 (0.21 U)
SB-46 (0.65)
SB-47 (0.49)
SB-60 (0.23 U)
SB-49 (0.13 I)
SB-52 (0.15 I)
SB-51 (0.22 I)
SB-50 (0.22 I)
SB-43 (0.16 I)
SB-54 (0.15 I)
SB-44 (0.33 I)
SB-45**
SB-7 (0.10 U)
SB-53 (0.11 U)
SB-77 (0.22 U)
SB-56 (0.16 I)
SB-55 (0.11 U)
SB-45* (0.15 I)
SB-6 (0.10 U)
SB-59 (0.19 U)
SB-74 (0.20 U)
SB-58 (0.33 I)
SB-57 (0.20 U)
SB-75 (0.23 U)
SB-78 (0.21 U)
SB-76 (0.23 U)
SB-79 (0.22 U)

Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 20
Summary of PFOA in Soil from 0.5 to 2 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:

1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. *** indicates not used to generate contour.
8. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
9. Historic site features provided by Florida Department of Environmental Protection.
10. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Legend

Summary of PFOA in Soil

- Result Less than Provisional Leachability SCTL
- Result Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- PFOA Greater than the FDEP Provisional Leachability SCTL Isocontour
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue/NW Martin Luther King Jr. Avenue

SB-68 (0.21 U)
SB-66 (0.20 U)
SB-67 (0.19 U)
SB-8 (0.20 U)
SB-9 (0.20 U)
SB-10 (0.22 U)
SB-11
SB-21 (0.10 U)
SB-19 (0.21 I)
SB-17 (0.097 U)
SB-16 (0.095 U)
SB-69 (0.23 U)
SB-20 (0.098 U)
SB-18 (0.25 I)
Target Sump
SB-12
SB-22 (0.10 U)
SB-2 (2.8)
SB-15 (1.3)
SB-3 (0.90)
SB-71 (0.19 U)
SB-63 (0.20 U)
SB-13 (2.4)
SB-24 (0.10 U)
SB-70 (0.23 U)
SB-14 (0.16 I)
SB-23 (0.10 U)
SB-25
SB-29 (12)
SB-64 (0.20 U)
SB-30 (2.4)
SB-27 (0.23 I)
SB-31 (0.10 U)
SB-28 (0.59)
SB-32 (0.11 I)
SB-35 (5.0)
SB-26
SB-62 (0.21 U)
SB-34 (0.10 U)
SB-37 (0.41)
Warehouse Sump
SB-33 (0.13 I)
SB-4 (0.33 I)
SB-72 (0.19 U)
SB-36 (0.10 U)
SB-5 (0.14 U)
SB-61 (0.21 U)
SB-1 (0.12 I)
SB-41 (0.10 U)
SB-40 (0.12 I)
SB-39 (0.11 U)
SB-38
SB-42 (0.25 I)
SB-65
SB-48 (0.61)
SB-46 (0.23 I)
SB-47 (0.15 I)
SB-73 (0.21 U)
SB-60 (0.21 U)
SB-49
SB-52 (0.14 I)
SB-51 (0.15 U)
SB-50 (0.40 I)
SB-43 (0.14 UJ)
SB-54 (0.15 I)
SB-44 (0.14 I)
SB-7 (0.17 I)
SB-53
SB-45**
SB-56
SB-77 (0.22 U)
SB-55 (0.18 I)
SB-45* (0.15 I)
SB-6 (0.10 U)
SB-59 (0.21 U)
SB-74 (0.21 U)
SB-58 (0.85 I)
SB-57 (0.21 U)
SB-75 (0.22 U)
SB-78 (0.21 U)
SB-76 (0.22 U)
SB-79 (0.22 U)

Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 21
Summary of PFOA in Soil from 2 to 4 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. J indicates estimated value and/or the analysis did not meet established quality control criteria.
4. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
5. SCTL indicates soil cleanup target level.
6. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
7. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
8. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
9. Historic site features provided by Florida Department of Environmental Protection.
10. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Legend

Summary of PFOA in Soil

- Result Less than Provisional Leachability SCTL
- Result Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- PFOA Greater than the FDEP Provisional Leachability SCTL Isocontour
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue/NW Martin Luther King Jr. Avenue

SB-68 (0.22 U)
SB-66 (0.21 U)
SB-67 (0.25 U)
SB-8 (0.19 U)
SB-9 (0.21 U)
SB-10 (0.22 U)
SB-11
SB-21
SB-19
SB-17
SB-16
SB-69 (0.22 U)
SB-20
Target Sump
SB-12
SB-22
SB-2 (1.9)
SB-18
SB-15
SB-3 (3.3)
SB-71 (0.22 U)
SB-63 (0.20 U)
SB-13
SB-24
SB-70 (0.25 U)
SB-14
SB-23
SB-25
SB-29
SB-27 (0.28 U)
SB-31
SB-30
SB-28
SB-64 (0.20 U)
SB-26
SB-32
SB-35
SB-37 (0.10 U)
SB-34
SB-62 (0.21 U)
Warehouse Sump
SB-72 (0.21 U)
SB-4 (0.10 U)
SB-33
SB-36
SB-5 (0.17 I)
SB-1 (0.31 I)
SB-38
SB-61 (0.20 U)
SB-41
SB-40
SB-39
SB-42 (0.26 IJ)
SB-48 (0.22 U)
SB-47
SB-73 (0.20 U)
SB-46
SB-49
SB-60 (0.21 U)
SB-52
SB-51
SB-50
SB-43 (0.11 U)
SB-54
SB-44 (0.098 U)
SB-53
SB-7 (0.98)
SB-45** (0.21 U)
SB-56
SB-55
SB-77
SB-45*
SB-6 (0.11 U)
SB-74 (0.23 U)
SB-59 (0.20 U)
SB-58 (0.53 I)
SB-57 (0.20 U)
SB-75
SB-78
SB-76
SB-79

Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 22
Summary of PFOA in Soil from 4 to 6 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. J indicates estimated value and/or the analysis did not meet established quality control criteria.
4. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
5. SCTL indicates soil cleanup target level.
6. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
7. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
8. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
9. Historic site features provided by Florida Department of Environmental Protection.
10. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Legend

Summary of PFOA in Soil

- Result Less than Provisional Leachability SCTL
- Result Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue/NW Martin Luther King Jr. Avenue

SB-68 (6-8 ft BLS) 0.24 U (10-12 ft BLS) 0.30 U (13-15 ft BLS) 0.26 U

SB-66 SB-67

SB-8 SB-9 SB-10 SB-11 SB-21 SB-19 SB-17 SB-16 SB-69 SB-20 Target Sump SB-3 (6-8 ft BLS) 0.81 (10-12 ft BLS) 4.4 (13-15 ft BLS) 3.1 SB-12 SB-18 SB-2 (6-8 ft BLS) 2.8 (10-12 ft BLS) 1.3 (13-15 ft BLS) 0.099 U SB-15 SB-71 SB-22 SB-63 (6-8 ft BLS) 0.19 U (10-12 ft BLS) 0.21 U (13-15 ft BLS) 0.22 U SB-13 SB-24 SB-14 SB-70 SB-23 SB-25 SB-29 SB-31 SB-30 SB-27 SB-64 SB-28 SB-32 SB-35 SB-4 (6-8 ft BLS) 0.094 U (10-12 ft BLS) 0.13 U (13-15 ft BLS) 0.14 U SB-26 SB-62 SB-34 SB-37 Warehouse Sump SB-72 (6-8 ft BLS) 0.21 U (10-12 ft BLS) 0.20 U (13-15 ft BLS) 0.22 U SB-1 (6-8 ft BLS) 0.13 I (10-12 ft BLS) 0.11 I (13-15 ft BLS) 0.10 U SB-33 SB-36 SB-5 (6-8 ft BLS) 0.13 U (10-12 ft BLS) 0.11 U (13-15 ft BLS) 0.11 U SB-38 SB-61 (6-8 ft BLS) 0.23 U (10-12 ft BLS) 0.27 U (13-15 ft BLS) 0.31 U SB-41 SB-40 SB-39 SB-42 SB-65 SB-48 SB-46 SB-47 SB-73 SB-60 SB-49 SB-52 SB-51 SB-50 SB-43 SB-54 SB-44 SB-53 SB-45** (6-8 ft BLS) 0.21 U (10-12 ft BLS) 0.23 U (13-15 ft BLS) 0.23 U SB-7 (6-8 ft BLS) 0.41 I (10-12 ft BLS) 0.31 I (13-15 ft BLS) 0.13 U SB-56 SB-55 SB-77 SB-45* SB-6 (6-8 ft BLS) 0.11 U (10-12 ft BLS) 0.12 U (13-15 ft BLS) 0.12 U SB-74 SB-59 SB-58 SB-57 SB-75 SB-78 SB-76 SB-79

Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 23
Summary of PFOA in Soil from 6 to 15 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. Historic site features provided by Florida Department of Environmental Protection.
9. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Legend

Summary of PFOA in Soil

- Result Less than Provisional Leachability SCTL
- Result Greater than Provisional Leachability SCTL
- No Data for this Depth Interval
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

NW 16th Avenue/NW Martin Luther King Jr. Avenue

SB-68
(23-25 ft BLS) 0.27 U
(32-34 ft BLS) 0.26 U

SB-66 SB-67

SB-8 SB-9 SB-10 SB-11 SB-21 SB-19 SB-17 SB-16 SB-69 SB-20 SB-18 Target Sump SB-3 (23-25 ft BLS) 1.5 (28-30 ft BLS) 1.5 SB-12 SB-22 SB-2 (23-25 ft BLS) 5.5 (28-30 ft BLS) 0.21 I SB-15 SB-71 SB-63 (23-25 ft BLS) 0.23 U (33-35 ft BLS) 0.29 U SB-13 SB-24 SB-70 SB-14 SB-23 SB-25 SB-29 SB-27 SB-31 SB-30 SB-28 SB-64 SB-26 SB-32 SB-35 SB-37 SB-34 SB-62 SB-4 (23-25 ft BLS) 0.15 U (30-32 ft BLS) 0.13 U Warehouse Sump SB-72 (23-25 ft BLS) 0.27 U (33-35 ft BLS) 0.34 U SB-33 SB-36 SB-1 (23-25 ft BLS) 0.15 I (33-35 ft BLS) 0.16 U SB-5 (23-25 ft BLS) 0.12 U (28-30 ft BLS) 0.12 U SB-38 SB-61 (23-25 ft BLS) 0.28 U (28-30 ft BLS) 0.25 U SB-41 SB-40 SB-39 SB-42 SB-65 SB-48 SB-73 SB-46 SB-47 SB-60 SB-49 SB-52 SB-51 SB-50 SB-43 SB-54 SB-44 SB-53 SB-45** (23-25 ft BLS) 0.29 U (28-30 ft BLS) 0.26 U SB-7 (23-25 ft BLS) 0.12 U (28-30 ft BLS) 0.12 U SB-56 SB-55 SB-77 SB-45* SB-6 (23-25 ft BLS) 0.14 U (28-30 ft BLS) 0.15 U SB-59 SB-74 SB-58 SB-57 SB-75 SB-78 SB-76 SB-79

Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 24
Summary of PFOA in Soil from 16 to 35 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. Historic site features provided by Florida Department of Environmental Protection.
9. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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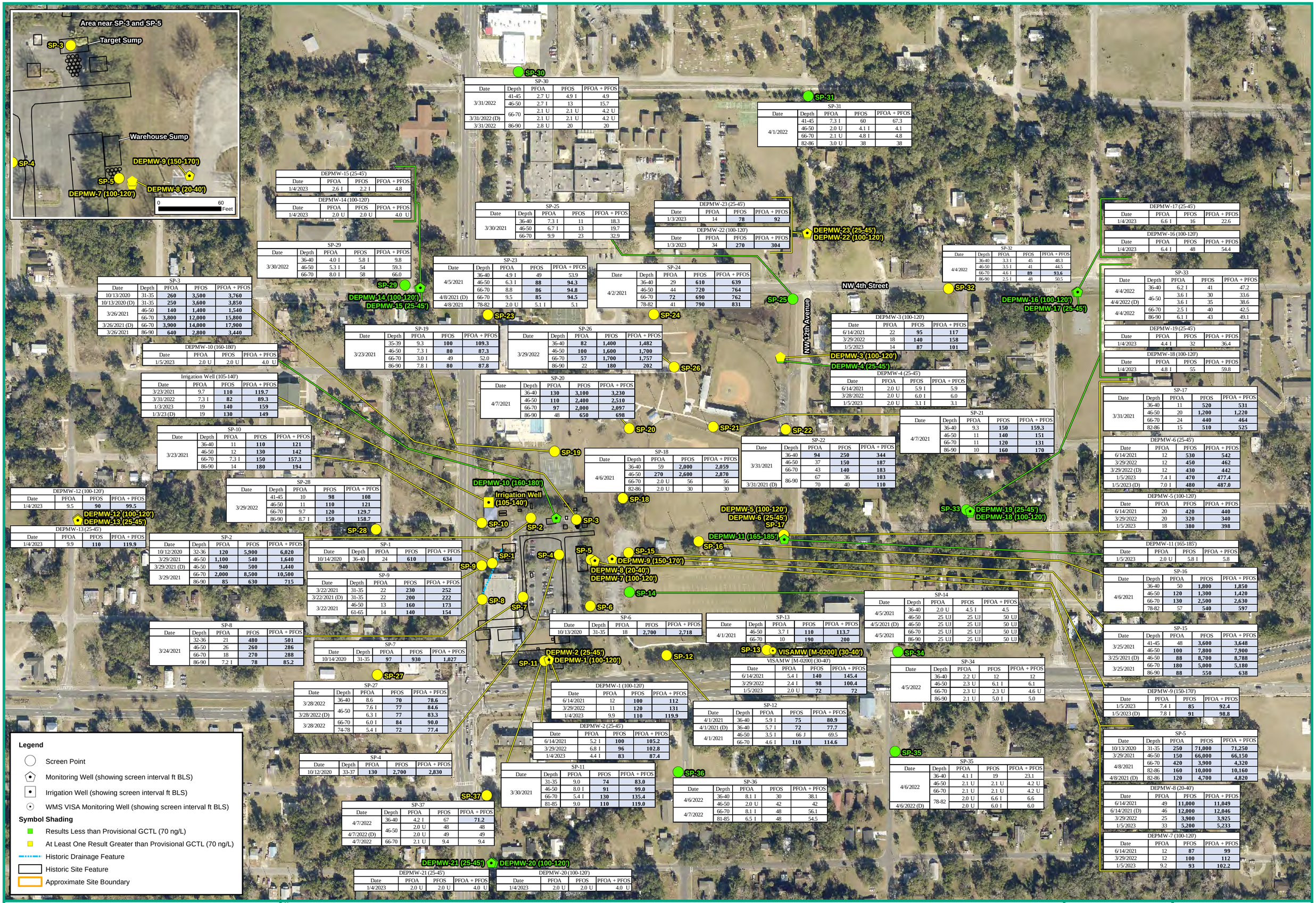


DEPMW-15 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
1/4/2023	2.6 I	2.2 I	4.8

DEPMW-14 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
1/4/2023	2.0 U	2.0 U	4.0 U

SP-30

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/31/2022	41-45	2.7 U	4.9 I	4.9
	46-50	2.7 I	13	15.7
3/31/2022 (D)	66-70	2.1 U	2.1 U	4.2 U
		2.1 U	2.1 U	4.2 U
3/31/2022	86-90	2.8 U	20	20

SP-31

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/1/2022	41-45	7.3 I	60	67.3
	46-50	2.0 U	4.1 I	4.1
	66-70	2.1 U	4.8 I	4.8
	82-86	3.0 U	38	38

SP-32

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/4/2022	36-40	3.3 I	45	48.3
	46-50	3.5 I	41	44.5
	66-70	4.6 I	**89**	**93.6**
	86-90	2.5 I	48	50.5

SP-29

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/30/2022	36-40	4.0 I	5.8 I	9.8
	46-50	5.3 I	54	59.3
	66-70	8.0 I	58	66.0

SP-25

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/30/2021	36-40	7.3 I	11	18.3
	46-50	6.7 I	13	19.7
	66-70	9.9	23	32.9

DEPMW-23 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
1/3/2023	14	**78**	**92**

DEPMW-22 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
1/3/2023	34	**270**	**304**

SP-23

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/5/2021	36-40	4.9 I	49	53.9
	46-50	6.3 I	**88**	**94.3**
	66-70	8.8	**86**	**94.8**
4/8/2021 (D)	66-70	9.5	**85**	**94.5**
4/8/2021	78-82	2.0 U	5.1 I	5.1

SP-24

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/2/2021	36-40	29	**610**	**639**
	46-50	44	**720**	**764**
	66-70	**72**	**690**	**762**
	78-82	41	**790**	**831**

SP-3

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/13/2020	31-35	**260**	**3,500**	**3,760**
10/13/2020 (D)	31-35	**250**	**3,600**	**3,850**
3/26/2021	46-50	**140**	**1,400**	**1,540**
	66-70	**3,800**	**12,000**	**15,800**
3/26/2021 (D)	66-70	**3,900**	**14,000**	**17,900**
3/26/2021	86-90	**640**	**2,800**	**3,440**

SP-19

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/23/2021	35-39	9.3	**100**	**109.3**
	46-50	7.3 I	**80**	**87.3**
	66-70	3.0 I	49	52.0
	86-90	7.8 I	**80**	**87.8**

SP-26

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/29/2022	36-40	**82**	**1,400**	**1,482**
	46-50	**100**	**1,600**	**1,700**
	66-70	**57**	**1,700**	**1,757**
	86-90	22	**180**	**202**

DEPMW-3 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	22	**95**	**117**
3/29/2022	18	**140**	**158**
1/5/2023	14	**87**	**101**

DEPMW-4 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	2.0 U	5.9 I	5.9
3/28/2022	2.0 U	6.0 I	6.0
1/5/2023	2.0 U	3.1 I	3.1

DEPMW-10 (160-180')

Date	PFOA	PFOS	PFOA + PFOS
1/5/2023	2.0 U	2.0 U	4.0 U

Irrigation Well (105-140')

Date	PFOA	PFOS	PFOA + PFOS
3/23/2021	9.7	**110**	**119.7**
3/31/2022	7.3 I	**82**	**89.3**
1/3/2023	19	**140**	**159**
1/3/23 (D)	19	**130**	**149**

SP-20

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/7/2021	36-40	**130**	**3,100**	**3,230**
	46-50	**110**	**2,400**	**2,510**
	66-70	**97**	**2,000**	**2,097**
	86-90	48	**650**	**698**

SP-10

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/23/2021	36-40	11	**110**	**121**
	46-50	12	**130**	**142**
	66-70	7.3 I	**150**	**157.3**
	86-90	14	**180**	**194**

SP-18

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/6/2021	36-40	59	**2,000**	**2,059**
	46-50	**270**	**2,600**	**2,870**
	66-70	2.0 U	56	56
	82-86	2.0 U	30	30

SP-22

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/31/2021	36-40	**94**	**250**	**344**
	46-50	37	**150**	**187**
	66-70	43	**140**	**183**
	86-90	67	36	**103**
3/31/2021 (D)		70	40	**110**

SP-21

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/7/2021	36-40	9.3	**150**	**159.3**
	46-50	11	**140**	**151**
	66-70	11	**120**	**131**
	86-90	10	**160**	**170**

DEPMW-17 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
1/4/2023	6.6 I	16	22.6

DEPMW-16 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
1/4/2023	6.4 I	48	54.4

SP-33

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/4/2022	36-40	6.2 I	41	47.2
	46-50	3.6 I	30	33.6
4/4/2022 (D)		3.6 I	35	38.6
4/4/2022	66-70	2.5 I	40	42.5
	86-90	6.1 I	43	49.1

DEPMW-19 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
1/4/2023	4.4 I	32	36.4

DEPMW-18 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
1/4/2023	4.8 I	55	59.8

SP-17

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/31/2021	36-40	11	**520**	**531**
	46-50	20	**1,200**	**1,220**
	66-70	24	**440**	**464**
	82-86	15	**510**	**525**

DEPMW-6 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	12	**530**	**542**
3/29/2022	12	**450**	**462**
3/29/2022 (D)	12	**430**	**442**
1/5/2023	7.4 I	**470**	**477.4**
1/5/2023 (D)	7.0 I	**480**	**487.0**

DEPMW-5 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	20	**420**	**440**
3/29/2022	20	**320**	**340**
1/5/2023	18	**380**	**398**

DEPMW-11 (165-185')

Date	PFOA	PFOS	PFOA + PFOS
1/5/2023	2.0 U	5.8 I	5.8

SP-16

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/6/2021	36-40	50	**1,800**	**1,850**
	46-50	**120**	**1,300**	**1,420**
	66-70	**130**	**2,500**	**2,630**
	78-82	57	**540**	**597**

SP-15

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/25/2021	41-45	48	**3,600**	**3,648**
	46-50	**100**	**7,800**	**7,900**
3/25/2021 (D)	46-50	**88**	**8,700**	**8,788**
3/25/2021	66-70	**180**	**5,000**	**5,180**
	86-90	**88**	**550**	**638**

DEPMW-9 (150-170')

Date	PFOA	PFOS	PFOA + PFOS
1/5/2023	7.4 I	**85**	**92.4**
1/5/2023 (D)	7.8 I	**91**	**98.8**

SP-5

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/13/2020	31-35	**250**	**71,000**	**71,250**
3/29/2021	46-50	**150**	**66,000**	**66,150**
4/8/2021	66-70	**420**	**3,900**	**4,320**
	82-86	**160**	**10,000**	**10,160**
4/8/2021 (D)	82-86	**120**	**4,700**	**4,820**

DEPMW-8 (20-40')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	49	**11,000**	**11,049**
6/14/2021 (D)	46	**12,000**	**12,046**
3/29/2022	25	**3,900**	**3,925**
1/5/2023	33	**5,200**	**5,233**

DEPMW-7 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	12	**87**	**99**
3/29/2022	12	**100**	**112**
1/5/2023	9.2	**93**	**102.2**

DEPMW-12 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
1/4/2023	9.5	**90**	**99.5**

DEPMW-13 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
1/4/2023	9.9	**110**	**119.9**

SP-2

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/12/2020	32-36	**120**	**5,900**	**6,020**
3/29/2021	46-50	**1,100**	**540**	**1,640**
3/29/2021 (D)	46-50	**940**	**500**	**1,440**
3/29/2021	66-70	**2,000**	**8,500**	**10,500**
	86-90	**85**	**630**	**715**

SP-1

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/14/2020	36-40	24	**610**	**634**

SP-28

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/29/2022	41-45	10	**98**	**108**
	46-50	11	**110**	**121**
	66-70	9.7	**120**	**129.7**
	86-90	8.7 I	**150**	**158.7**

SP-9

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/22/2021	31-35	22	**230**	**252**
3/22/2021 (D)	31-35	22	**200**	**222**
3/22/2021	46-50	13	**160**	**173**
	61-65	14	**140**	**154**

SP-8

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/24/2021	32-36	21	**480**	**501**
	46-50	26	**260**	**286**
	66-70	18	**270**	**288**
	86-90	7.2 I	**78**	**85.2**

SP-7

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/14/2020	31-35	**97**	**930**	**1,027**

SP-6

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/13/2020	31-35	18	**2,700**	**2,718**

SP-13

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/1/2021	46-50	3.7 I	**110**	**113.7**
	66-70	10	**190**	**200**

SP-14

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/5/2021	36-40	2.0 U	4.5 I	4.5
	46-50	25 UJ	25 UJ	50 UJ
4/5/2021 (D)	46-50	25 UJ	25 UJ	50 UJ
4/5/2021	66-70	25 UJ	25 UJ	50 UJ
	86-90	25 UJ	25 UJ	50 UJ

SP-27

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/28/2022	36-40	8.6	**70**	**78.6**
	46-50	7.6 I	**77**	**84.6**
3/28/2022 (D)		6.3 I	**77**	**83.3**
3/28/2022	66-70	6.0 I	**84**	**90.0**
	74-78	5.4 I	**72**	**77.4**

SP-4

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/12/2020	33-37	**130**	**2,700**	**2,830**

SP-37

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/7/2022	36-40	4.2 I	67	**71.2**
	46-50	2.0 U	48	48
4/7/2022 (D)		2.0 U	49	49
4/7/2022	66-70	2.1 U	9.4	9.4

DEPMW-1 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	12	**100**	**112**
3/29/2022	11	**120**	**131**
1/4/2023	9.9	**110**	**119.9**

DEPMW-2 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	5.2 I	**100**	**105.2**
3/29/2022	6.8 I	**96**	**102.8**
1/4/2023	4.4 I	**83**	**87.4**

SP-11

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/30/2021	31-35	9.0	**74**	**83.0**
	46-50	8.0 I	**91**	**99.0**
	66-70	5.4 I	**130**	**135.4**
	81-85	9.0	**110**	**119.0**

SP-12

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/1/2021	36-40	5.9 I	**75**	**80.9**
4/1/2021 (D)	36-40	5.7 I	**72**	**77.7**
4/1/2021	46-50	3.5 I	66 J	69.5
	66-70	4.6 I	**110**	**114.6**

VISAMW [M-0200] (30-40')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	5.4 I	**140**	**145.4**
3/29/2022	2.4 I	**98**	**100.4**
1/5/2023	2.0 U	**72**	**72**

SP-34

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/5/2022	36-40	2.2 U	12	12
	46-50	2.3 U	6.1 I	6.1
	66-70	2.3 U	2.3 U	4.6 U
	86-90	2.1 U	5.0 I	5.0

SP-36

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/6/2022	36-40	8.1 I	30	38.1
	46-50	2.0 U	42	42
4/7/2022	66-70	8.1 I	48	56.1
	81-85	6.5 I	48	54.5

SP-35

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/6/2022	36-40	4.1 I	19	23.1
	46-50	2.1 U	2.1 U	4.2 U
	66-70	2.1 U	2.1 U	4.2 U
	78-82	2.0 U	6.6 I	6.6
4/6/2022 (D)		2.0 U	6.0 I	6.0

DEPMW-21 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
1/4/2023	2.0 U	2.0 U	4.0 U

DEPMW-20 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
1/4/2023	2.0 U	2.0 U	4.0 U

Legend

- Screen Point
- Monitoring Well (showing screen interval ft BLS)
- Irrigation Well (showing screen interval ft BLS)
- WMS VISA Monitoring Well (showing screen interval ft BLS)

Symbol Shading

- Results Less than Provisional GCTL (70 ng/L)
- At Least One Result Greater than Provisional GCTL (70 ng/L)
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

Figure 25
Summary of Analytical Results in Groundwater
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:

1. Results and screening criteria are presented in nanograms per liter (ng/L).
2. Depth is presented in feet below land surface (ft BLS).
3. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
4. J indicates estimated value and/or the analysis did not meet established quality control criteria.
5. U indicates analyte was not detected in the specified sample. The reported value for individual analytes is the MDL for the sample analyzed. For PFOA+PFOS calculations presented with a "U", this indicates neither PFOS nor PFOA were detected in the specified sample and thus the calculated value is the sum of the two MDLs (see Note 7).
6. D indicates duplicate sample.
7. PFOA + PFOS indicates the summation of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) concentrations calculated based on guidance provided by the Florida Department of Environmental Protection (FDEP) on 16 November 2022. For results where both PFOA and PFOS were detected, PFOA+PFOS was calculated by summing the two detections. For results where either PFOA or PFOS was detected and the other was not, PFOA+PFOS was calculated by assuming the non-detect result was 0. For results where neither PFOA nor PFOS were detected, the PFOA+PFOS value presented is the sum of the method detection limits (MDLs) for each constituent.
8. Blue shaded, bold text indicates an exceedance of the Florida Department of Environmental Protection provisional groundwater cleanup target level (GCTL) of 70 ng/L.
9. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
10. Historic site features provided by Florida Department of Environmental Protection.
11. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

200 Feet

Path: (\\Titusville-01\DATA) \\Titusville-01\Data\0GIS\FR7522_FormerFSFC\MXDs\2023\02\GW_spiders_202302.mxd 15 March 2023. Last Edited by: mhensley

Legend

- Screen Point (showing screen interval of maximum result ft BLS)
- Monitoring Well (showing screen interval ft BLS)
- Irrigation Well (showing screen interval ft BLS)
- WMS VISA Monitoring Well (showing screen interval ft BLS)

Summary of Maximum PFOA + PFOS in Groundwater

- Less than or Equal to 70 ng/L
- Greater than 70 ng/L and Less than or Equal to 700 ng/L
- Greater than 700 ng/L and Less than or Equal to 7,000 ng/L
- Greater than 7,000 ng/L and Less than or Equal to 70,000 ng/L
- Greater than 70,000 ng/L
- PFOA + PFOS Greater than the FDEP Provisional GCTL Isocontour (dashed where inferred)
- Historic Drainage Feature
- Historic Site Feature
- Approximate Site Boundary

SP-30 (86-90') (20)
SP-31 (82-86') (67.3)
DEPMW-22 (100-120') (304)
DEPMW-23 (25-45') (92)
SP-29 (66-70') (66.0)
DEPMW-14 (100-120') (4.0 U)
DEPMW-15 (25-45') (4.8)
NW 4th Street
SP-25 (66-70') (32.9)
SP-32 (66-70') (93.6)
DEPMW-16 (100-120') (54.4)
DEPMW-17 (25-45') (22.6)
SP-23 (66-70') (94.8)
SP-24 (78-82') (831)
DEPMW-3 (100-120') (101)
NW 12th Avenue
SP-26 (66-70') (1,757)
DEPMW-4 (25-45') (3.1)
SP-21 (86-90') (170)
SP-20 (36-40') (3,230)
SP-22 (36-40') (344)
SP-19 (35-39') (109.3)
DEPMW-10 (160-180') (4.0 U)
SP-2 (66-70') (10,500)
SP-3 (66-70') (17,900)
Irrigation Well (105-140') (149)
SP-5 (31-35') (71,250)
SP-18 (46-50') (2,870)
DEPMW-13 (25-45') (119.9)
DEPMW-12 (100-120') (99.5)
SP-10 (86-90') (194)
SP-33 (86-90') (49.1)
DEPMW-18 (100-120') (59.8)
DEPMW-19 (25-45') (36.4)
SP-28 (86-90') (158.7)
DEPMW-8 (20-40') (5,233)
SP-17 (46-50') (1,220)
SP-15 (46-50') (8,788)
DEPMW-6 (25-45') (487.0)
SP-4 (33-37') (2,830)
DEPMW-5 (100-120') (398)
DEPMW-11 (165-185') (5.8)
SP-16 (66-70') (2,630)
SP-9 (31-35') (252)
DEPMW-9 (150-170') (98.8)
DEPMW-7 (100-120') (102.2)
SP-1 (36-40') (634)
SP-14 (46-90') (50 UJ)
SP-8 (32-36') (501)
SP-6 (31-35') (2,718)
SP-7 (31-35') (1,027)
SP-13 (66-70') (200)
VISAMW [M-0200] (30-40') (72)
SP-34 (36-40') (12)
SP-11 (66-70') (135.4)
DEPMW-1 (100-120') (119.9)
SP-12 (66-70') (114.6)
Silver Springs Boulevard
DEPMW-2 (25-45') (87.4)
SP-27 (66-70') (90.0)
SP-35 (36-40') (23.1)
SP-36 (66-70') (56.1)
SP-37 (36-40') (71.2)
DEPMW-20 (100-120') (4.0 U)
DEPMW-21 (25-45') (4.0 U)

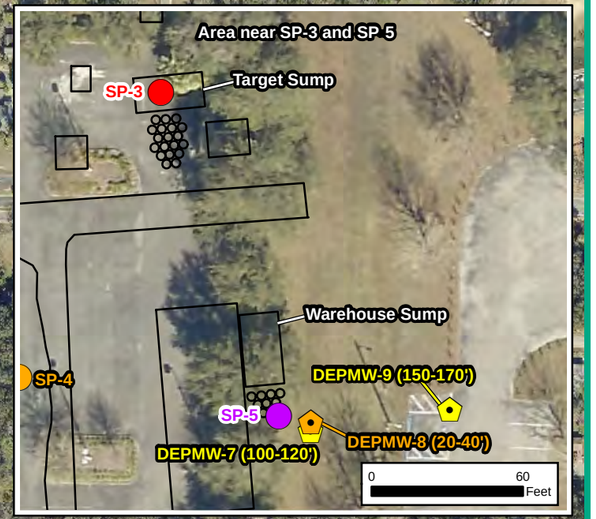


Figure 26
Summary of Maximum Concentrations of PFOA +PFOS in Groundwater
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. PFOA + PFOS indicates the summation of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) concentrations calculated based on guidance provided by the Florida Department of Environmental Protection (FDEP) on 16 November 2022. For results where both PFOA and PFOS were detected, PFOA+PFOS was calculated by summing the two detections. For results where either PFOA or PFOS was detected and the other was not, PFOA+PFOS was calculated by assuming the non-detect result was 0. For results where neither PFOA nor PFOS were detected, the PFOA+PFOS value presented is the sum of the method detection limits (MDLs) for each constituent.
2. Contours were generated using the summation concentration of PFOA + PFOS from January 2023 groundwater monitoring well and screen point analytical results.. The higher concentration between a sample and its duplicate was utilized. The highest concentration within a well cluster was utilized to contour.
3. Monitoring wells display PFOA + PFOS concentrations from January 2023. Screen points display the maximum PFOA + PFOS concentration from each location.
4. Results and screening criteria are presented in nanograms per liter (ng/L).
5. Depth (') is presented in feet below land surface (ft BLS).
6. Screening based on the Florida Department of Environmental Protection provisional groundwater cleanup target level (GCTL) of 70 ng/L.
7. U indicates analyte was not detected in the specified sample. The reported value for individual analytes is the MDL for the sample analyzed. For PFOA+PFOS calculations presented with a "U", this indicates neither PFOS nor PFOA were detected in the specified sample and thus the calculated value is the sum of the two MDLs (see Note 1).
8. J indicates estimated value and/or the analysis did not meet established quality control criteria.
9. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
10. Historic site features provided by Florida Department of Environmental Protection.
11. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: March 15, 2023

N

300 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

A (West)

A' (East)

DEPMW-12 (100-120')
DEPMW-13 (25-45')
SB-28
SP-9
SB-61
SB-1
SP-1
SB-36
DEPMW-8 (20-40')
DEPMW-7 (100-120')
SP-4
SB-4
SP-5
SB-5
DEPMW-9 (150-170')
SB-72 (projected onto transect)
SP-15 (projected onto transect)
SP-16 (projected onto transect)
DEPMW-6 (25-45')
SP-17
DEPMW-11 (165-185')
DEPMW-5 (100-120')
DEPMW-19 (25-45')
DEPMW-18 (100-120')
SP-33

Depth (feet below land surface)

119.9
252
634
2,830
71,250
5,233
1,850
531
487.0
3,648
8,788
1,420
1,220
108
121
173
66,150
36.4
47.2
38.6
154
129.7
4,320
5,180
2,630
464
42.5
597
10,160
638
525
158.7
49.1
99.5
102.2
Void
100 to 120 ft BLS
398
59.8
98.8
Void
160 to 200 ft BLS
5.8

Legend

- 70 ng/L Isopleth PFOA + PFOS (Dashed where Inferred)
- Approximate Water Table
- Inferred Lithology

Lithology

- SAND with Silt/Clay Nodules
- Interbedded Sandy CLAY and Clayey SAND with locally present chert
- LIMESTONE

Soil Boring

Screen Point

Screen Interval

PFOA+PFOS (ng/L)

Monitoring Well

Screen Interval

Figure 27
Vertical Profile of PFOA and PFOS in Groundwater from A-A'
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:

1. Results are provided in nanograms per liter (ng/L).
2. ft BLS indicates feet below land surface.
3. PFOA + PFOS indicates the summation of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) concentrations calculated based on guidance provided by the Florida Department of Environmental Protection (FDEP) on 16 November 2022. For results where both PFOA and PFOS were detected, PFOA+PFOS was calculated by summing the two detections. For results where either PFOA or PFOS was detected and the other was not, PFOA+PFOS was calculated by assuming the non-detect result was 0. For results where neither PFOA nor PFOS were detected, the PFOA+PFOS value presented is the sum of the method detection limits (MDLs) for each constituent.
4. Refer to Figure 6 for the plan view of the cross-section transects layout.
5. The Florida Department of Environmental Protection provisional groundwater cleanup target level (GCTL) for the summation of PFOA and PFOS is 70 ng/L.
6. Contours were generated using the summation concentration of PFOA + PFOS. The highest concentration between a sample and its duplicate was utilized.
7. Red text indicates result is greater than the PFOA+PFOS GCTL.

Date: March 09, 2023

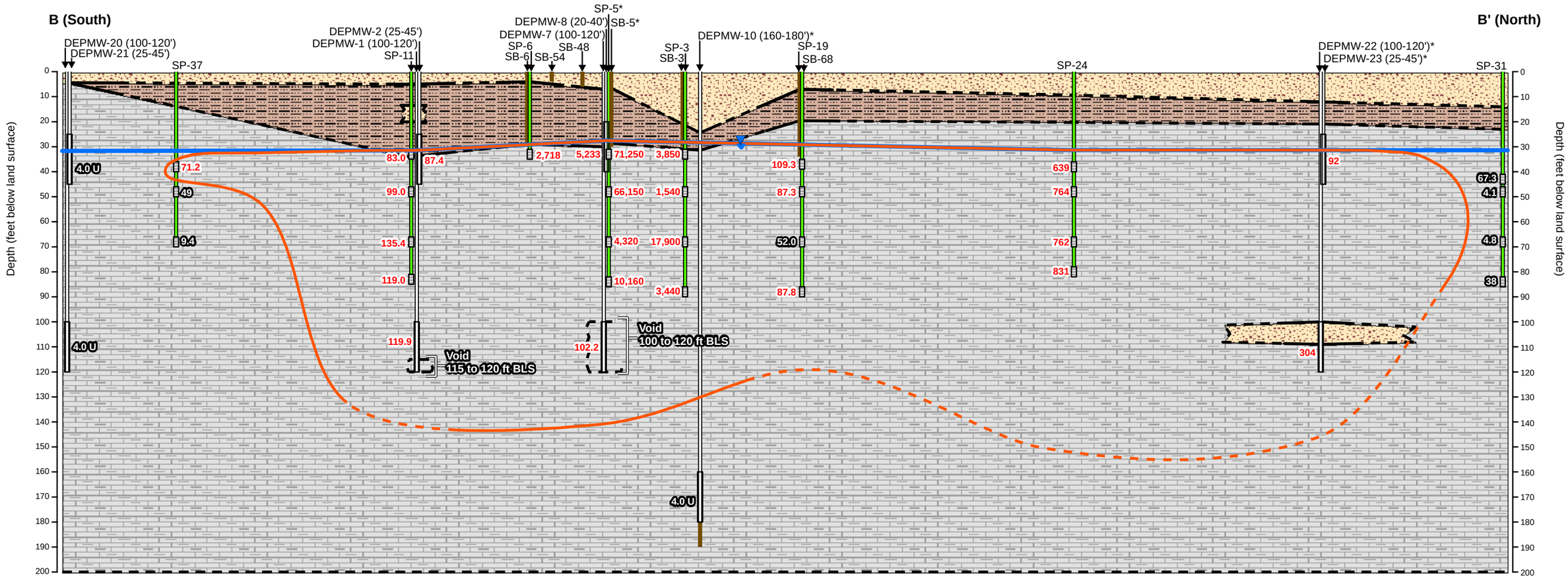
N

130 Feet

Vertical Exaggeration = 5

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) \\Titusville-01\Data\GIS\FR7522_FormerFSFC\MXDs\202302\CrossSection_AA_202302Results.mxd 09 March 2023. Last Edited by: csaville



Legend

- 70 ng/L IsoplethPFOA + PFOS (Dashed where Inferred)
- Approximate Water Table
- Inferred Lithology

Lithology

- SAND with Silt/Clay Nodules
- Interbedded Sandy CLAY and Clayey SAND with locally present chert
- LIMESTONE

Soil Boring

Screen Point

Screen Interval

PFOA+PFOS (ng/L)

Monitoring Well

Screen Interval

Figure 28
Vertical Profile of PFOA and PFOS in Groundwater from B-B'
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:

1. Results are provided in nanograms per liter (ng/L).
2. ft BLS indicates feet below land surface.
3. PFOA + PFOS indicates the summation of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) concentrations calculated based on guidance provided by the Florida Department of Environmental Protection (FDEP) on 16 November 2022. For results where both PFOA and PFOS were detected, PFOA+PFOS was calculated by summing the two detections. For results where either PFOA or PFOS was detected and the other was not, PFOA+PFOS was calculated by assuming the non-detect result was 0. For results where neither PFOA nor PFOS were detected, the PFOA+PFOS value presented is the sum of the method detection limits (MDLs) for each constituent.
4. Refer to Figure 6 for the plan view of the cross-section transects layout.
5. The Florida Department of Environmental Protection provisional groundwater cleanup target level (GCTL) for the summation of PFOA and PFOS is 70 ng/L.
6. U indicates analyte was not detected in the specified sample. The reported value for individual analytes is the MDL for the sample analyzed. For PFOA+PFOS calculations presented with a "U", this indicates neither PFOS nor PFOA were detected in the specified sample and thus the calculated value is the sum of the two MDLs (see Note 1).
7. Contours were generated using the summation concentration of PFOA + PFOS. The highest concentration between a sample and its duplicate was utilized.
8. Red text indicates result is greater than the PFOA+PFOS GCTL.
9. * indicates projected onto transect.

Date: March 09, 2023

N

200 Feet

Vertical Exaggeration = 5

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) \\Titusville-01\Data\0GIS\FR7522_FormerFSFC\MXDs\202302\CrossSection_BB_202302Results.mxd 09 March 2023. Last Edited by: csaville

SW-1			
Date	Depth	PFOS	PFOA
3/28/2022	0 - 1	**37**	4.4 I

Sed-1			
Date	Depth	PFOS	PFOA
3/28/2022	0 - 1	0.31 U	0.31 U

SW-3			
Date	Depth	PFOS	PFOA
3/28/2022	0 - 1	3.4 I	2.4 I

Sed-3			
Date	Depth	PFOS	PFOA
3/28/2022	0 - 1	12	0.63 U

SW-2			
Date	Depth	PFOS	PFOA
3/28/2022	0 - 1	4.8 I	4.4 I

Sed-2			
Date	Depth	PFOS	PFOA
3/28/2022	0 - 1	2.9	0.37 U

Surface Water Screening Levels Based on the Consumption of Freshwater and Estuarine Finfish and Shellfish	Perfluorooctane sulfonate (PFOS)	Perfluorooctanoic acid (PFOA)
	10	500

Legend

- Sediment
- Surface Water

Symbology Shading

- Results Less than Surface Water Screening Level for PFOS (10 ng/L)
- At Least One Result Greater than Surface Water Screening Level for PFOS (10 ng/L)
- Cleanup Target Levels Have Not Been Established for Sediment
- Approximate Site Boundary

Figure 29
Summary of Analytical Results in Sediment and Surface Water
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:

1. ft BLS indicates feet below land surface.
2. Surface water results and screening criteria are provided in nanograms per liter (ng/L). Sediment results are provided in micrograms per kilogram (ug/kg).
3. Depth for sediment is provided in feet below land surface (ft BLS).
4. Depth for surface water is provided in feet below water surface (ft BWS).
5. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
6. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
7. Blue shaded, bold text indicates an exceedance of the Florida Department of Environmental Protection surface water screening level based on the consumption of freshwater and estuarine finfish and shellfish.
8. Cleanup target levels have not been established for sediment.
9. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
10. 2021 Aerial Source: Florida Department of Transportation Surveying and Mapping Office APLUS website.

Date: February 15, 2023

N

150 Feet

Path: (Titusville-01\DATA) \\Titusville-01\Data\0GIS\FR7522_FormerFSFC\MXDs\202205\SW_Sed_Results_202206.mxd 15 February 2023. Last Edited by: csaville

APPENDIX A

University of Florida Letters for Screening and Provisional Cleanup Target Levels

UF | UNIVERSITY of FLORIDA

Center for Environment & Human Toxicology

PO Box 110885
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352-392-2243 Tel
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April 16, 2018

Brian Dougherty, PhD
Program Manager
District and Business Support Program
Division of Waste Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Development of alternative soil cleanup target levels for PFOA and PFOS

Dear Dr. Dougherty:

At your request, we have developed alternative soil cleanup target levels (ASCTLs) for perfluorooctanoic acid (PFOA; CAS# 335-67-1) and perfluorooctane sulfonate (PFOS; CAS# 1763-23-1). PFOA and PFOS are perfluoroalkyl substances (PFASs). PFASs are used to make products resistant to stains, grease, and water. Before production was phased out at the end of 2015, PFOA was used in carpets, leathers, textiles, upholstering, and as a waterproofing or stain-resistant agent (USEPA, 2016a). In 2002, the only major US manufacturer of PFOS agreed to phase out production. However, PFOA and PFOS degrade slowly and are persistent in the environment. Most contamination by PFOA and PFOS is a result of releases from manufacturing sites, industrial sites, fire training areas, and waste sites where these chemicals were disposed (USEPA, 2016a & 2016b). Derivation of the ASCTLs for each chemical is described below.

Perfluorooctanoic Acid (PFOA)

The United States Environmental Protection Agency (USEPA) summarized toxicity studies for PFOA in the Drinking Water Health Advisory for PFOA (USEPA, 2016a). For reference dose (RfD) development, several candidate studies and health effect endpoints were evaluated (Perkins et al., 2004; Lau et al., 2006; Wolf et al., 2007; White et al., 2009; DeWitt et al., 2008; Butenhoff et al., 2004). A total of six candidate RfDs were considered based upon endpoints including increased liver weight and necrosis in rats, decreased pup weight from gestational exposure in mice, immunosuppression in mice, reduced ossification and accelerated male puberty in offspring of mice, and reduced body weight and increased kidney weight (relative and absolute) in rats. For each animal toxicity study, human equivalent average serum PFOA concentrations were derived using a pharmacokinetic model by Wambaugh et al. (2013). An oral reference dose (RfD) was derived for each human equivalent no observed adverse effect level (NOAEL) or lowest observed adverse effect level (LOAEL) using study-specific uncertainty factors. Three endpoints resulted in a RfD of 2E-05 mg/kg-d (the lowest calculated RfD). Among these, reduced ossification of the proximal phalanges and accelerated puberty in offspring from treated dams in the study by Lau et al. (2006) were selected as the critical

effect(s). Other studies producing the same or similar RfD values are considered supportive. Data were not considered adequate to derive a reference concentration (RfC) for inhalation exposure.

In the Lau et al. (2006) study, pregnant CD-1 mice were dosed with 1, 3, 5, 10, 20, or 40 mg/kg PFOA by oral gavage daily from gestational day 1 to 17. Decreased ossification of pup (both sexes) proximal phalanges and accelerated preputial separation were seen at 1 mg/kg PFOA. The USEPA calculated a human equivalent point of departure of 5.3E-03 mg/kg-d for these endpoints. An uncertainty factor of 300 (3 for extrapolation from animal to human, 10 for extrapolation from LOAEL to NOAEL, and 10 for sensitive individuals) was applied to derive an oral RfD of 2E-05 mg/kg-d. Greater than 95% of PFOA is absorbed by the gastrointestinal tract (ATSDR, 2015). Therefore, a gastrointestinal absorption factor of 1 was used to extrapolate the toxicity to other routes of exposure.

PFOA is also carcinogenic and has been shown to be tumorigenic in the liver, testes, and pancreas of rats. In humans, there is epidemiological evidence for an association between serum PFOA and kidney and testicular tumors (USEPA, 2016a). The USEPA developed an oral cancer slope factor of 7E-02 per mg/kg-d based on the development of testicular tumors in rats. They concluded that the drinking water health advisory based on non-cancer effects was protective for the cancer endpoint. We also calculated ASCTLs based on the oral cancer slope factor of 7E-02 per mg/kg-d (ASCTLs not shown). These ASCTLs were higher than those protective of non-cancer endpoints confirming that ASCTLs based on non-cancer effects are protective of the cancer endpoint.

Direct exposure ASCTLs for residential and commercial/industrial scenarios were calculated using the formula presented in Figure 5 of Chapter 62-777, Florida Administrative Code (F.A.C.). The equation is shown in Figure 1. Default assumptions listed in Table 1 were taken from OSWER Directive 9200.1-120 (USEPA, 2014) and Table 3 of Chapter 62-777, F.A.C. Chemical-specific parameters are presented in Table 2. **The residential ASCTL for PFOA is 1.3 mg/kg and the commercial/industrial ASCTL is 25 mg/kg.** A leachability ASCTL was derived using the formula presented in Figure 8 of Chapter 62-777, FAC. The equation is shown in Figure 2 and inputs are listed in Table 1. **The ASCTL for leachability to groundwater is 0.004 mg/kg** (based on an alternative groundwater cleanup target level of 0.1 µg/L provided to you in a letter dated April 12, 2017).

Perfluorooctane Sulfonate (PFOS)

The USEPA summarized toxicity studies for PFOS in the Drinking Water Health Advisory for PFOS (USEPA, 2016b). Six candidate studies and seven endpoints were identified for the derivation of an RfD for PFOS (Seacat et al., 2002 & 2003; Luebker et al., 2005a & 2005b; Butenhoff et al, 2009; Lau et al., 2003). Candidate endpoints included: 1) increased liver weight and histopathology, decreased body weight, and thyroid hormone disturbances in monkeys; 2) increased liver weight and histopathology, and increased liver enzymes and blood urea nitrogen in serum in male rats; 3) decreased body weight of rat pups; 4) another study showing decreased body weight in rat pups; 5) decreased maternal body weight, gestation length, and pup survival in rats; 6) developmental neurotoxicity in rats; and 7) decreased pup survival and decreased maternal and pup body weight in rats. For each animal toxicity study, human equivalent average serum PFOS concentrations were derived using a pharmacokinetic model by Wambaugh et al. (2013). An oral RfD was derived for each human equivalent NOAEL or LOAEL using study-specific uncertainty factors. Data were not considered adequate to derive a

reference concentration (RfC) for inhalation exposure. The USEPA selected reduced pup weight from a two-generation study in rats as the critical effect. Low body weight was considered to be a marker for developmental effects, including effects that may not be manifested until later in life. This effect is considered relevant to humans because PFOS has been measured in the blood of newborns, in breast milk, and in blood of older children.

The developmental toxicity study by Luebker et al. (2005a) resulted in a RfD of 2E-05 mg/kg-d (the lowest calculated RfD). In this study, male and female rats were dosed with 0, 0.1, 0.4, 1.6, or 3.2 mg/kg-d by gavage from six weeks prior to mating, during mating, and, for females, through gestation and lactation across two generations. Rat pup weight was significantly decreased at 1.6 mg/kg-d PFOS in the F1 generation. The USEPA calculated a human equivalent point of departure of 5.1E-04 mg/kg-d based on decreased rat pup weight in the F1 generation. An uncertainty factor of 30 (3 for extrapolation from animal to human and 10 for sensitive subpopulations) was applied to derive an oral RfD of 2E-05 mg/kg-d. No data are available regarding the gastrointestinal absorption of PFOS. Therefore, a gastrointestinal absorption factor of 1 was used to extrapolate the toxicity to other routes of exposure.

There is also suggestive evidence that PFOS is carcinogenic in humans based on chronic studies in rats that result in liver and thyroid adenomas. However, the tumor data lack a dose-response relationship and could not be used by the USEPA to develop a cancer slope factor. Therefore, the critical effect for PFOS is developmental toxicity.

Direct exposure ASCTLs for residential and commercial/industrial scenarios were calculated using the formula presented in Figure 5 of Chapter 62-777, Florida Administrative Code (F.A.C.). The equation is shown in Figure 1. Default assumptions listed in Table 1 were taken from OSWER Directive 9200.1-120 (USEPA, 2014) and Table 3 of Chapter 62-777, F.A.C. Chemical-specific parameters are presented in Table 2. **The residential ASCTL for PFOS is 1.3 mg/kg and the commercial/industrial ASCTL is 25 mg/kg.** A leachability ASCTL was derived using the formula presented in Figure 8 of Chapter 62-777, FAC. The equation is shown in Figure 2 and inputs are listed in Table 1. **The ASCTL for leachability to groundwater is 0.01 mg/kg** (based on an alternative groundwater cleanup target level of 0.1 µg/L provided to you in a letter dated April 12, 2017).

As with the PFOA and PFOS alternative groundwater cleanup target levels (AGCTLs) provided to you previously, these ASCTLs have been calculated using default equations and exposure assumptions from Chapter 62-777, F.A.C. (the ASCTLs also include updated exposure assumptions from OSWER Directive 9200.1-120). Recently, the USEPA and a number of states have modified their calculation of PFOA and PFOS criteria based upon the critical effects, which are developmental in nature, and/or the availability of serum concentration data for these chemicals. For example, the USEPA Health Advisories for PFOA and PFOS in drinking water are based upon a water consumption rate for a lactating woman to protect the breast fed infant rather than a standard adult drinking water consumption rate. This higher rate of consumption leads to a lower acceptable drinking water concentration (0.07 µg/L rather than 0.1 µg/L calculated with Chapter 62-777 F.A.C. assumptions). New Jersey and Minnesota have both used serum concentration data rather than the USEPA oral reference dose to derive acceptable concentrations of PFOA and PFOS in drinking water that are lower than the USEPA Health Advisories. The Minnesota approach specifically targets serum concentrations in the breast fed infant. Other than a general protection of children when developing SCTLs, Florida has not typically tailored calculation of cleanup target levels (CTLs) to address sensitive life stages when they have been identified. With increased attention to the issue of sensitive life stages in the context of PFOA and PFOS exposure, the Florida Department of Environmental

Protection (FDEP) may want to consider as a general matter when and to what extent sensitive life stages should be addressed in CTL development.

Please let us know if you have any questions regarding the development of these ASCTLs.

Sincerely,

Leah D. Stuchal, Ph.D.

Stephen M. Roberts, Ph.D.

References:

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USEPA (2014) *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors, OSWER Directive 9200.1-200.* United States Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C.

USEPA (2016a) *Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA).* United States Environmental Protection Agency, Office of Water, Washington, DC.

USEPA (2016b) *Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS).* United States Environmental Protection Agency, Office of Water, Washington, DC.

Wambaugh, J.F., R.W. Setzer, A.M. Pitruzzello, J. Liu, D.M. Reif, N.C. Kleinstreuer, N. Ching, Y. Wang, N. Sipes, M. Martin, K. Das, J.C. DeWitt, M. Strynar, R. Judson, K.A. Houck, and C. Lau (2013) Dosimetric anchoring of in vivo and in vitro studies for perfluorooctanoate and perfluorooctanesulfonate. *Toxicological Science* 136: 308-327.

White SS, Kato K, Jia L T, et al. (2009) Effects of perfluorooctanoic acid on mouse mammary gland development and differentiation resulting from cross-foster and restricted gestational exposures. *Reprodut. Toxicol.* 27: 289-298.

Wolf CJ, Fenton SE, Schmid JE, et al. (2007) Developmental toxicity of perfluorooctanoic acid in the CD-1 mouse after cross-foster and restricted gestational exposure. *Toxicol. Sci.* 95: 462-473.

Figure 1 – Equation for Developing Acceptable Soil Cleanup Target Levels for Non-Carcinogens:

$$\text{SCTL} = \frac{THI \times BW \times AT}{EF \times ED \times FC \times \left[\left(\frac{1}{RfD_o} \times IR_o \times 10^{-6} kg/mg \times RBA\right) + \left(\frac{1}{RfD_d} \times SA \times AF \times DA \times 10^{-6} kg/mg\right)\right]}$$

Figure 2 – Equation for the Determination of SCTLs Based on Leachability:

$$\text{SCTL}\ (mg/kg) = GCTL(\mu g/L) \times CF(mg/\mu g) \times DF \times \left[K_{oc} \times f_{oc} + \frac{\theta_w + \theta_a \times H'}{\rho_b}\right]$$

Table 1 - Default values for the direct contact and leachability equations

Symbol	Definition (units)	Receptor	Default
BW	Body weight (kg)	child	15
		worker	80
IR_o	Ingestion rate, oral (mg/day)	child	200
		worker	50
EF	Exposure frequency (days/yr)	child	350
		worker	250
ED	Exposure duration (years)	child	6
		worker	25
SA	Surface area exposed (cm^2/day)	child	2373
		worker	3527
AT	Averaging time (days) (non-carcinogens)	child	2190
		worker	9125
AF	Adherence factor (mg/cm^2)	child	0.2
		worker	0.12
IR_i	Inhalation rate (m^3/day)	child	8.1
		worker	20
DA	Dermal absorption (unitless) (organics)		0.1
PEF	Particulate emission factor (m^3/kg)		1.24×10^9
TR	Target risk (unitless)		1×10^{-6}
CF	Conversion factor (µg/mg)		1000
DAF	Dilution attenuation factor (unitless)		20
f_{oc}	Fraction organic carbon in soil (g/g)		0.002
Θ_ω	Water-filled soil porosity (L_{water}/L_{soil})		0.3
Θ_α	Air-filled soil porosity (L_{air}/L_{soil})		0.13
ρ_β	Dry soil bulk density (g/cm^3)		1.5
ω	Average soil moisture content (g_{water}/g_{soil})		0.2 (20%)
η	Total soil porosity (L_{pore}/L_{soil})		0.43
ρ_σ	Soil particle density (g/cm^3)		2.65
CF	Conversion factor (µg/mg)		1000

Table 2 – Chemical-specific parameters for PFOA and PFOS

Chemical-Specific	PFOA		PFOS	
Variable	Value	Source	Value	Source
RfD_o	2E-05 mg/kg-day	USEPA	2E-05 mg/kg-day	USEPA
RfD_d	2E-05 mg/kg-day	extrapolated	2E-05 mg/kg-day	extrapolated
RfD_i	2E-05 mg/kg-day	extrapolated	2E-05 mg/kg-day	extrapolated
Diffusivity in air	2.3E-02 cm^2/s	calculated	1.7E-02 cm^2/s	calculated
Diffusivity in water	5.8E-06 cm^2/s	calculated	4.2E-06 cm^2/s	calculated
Molecular weight	414.09 g/mol	HSDB	500.13 g/mol	HSDB
Density	1.792 g/cm^3	HSDB	1.25 g/cm^3	Chemicaland21
Henry's Law Constant	Not measurable	EPIWIN	Not measurable	EPIWIN
log K_{ow}	4.81	HSDB	4.49	EPIWIN
K_{oc}	655.1 L/kg	EPIWIN	2562 L/kg	EPIWIN

USEPA – United States Environmental Protection Agency
HSDB – Hazardous Substances Data Bank
EPIWIN – Estimation Programs Interface for Windows v4.1.1

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August 16, 2018

Leah J. Smith
District and Business Support Program
Division of Waste Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Calculation of an AGCTL for PFOA/PFOS protective of sensitive lifestages

Dear Ms. Smith:

We have developed an alternative groundwater cleanup target level (AGCTL) for perfluorooctanoic acid (PFOA; CAS# 335-67-1) and perfluorooctane sulfonate (PFOS; CAS# 1763-23-1) protective of sensitive lifestages/receptors. We previously developed AGCTLs for PFOA and PFOS in letters to the Florida Department of Environmental Protection (FDEP) dated April 12, 2017. These AGCTLs incorporated updated toxicity values based on the USEPA Drinking Water Health Advisories for PFOA and PFOS (USEPA, 2016a & 2016b) and updated exposure parameters for adults listed in the 2011 Exposure Factors Handbook (USEPA, 2011). At that time, we were requested to use a drinking water ingestion rate applicable to a generic adult receptor, which is the approach used in the development of groundwater cleanup target levels (GCTLs) in Chapter 62-777, F.A.C. The resulting GCTL for both PFOA and PFOS was 0.1 µg/L.

The critical effects for both of these chemicals are developmental effects. For PFOA, the critical effects are decreased ossification of pup (both sexes) proximal phalanges and accelerated preputial separation. For PFOS, the critical effect is decreased pup weight in the F_1 generation. The F_1 generation is the first generation of pups born after parental exposure. Exposure usually takes place while pups are in utero and may last through lactation and weaning. Because the critical effects are development endpoints, adverse effects can result from short-term exposure during critical periods of development. The 90th percentile drinking water ingestion rate for lactating women (0.054 L/kg-d; USEPA, 2011) is used by the USEPA in the development of their drinking water criterion due to the potential increased susceptibility from higher drinking water rates during pregnancy and lactation (USEPA 2016a & 2016b). From a toxicological standpoint, it is more appropriate to use a drinking water ingestion rate applicable to the most sensitive lifestage/receptor in the development of a cleanup target level, than a default drinking water rate for an adult.

At your request, we have calculated AGCTLs for PFOA and PFOS protective of sensitive lifestages based on the 90th percentile drinking water ingestion rate of 0.054 L/kg-d for lactating women. For developmental effects, AGCTLs of 0.07 µg/L were derived for both PFOA and PFOS using the formula in Figure 2 of Chapter 62-777, FAC. The AGCTLs for these two

chemicals are identical because their oral reference doses are also identical (2E-05 mg/kg-d). The calculation and exposure assumptions used are shown in Figure 1 below. Because of the similarity in adverse effects and potency of these chemicals, the USEPA recommends that, where PFOA and PFOS are co-located, the sum of the concentrations of these chemicals should be compared to the drinking water criterion (USEPA, 2016a & 2016b). Therefore, **the sum of PFOA and PFOS concentrations should be compared to the AGCTL of 0.07 µg/L.**

In deriving these AGCTLs, we note that the Agency for Toxic Substances and Disease Registry (ATSDR) has recently released for public comment a draft toxicological profile for perfluoroalkyl chemicals, including PFOA and PFOS. The proposed Minimal Risk Levels for PFOA and PFOS are an order of magnitude lower than their USEPA reference doses, prompting discussion within the scientific and regulatory community whether the USEPA reference doses should be re-visited and perhaps revised downward. We recommend following this discussion closely and making further modifications to the AGCTLs if warranted. Please let us know if you have any questions regarding the development of this AGCTL.

Sincerely,

Leah D. Stuchal, Ph.D.

Stephen M. Roberts, Ph.D.

References:

USEPA (2011) *Exposure Factors Handbook: 2011 Edition.* United States Environmental Protection Agency, National Center for Environmental Assessment, Office of Research and Development, Washington, DC.

USEPA (2016a) *Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA).* United States Environmental Protection Agency, Office of Water, Washington, DC.

USEPA (2016b) *Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS).* United States Environmental Protection Agency, Office of Water, Washington, DC.

Figure 1 – Equation for the derivation of a GCTL for PFOA and PFOS

$$GCTL\ (\mu g/L) = \frac{RfD_o \times RSC \times CF}{WC}$$

where:

Parameter	Definition	Value
GCTL	Groundwater cleanup target level (µg/L)	--
RfDo	Reference dose (mg/kg-d)	2E-05
RSC	Relative source contribution	0.2
CF	Conversion factor (µg/mg)	1000
WC	Water consumption (L/kg-d)	0.054

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January 3, 2019

Leah J. Smith
District and Business Support Program
Division of Waste Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Leachability SCTLs for PFOA and PFOS based on the alternative GCTL of 0.07 μg/L

Dear Ms. Smith:

At your request, we have calculated leachability soil cleanup target levels (SCTLs) for perfluorooctanoic acid (PFOA; CAS# 335-67-1) and perfluorooctane sulfonate (PFOS; CAS# 1763-23-1) based on the alternative groundwater cleanup target level (AGCTL) of 0.07 μg/L for the protection of sensitive lifestages. The leachability SCTLs were calculated using the equation in Figure 5 of Chapter 62-777, F.A.C. Chemical-specific properties used in the calculation were taken from our letter regarding the calculation of SCTLs for PFOA and PFOS (dated April 16, 2018. Based on these parameters, **the leachability SCTL for PFOA is 0.002 mg/kg and the leachability SCTL for PFOS is 0.007 mg/kg**. Please let us know if you have any questions regarding these calculations.

Sincerely,

Leah D. Stuchal, Ph.D.

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June 18, 2018

Leah Smith
District and Business Support Program
Division of Waste Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Provisional irrigation water risk-based screening levels for PFOA and PFOS

Dear Ms. Smith:

At your request, we calculated irrigation water screening levels (IWSLs) for perfluorooctanoic acid (PFOA; CAS# 335-67-1) and perfluorooctane sulfonate (PFOS; CAS# 1763-23-1) that are protective of human health under an irrigation scenario. In the irrigation scenario, receptors are exposed to contaminated groundwater outdoors while irrigating lawns, ornamental beds, and vegetable crops. From this scenario, separate guidance levels were developed based upon: 1) exposure for residents using contaminated water for lawn and ornamental bed irrigation, including exposure from recreational use of the lawn sprinklers by children; 2) exposure for landscape maintenance workers using contaminated water for the irrigation of lawns and ornamental beds at commercial facilities; and 3) exposure for residents who use contaminated water to grow fruit and vegetables for personal consumption.

IWSLs for these chemicals are listed in Table 1 and the chemical-specific variables used for the derivation of IWSLs are listed in Table 2. Physical-chemical properties were taken from sources in order of preference used by the United States Environmental Protection Agency (USEPA) in development of their regional screening levels (RSLs). A description of the methodology used for the calculation of these IWSLs was provided in a letter dated January 14, 2009. The equations for the calculation of IWSLs are reproduced in Figure 1 and the default assumptions are provided in Table 3. Since that time, an updated version of the Exposure Factors Handbook (EFH; USEPA, 2011) was released. The homegrown produce root and shoot ingestion rates were updated using Tables 13-60 through 13-62 of the 2011 EFH. The 90th percentile consumer only ingestion rates were averaged over the ages that correspond to the exposure period, then multiplied by the body weight of the receptor of concern. The recalculated homegrown produce ingestion rates are listed in Table 4. Updated body weight and surface area values from the EFH were used in this calculation (USEPA, 2014).

For watering of lawns and ornamentals in a residential setting, the IWSLs are: 6.7 µg/L for PFOA and 72 µg/L for PFOS. In an industrial setting, where the exposed individual might be a landscape maintenance worker, the IWSLs are somewhat higher: 750 µg/L for PFOA and 370 µg/L for PFOS. Because PFOS is more volatile than PFOA (based on the estimated Henry's Law constants), PFOS results in a lower dermal exposure and higher inhalation exposure than PFOA.

Under a residential setting where dermal exposure is considered, PFOA has a lower IWSL. However, under the landscape worker scenario, only inhalation and ingestion are considered. Therefore, the increased inhalation exposure from PFOS results in a lower IWSL.

Using the Briggs model, the homegrown produce IWSL is 0.6 µg/L for PFOS. PFOA has a log Kow > 4.5. The Briggs model (Briggs, 1982), used to estimate uptake of contaminants from water into fruit and vegetables, does not produce reliable predictions for highly lipophilic chemicals with Kow values in this range. Consequently, we are unable to produce guidance levels for PFOA based on consumption of homegrown produce. From a practical standpoint, the absence of a screening value for this pathway should not be a problem. The very low water solubility limits concentrations that will be present in water for plant uptake. It is important to note that the produce IWSLs are very conservative screening values. Exceedance of the IWSL does not necessarily mean that contaminant levels in produce are a concern for human health. If the IWSL is exceeded, we recommend sampling produce to determine actual exposure concentrations.

It is important to point out that these IWSLs are based upon oral reference doses for PFOA and PFOS developed by the USEPA in 2016 as part of their effort to create drinking water health advisories for these substances (USEPA 2016a; USEPA 2016b). Reference doses for PFOA and PFOS are based upon critical studies showing adverse effects on development in mice and rats, respectively. Recently, concern has been expressed that these reference doses are not sufficiently protective, and that immunotoxicity may be a more sensitive endpoint, particularly for PFOS (see, for example, Lilienthal et al. 2017). In the short time since the USEPA health advisories were developed, several epidemiological studies have been published showing an association between PFOA and/or PFOS serum concentrations and one or more indicators of adverse effects on the immune system, providing impetus for stronger consideration of immunotoxicity when developing safe limits for PFOA and PFOS exposure. We note that the draft *Toxicological Profile for Perfluoroalkyls* recently released for public comment by the Agency for Toxic Substances and Disease Registry (ATSDR) develops a Minimal Risk Level (MRL) for PFOS based upon developmental toxicity, but divides the point of departure by an additional factor of 10 based upon concern that an MRL based on developmental toxicity alone may not be protective of adverse immune system effects. The resulting MRL (2E-06 mg/kg/day) is an order of magnitude lower than the USEPA PFOS reference dose (2E-05 mg/kg/day). For PFOA, the ATSDR considers an MRL based upon developmental toxicity to also be protective of immunotoxicity, but selection of a different critical study (with a different point of departure), along with different derivation of the human equivalent dose, also resulted in an MRL (3E-06 mg/kg/day) an order of magnitude lower than the USEPA reference dose (2E-05 mg/kg/day). Based upon these and other concerns, several states have adopted drinking water criteria for PFOA and/or PFOS that are lower than the USEPA health advisories, including Michigan, Minnesota, New Jersey, and Vermont.

Given uncertainty regarding the safe dose limit for PFOA and PFOS discussed above, the IWSLs developed here should be considered provisional and re-evaluated at appropriate intervals as new information on PFOA and PFOS toxicity and risk is published.

Please let us know if you have any questions regarding these calculations.

Sincerely,

Leah D. Stuchal, Ph.D.

Stephen M. Roberts, Ph.D.

References:

Briggs, G.G., Bromilow, R.H., and Evans, A.A. (1982) Relationships between lipophilicity and root uptake and translocation of non-ionised chemicals by barley. *Pestic. Sci.* 13, 495-504.

Lilienthal H, Dieter HH, Holzer J, Wilhelm M (2017). Recent experimental results of effects of perfluoroalkyl substances in laboratory animals — relation to current regulations and guidance. *Int. J. Hyg. Environ. Health* 220:765-775.

USEPA (2011) *Exposure Factors Handbook: 2011 Edition*. United States Environmental Protection Agency, National Center for Environmental Assessment, Office of Research and Development, Washington, DC.

USEPA (2014) *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors, OSWER Directive 9200.1-200*. United States Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C.

USEPA (2016a) *Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA)*. United States Environmental Protection Agency, Office of Water, Washington, DC.

USEPA (2016b) *Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS)*. United States Environmental Protection Agency, Office of Water, Washington, DC.

USEPA (2018) *Regional Screening Levels (RSLs) – User's Guide*. United States Environmental Protection Agency. https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide#supporting Accessed: June 11, 2018.

Table 1 – Irrigation water risk-based guidance levels for PFOA and PFOS

Chemical	Residential IWSL (µg/L)	Industrial IWSL (µg/L)	Produce IWSL (µg/L)
PFOA	6.7	750	NA 0.01
PFOS	72	370	0.6

NA - Not applicable. The Briggs plant uptake model is not applicable to chemicals with a log Kow>4.5.

Table 2 – Chemical-specific variables for PFOA and PFOS

Chemical-Specific Variable	PFOA		PFOS	
	Value	Source	Value	Source
RfD_o	2E-05 mg/kg-d	USEPA 2016a	2E-05 mg/kg-d	USEPA 2016b
RfD_d	2E-05 mg/kg-d	extrapolated	2E-05 mg/kg-d	extrapolated
RfD_i	2E-05 mg/kg-d	extrapolated	2E-05 mg/kg-d	extrapolated
log K_{ow}	6.3	PYSPROP	4.49	EPIWIN estimate
K_{oc}	4370 L/kg	EPIWIN K_{ow} estimation method	2562 L/kg	EPIWIN K_{ow} estimation method
Henry's Law constant	3.01E-05 atm-m^3/mol	PHYSPROP estimated value	0.011 atm-m^3/mol	EPIWIN bond-estimated value
K_p	0.114 cm/hr	EPIWIN estimate	0.00236 cm/hr	EPIWIN estimate

PHYSPROP – Physical Properties Database by Syracuse Research Corporation
EPIWIN – Estimation Programs Interface for Windows v4.1.1

Figure 1 – IWSL equations for non-carcinogens

Equation for the calculation of an IWSL for PFOA and PFOS:

$$IWSL = \frac{THI \times AT_{nc}}{\left[\left(\frac{EF_i \times IR_o \times ED_c}{BW_c \times RfD_o}\right) + \left(\frac{EF_i \times SA \times T_t \times K_p \times \left(1 - \frac{SE}{100}\right) \times CF \times ED_c}{BW_c \times RfD_d}\right) + \left(\frac{EF_i \times IR_{ic} \times T_t \times V_w \times \frac{SE}{100} \times ED_c}{BW_c \times V_a \times RfD_i}\right)\right]}$$

Equation for the calculation of a commercial/industrial IWSL for PFOA and PFOS:

$$IWSL = \frac{THI \times AT_{nc}}{\left[\left(\frac{EF_i \times IR_o \times ED_w}{BW_w \times RfD_o}\right) + \left(\frac{EF_i \times IR_{iw} \times T_t \times V_w \times \frac{SE}{100} \times ED_w}{BW_w \times V_a \times RfD_i}\right)\right]}$$

Calculation of an IWSL for the consumption of homegrown produce for PFOA and PFOS:

$$IWSL = \frac{THI \times AT_{nc}}{\left(\frac{EF_v \times [(RCF \times Ir_{rc}) + (SCF \times Ir_{sc})] \times \left(1 - \frac{SE}{100}\right) \times RD \times ED_c}{BW_c \times RfD_o}\right)}$$

Supporting equations:

$$SE = [7.95 \times ln(H)] + 68.17$$

$$RCF = 10^{0.77 log K_{ow} - 1.52} + 0.82$$

$$SCF = (10^{0.95 log K_{ow} - 2.05} + 0.82)\left(0.784 \times 10^{-0.434 (log K_{ow} - 1.78)^2 / 2.44}\right)$$

Table 3 – Default assumptions used in the calculation of IWSLs for PFOA and PFOS

Abbreviation	Definition	Value
AT_{nc}	Non-carcinogenic averaging time	(365 x ED) d
BW_w	Worker body weight	80 kg
BW_c	Child body weight	15 kg
CF	Correction factor	0.001 L/cm^3
ED_w	Worker exposure duration	25 y
ED_c	Child exposure duration	6 y
EF_i	Irrigation exposure frequency	52 d/y
EF_v	Vegetable exposure frequency	350 d/y
H	Dimensionless Henry's Law constant	chemical-specific
IWSL	Irrigation water screening level	(mg/L)
IR_{ic}	Child inhalation rate	1.2 m^3/h
IR_{iw}	Worker inhalation rate	1.5 m^3/h
IR_o	Water incidental ingestion rate	0.01 L/d
Ir_{rc}	Child ingestion of root vegetables	0.024 kg/d
Ir_{sc}	Child ingestion of shoot vegetables	0.131 kg/d
K_{oc}	Octanol-carbon partition coefficient	chemical specific (L/kg)
K_{ow}	Octanol-water partition coefficient	chemical-specific
K_p	Permeability coefficient	chemical-specific (cm/h)
RCF	Root concentration factor	chemical-specific (L/kg)
RD	Rainfall dilution	0.5
RfD_d	Dermal reference dose	chemical-specific (mg/kg-d)
RfD_i	Inhalation reference Dose	chemical-specific (mg/kg-d)
RfD_o	Oral reference dose	chemical-specific (mg/kg-d)
SA	Child surface area	6378 cm^2
SCF	Shoot concentration factor	chemical-specific (L/kg)
SE	Water-to-air chemical stripping efficiency	chemical-specific
THI	Target hazard index	1
TR	Target cancer risk	1.00E-06
T_t	Irrigation time	0.483 h/d
V_a	Volume of air for volatilization	31320 m^3
V_w	Volume of water used	1450 L

Table 4 – Updated homegrown produce ingestion rate (IR) assumptions based on the 2011 Exposure Factors Handbook

Receptor	IRroot (g/d)	IRshoot (g/d)
Child	0.024	0.131
Aggregate Resident	0.066	0.281

White Paper

Development of Surface Water Screening Levels for PFOA and PFOS Based on the Protection of Human Health Using Probabilistic Risk Assessment

Prepared for the District and Business Support Program
Florida Department of Environmental Protection

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This white paper develops surface water screening levels for perfluorooctanoic acid (PFOA; CAS# 335-67-1) and perfluorooctane sulfonate (PFOS; CAS# 1763-23-1) protective of human health using probabilistic risk assessment (PRA). These screening levels are based on fish and shellfish ingestion pathways. PFOA and PFOS are manmade chemicals that belong to a group of thousands of chemicals known as perfluoroalkyl substances (PFAS). PFASs are water- and lipid-resistant. They are used as waterproofing and stain-resistant coatings for carpets, leather, textiles, furniture, and packaging materials. They are also used in fire-fighting foam and are added to aviation fluids to decrease flammability. PFOA and PFOS degrade slowly and are very persistent in the environment and the human body (USEPA, 2016a; USEPA, 2016b). The PFOA and PFOS present in surface water bioconcentrates and bioaccumulates into fish and shellfish that are consumed by local populations.

The following sections describe the technical basis for the proposed surface water screening levels.

Equation and assumptions

We calculated surface water screening levels protective of fish and shellfish consumption using a modified equation from the U.S. Environmental Protection Agency (USEPA) for the calculation of fish consumption limits based on concentrations of contaminants in fish tissue (USEPA, 2000a). The equation for non-carcinogens was used, modified by removing the drinking water intake component.

$$SWSL\ (\mu g/L) = \frac{RfD \times RSC \times BW \times CF}{\sum_{i=2}^{4}(FI_i \times BAF_i)}$$

Where:
SWSL = surface water screening level (μg/L)
RfD = oral reference dose (mg/kg-d)
RSC = relative source contribution
BW = body weight (kg)
CF = correction factor, 1000 μg/mg
FI_i = freshwater and estuarine finfish and shellfish consumption rate for aquatic trophic levels 2, 3, and 4 (kg/d)
BAF_i = bioaccumulation factor for aquatic trophic levels (TLs) 2, 3, and 4 (L/kg)
$\sum_{i=2}^{4}$ = summation of values for aquatic TLs, where the letter i stands for the TLs, starting with TL2 and continuing to TL4

For the PRA, body weight and freshwater and estuarine finfish and shellfish consumption rate (fish consumption rate) were chosen as distributions. Point values were selected for the other exposure parameters. This is identical to the PRA method proposed for the surface water standards in Chapter 62-302, F.A.C. (FDEP, 2016). The point value parameters are listed in Table 1 and the distributions for fish ingestion are provided in Table 2. Body weight was defined as a lognormal distribution with a mean of 79.96 kg and a standard deviation of 20.73 kg (USEPA, 2011). Figures showing the distributions for body weight and fish ingestion are included in Appendix A.

Table 1 – Point value parameters used in the derivation of surface water screening levels for PFOA and PFOS

Parameter	PFOA	PFOS	Source
Reference dose (mg/kg-d)	2E-05	2E-05	USEPA, 2016a USEPA, 2016b
Relative source contribution	0.6	0.6	CEHT, 2020
Bioaccumulation factor TL2 (L/kg)	35	937	See section on bioaccumulation factor
Bioaccumulation factor TL3 (L/kg)	71	2959	See section on bioaccumulation factor
Bioaccumulation factor TL4 (L/kg)	161	6304	See section on bioaccumulation factor

Table 2 – Fish ingestion lognormal distributions used in the PRA for the derivation of surface water screening levels for PFOA and PFOS

Trophic Level	Statistic	Atlantic (g/d)	Gulf (g/d)	Inland South (g/d)
2	Mean	4.9	4.2	3.1
	95th Percentile	16.4	14.6	11.3
3	Mean	5.4	5.1	3.7
	95th Percentile	16.6	16.4	11.9
4	Mean	2.6	2.5	2.8
	50th Percentile	0.8	0.7	NA
	97th Percentile	NA	NA	15.8

The fish ingestion distributions were derived from USEPA, 2014, Appendix E, Tables E-13, E-14, and E-15; NA – not applicable. This statistic was not used to define the distribution.

Reference Dose

The USEPA has developed reference doses for PFOA and PFOS in order to create drinking water Health Advisory Levels for these compounds. FDEP has used these reference doses for the calculation of alternative groundwater cleanup target levels (GCTLs) and soil cleanup target levels (SCTLs) for PFOA and PFOS (See letters to the FDEP dated April 16, 2018 and August 16, 2018 for details regarding the derivation of those screening levels). For consistency, the same RfD values are used in the surface water calculation, i.e., an oral reference dose (RfD) of 2E-05 mg/kg-d for both PFOA and PFOS.

We are aware that there is a lack of consistency among federal and state agencies in the derivation of safe limits for oral exposure to these substances. The Agency for Toxic Substances and Disease Registry (ATSDR) released a draft toxicity profile for PFAS, including PFOA and PFOS. The proposed Minimal Risk Levels (MRLs; analogous to RfDs) are an order of magnitude lower than the USEPA RfDs. This draft document received extensive public comment and has not yet been finalized. Additionally, North Carolina, Texas, Maine, Minnesota, and New Jersey have developed toxicity values for PFOA and PFOS based on

differing endpoints and/or uncertainty factors. This results in different toxicity values than were proposed by the USEPA and ATSDR. California has also derived slope factors for PFOA and PFOS based on the development of pancreatic and liver tumors in male rats (CalEPA, 2019). The potential toxicity of PFOA and PFOS is a subject of active research, and the data available are rapidly evolving. Thus, while the USEPA RfD values are used for the surface water screening levels proposed here, we recommend re-visiting these screening levels as new information develops. Use of toxicity values developed based upon other endpoints, including cancer, instead of the USEPA RfDs will result in different screening level estimates that may be lower than those calculated here.

Body Weight

The Exposure Factors Handbook recommends using the body weight distributions calculated by Portier et al., (2007) for probabilistic risk assessment. For this analysis, body weight was defined as a lognormal distribution with a mean of 79.96 kg and a standard deviation of 20.73 kg (USEPA, 2011). This distribution represents the National Health and Nutrition Examination Survey (NHANES) IV estimated body weights for 18 to 65-year-old males and females. It was not truncated for the risk assessment. This body weight distribution was also used in the FDEP (2016) technical support document for the derivation of surface water standards.

Relative Source Contribution

This assessment uses the USEPA relative source contribution (RSC) values of 0.6 (60%) for both PFOA and PFOS. These chemical-specific RSCs for PFOA and PFOS were derived using the USEPA Exposure Decision Tree methodology (USEPA, 2000b), as explained in the companion white paper, "*Determination of Relative Source Contribution Values for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) in Support of Development of Florida Surface Water Screening Levels*" (CEHT, April 2020). As described in this document, there are several potential sources for PFOA and PFOS identified in the literature, of which drinking water, diet, consumer products, and indoor air and dust may be important. RSC values were derived using the percentage method, taking into account exposure from drinking water consistent with current FDEP screening levels, dietary exposure, and potential exposure to other sources combined. From this analysis, 60% of the intake corresponding to the RfDs for PFOA and PFOS were allocated to surface water exposure in the form of consumption of fish and shellfish.

Finfish and Shellfish Consumption Rate

No current Florida-specific fish consumption studies are available. The Degner et al. (1994) fish consumption study in Florida was used previously to develop fish consumption rates for Chapter 62-302, F.A.C. It also includes Florida-specific data on shellfish consumption for the general population. However, it is dated and may not represent current fish consumption rates. Therefore, we used NHANES 2003-2010 fish consumption data. The NHANES data are presented based on age, gender, and geographic region. The USEPA document summarizing the NHANES fish and shellfish consumption data presents several consumer categories that may be relevant to fish consumption in Florida (USEPA, 2014). However, none are specific to Florida. Based on the differences in fish and shellfish consumption rates for each geographic region in the U.S., these national data may not be appropriate for Florida. Regional data applicable to Florida include the South, Gulf of Mexico coastal counties, and Atlantic coastal counties. The FDEP determined that the combination of these regions provide the best

estimate for a fish consumption rate for Floridians. They calculated that 44.8% of the Florida population resides within the Atlantic coastal counties, 31.6% reside in the Gulf of Mexico coastal counties, and 23.6% reside in the South geographic region (FDEP, 2016).

The USEPA document summarizing the NHANES fish consumption data also includes estimates of fish consumption by trophic level for each region. We used fit statistics to describe lognormal distributions for the consumption rates in Tables E-13, E-14, and E-15 of that document (Table 2). These statistics represent the total freshwater and estuarine finfish and shellfish consumption rates for adults.

Bioaccumulation Factor

Bioaccumulation factors (BAFs) for PFOA and PFOS from the literature are listed in Appendix Tables B1 and B2. Studies that included data on bioaccumulation in the muscle tissue (e.g., fillet) were utilized to calculate the freshwater BAFs. These studies include fish not present in Florida (e.g., rainbow trout) and fish not usually consumed (e.g., minnows, whitebait). The BAFs for these fish were used to calculate a freshwater BAF for PFOA and PFOS because bioaccumulation data in fish and shellfish are limited. By including all of the data available, it provides a better estimate of the BAF.

Bioaccumulation factors for the derivation of human health surface water criteria were calculated based on a modified version of the USEPA framework for deriving BAFs (USEPA, 2016c). Based on the USEPA proposed framework, we utilized field BAFs to calculate baseline BAFs for PFOA and PFOS. Field BAFs are the preferred source for calculating BAFs for nonionic organic chemicals. Typically, in this methodology, a baseline BAF is calculated based on the field BAF, the concentration of particulate organic carbon (POC) in the water, the concentration of dissolved organic carbon (DOC) in the water, the chemical-specific n-octanol-water partition coefficient (Kow), and the fraction of finfish and shellfish tissue that is lipid. However, for the purposes of this assessment, the field BAFs were used as the baseline BAFs. The reasoning for this includes:

1. The POC and DOC were not known for the majority of the BAF studies. Calculation of the fraction of chemical in water that is freely dissolved would require assumptions regarding the amount of dissolved and particulate carbon. Although national averages may be used as defaults, the majority of studies took place outside the United States and default POC and DOC values for these countries are unknown.

2. The K_{ow} has not been measured for PFOA and PFOS. Calculation of a baseline BAF would require a K_{ow} based on physical/chemical property estimation software (e.g., EPI Suite).

3. Unlike most non-ionic organics, PFAS are not distributed to the lipid. Therefore, use of a lipid adjustment to derive a baseline BAF is inappropriate for PFAS chemicals.

Bioaccumulation factors were derived for each trophic level (TL). To calculate a BAF, the fish and shellfish from the bioaccumulation studies were assigned to trophic levels (Table B3). A bioaccumulation factor was calculated for each trophic level for both PFOA and PFOS. Individual field BAFs were combined as the geometric mean for each species. The baseline TL-specific BAF was calculated as the geometric mean of all species geometric means (Table 3). These calculations are presented in Tables B4 though B9. The Minnesota study (MPCA,

2007b) combined bluegill and white bass in their river bioaccumulation study. Because the BAFs were listed as geometric means (MPCA, 2007b), they were retained in the assessment.

Table 3 – Trophic level 2, 3, and 4 geometric mean bioaccumulation factors for PFOA and PFOS

Chemical	Trophic Level	BAF
PFOA	2	35
	3	71
	4	161
PFOS	2	937
	3	2959
	4	6304

Method for the probabilistic risk assessment

PFOA and PFOS surface water screening levels were calculated using PRA. In this analysis, body weight and fish consumption were defined as distributions and the other parameters were entered as point values. The surface water screening levels were derived in using 100,000 iterations of a Monte Carlo analysis in Crystal Ball software (Version 11.1) with a seed of 123457. Each iteration represents a hypothetical person in the population. For each iteration, the software chose a body weight from the distribution. Then, a region was chosen based on the percentage of Floridians who live in each area. Once the region was identified, the software chose a region-specific fish consumption rate for trophic levels 2, 3, and 4 (Table 2). The fish consumption rates for each trophic level were multiplied by their respective BAFs (Table 3) before being summed. There was no correlation between the fish consumption rates for the three TLs. We could not locate any data suggesting that a high-end consumer of fish and shellfish in TL2 would also be a high-end consumer of fish and shellfish in the other TLs. Using the equation provided in this document, the software generated a distribution of surface water concentrations equivalent to a hazard index of 1 for each iteration. The PFOA and PFOS screening levels were set at the 10^{th} percentile of this distribution. To check these values, the equation was rearranged and solved to ensure that the hazard index of 1 was not exceeded at the 90^{th} percentile (Chapter 62-780, F.A.C.).

Screening levels

Surface water screening levels for PFOA and PFOS were calculated using the equations and assumptions described in this document. The surface water screening level for PFOA is 0.5 μg/L and for PFOS is 0.01 μg/L (Table 4). The distributions are presented in Figures 1 and 2. We also calculated the hazard index for the screening levels to insure it was below 1 at the 90^{th} percentile. The hazard index for PFOA at a surface water screening level of 0.5 μg/L is 1 and the hazard index for PFOS at a screening level of 0.01 μg/L is 0.8 at the 90^{th} percentile. The screening level for PFOS at a hazard index of 1 is 0.012 μg/L. This was rounded to 1 significant figure, which decreased the hazard index at the 90^{th} percentile. The Crystal Ball output for the surface water screening level distributions and the distributions for the hazard index are presented in Appendix C.

Table 4 – Surface water screening levels for freshwater and estuarine finfish and shellfish for PFOA and PFOS

Surface Water Screening Levels (μg/L)	PFOA	PFOS
Freshwater and estuarine finfish and shellfish	0.5	0.01

Screening levels were rounded to one significant figure

Figure 1 – Surface water screening level distribution for PFOA

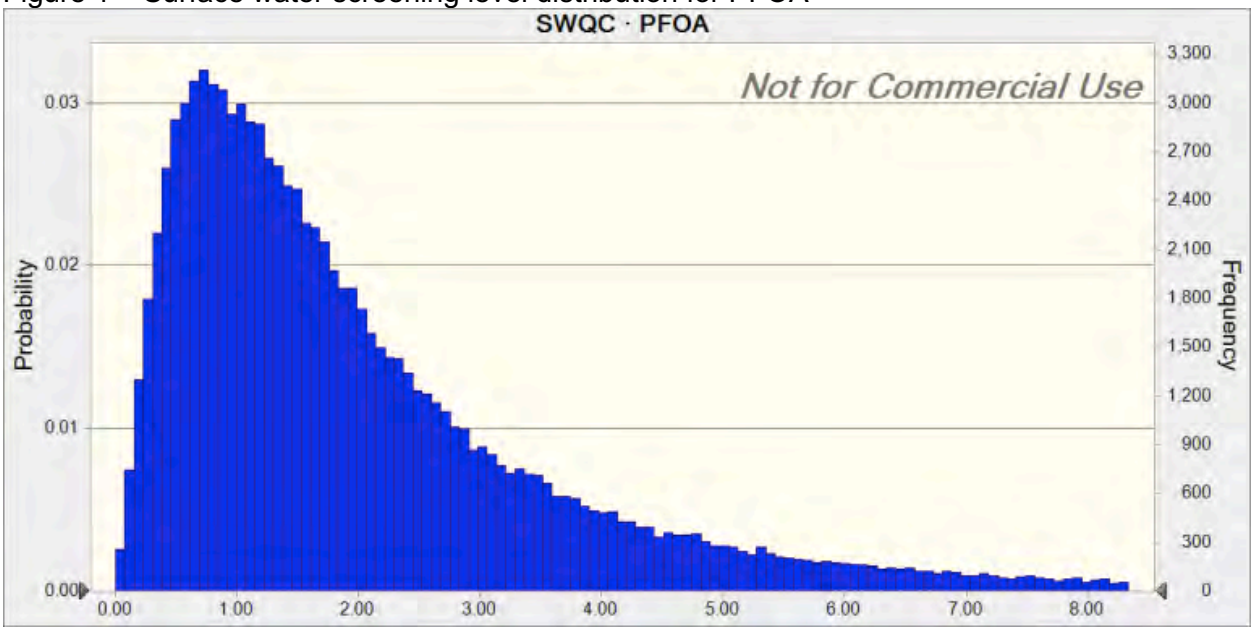
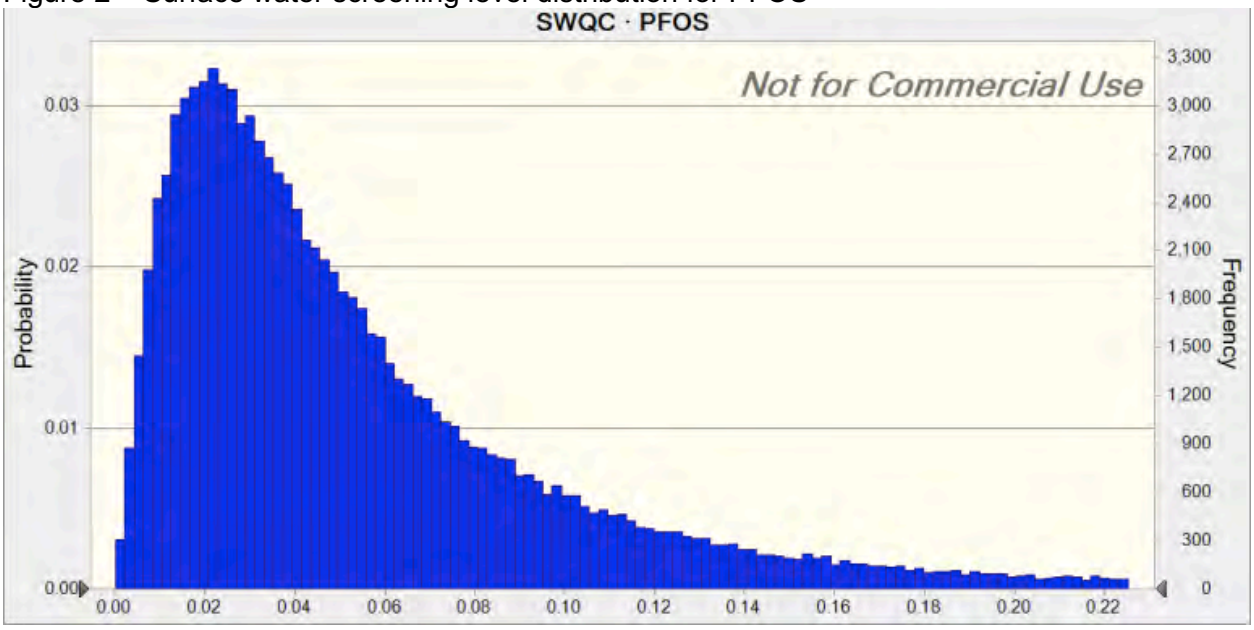


Figure 2 – Surface water screening level distribution for PFOS



The USEPA drinking water Health Advisory Levels (HALs) for PFOA and PFOS are each 0.07 µg/L. The USEPA recommends that the combined concentrations of PFOA and PFOS in drinking water be compared with this limit, based upon an assumption that their effects are additive. The rationale for this assumption is that their RfDs are derived for the same toxic endpoint (developmental effects) and that, although the mode of action for these effects has not been established, it is likely to be the same for these closely related chemicals. The fact that their individual Health Advisory Levels are identical makes it relatively straightforward to implement this recommendation. While the same argument could be made that the surface water screening levels for PFOA and PFOS should also address combined effects, this is more difficult because of the large difference in their values, approximately an order of magnitude. Picking the lower, higher, or average of these values for comparison with combined PFOA and PFOS concentrations could result in gross over- or underestimation of risk, depending on the individual PFOA and PFOS concentrations. As a practical matter, comparison of PFOA and PFOS concentrations in surface water with the screening levels should be made individually.

Surface water screening levels in Florida and other states

Table 5 – State surface water screening levels

State	PFOA (µg/L)	PFOS (µg/L)
Florida	0.5	0.01
Minnesota (lakes)	1.6	0.006
Minnesota (rivers)	2.7	0.007
Michigan	12	0.012
Alaska	0.07*	0.07*

* - Concentrations of PFOA and PFOS are summed before being compared to the criterion.

Minnesota has also developed freshwater surface water criteria based on fish consumption for the protection of human health. These criteria are based on site-specific bioaccumulation factors. For PFOA, the Minnesota surface water criteria include 1.6 µg/L for lakes and 2.7 µg/L for rivers (MPCA, 2017; Table 5). These criteria are higher than our proposed screening level of 0.5 µg/L. The difference in values is due to the use of a higher oral reference dose (1.4E-04 mg/kg-d) and slightly lower bioaccumulation factor (40 L/kg for lakes and 24 L/kg for rivers). Recently, the Minnesota Department of Health (MDOH) updated their reference doses for PFOA and PFOS (MDOH, 2019a; MDOH, 2019b). The updated reference dose for PFOA is 1.8E-05 mg/kg-d (MDOH, 2019a). Using this reference dose in their surface water equation would decrease the Minnesota criterion by approximately one order of magnitude. These updated values would be slightly lower than our proposed screening level of 0.5 µg/L.

The screening level for PFOS is lower than PFOA due to the large bioaccumulation factor for PFOS. For PFOS, the Minnesota surface water criteria include 0.006 µg/L for lakes 0.007 µg/L for rivers (MPCA, 2017). Our proposed PFOS screening level of 0.01 µg/L is similar to these two criteria. This is due to the use of a similar reference dose (8E-05 mg/kg-d) and bioaccumulation factors (6,087 L/kg for lakes and 3,877 for rivers) (MPCA, 2010a; MPCA, 2010b). The MDOH updated reference dose for PFOS is 3.1E-06 mg/kg-d (MDOH, 2019b). Use of this reference dose would lower the PFOS criteria to less than 0.001 µg/L, which is an order of magnitude below our proposed screening level.

The Michigan Department of Environmental Quality (MDEQ) criteria for PFOA and PFOS are human health-based non-cancer values for non-drinking surface water sources.

They were derived based on Michigan Rule 57 for toxic substances (MDEQ, 2020; Table 5). Their surface water screening level for PFOA is an order of magnitude greater than the screening level of 0.5 μg/L proposed in this document. The Michigan surface water screening level for PFOS is equivalent to our proposed PFOS surface water value of 0.01 μg/L. The Alaska Department of Environmental Conservation uses a criterion of 0.07 μg/L for PFAS in surface water used as drinking water (ADEC, 2019; Table 5). The criterion includes the sum of PFOA and PFOS concentrations. It is based on the USEPA drinking water HAL.

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Appendix A

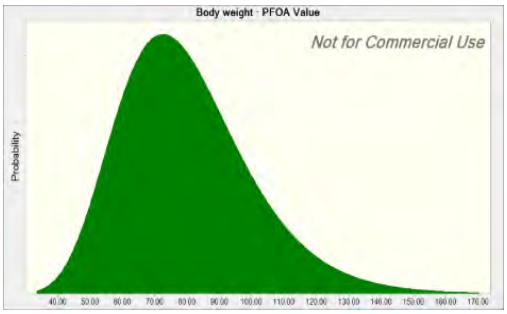
Crystal Ball Report - Assumptions

Assumptions

Assumption: Body weight · PFOA Value

Lognormal distribution with parameters:

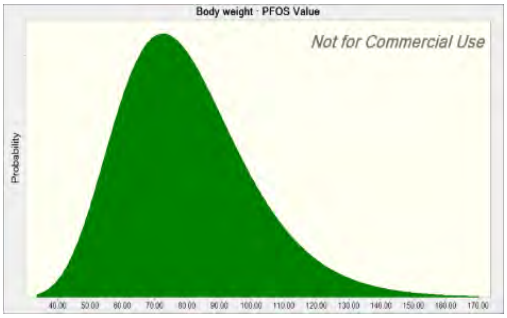
Location	0.00
Mean	79.96
Std. Dev.	20.73



Assumption: Body weight · PFOS Value

Lognormal distribution with parameters:

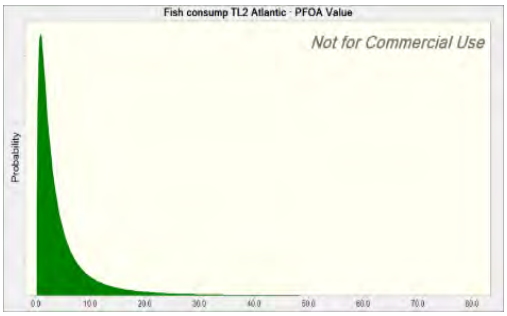
Location	0.00
Mean	79.96
Std. Dev.	20.73



Assumption: Fish consump TL2 Atlantic · PFOA Value

Lognormal distribution with parameters:

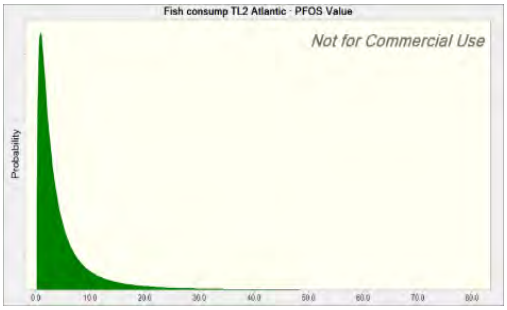
Location	0.0
Mean	4.9
95%	16.4



Assumption: Fish consump TL2 Atlantic · PFOS Value

Lognormal distribution with parameters:

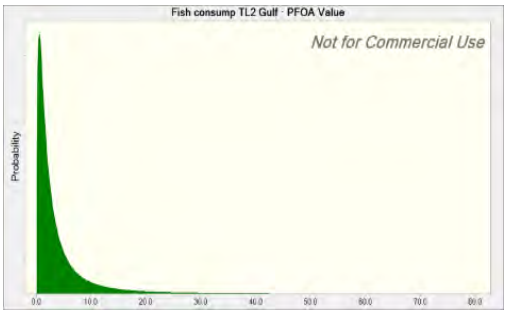
Location	0.0
Mean	4.9
95%	16.4



Assumption: Fish consump TL2 Gulf · PFOA Value

Lognormal distribution with parameters:

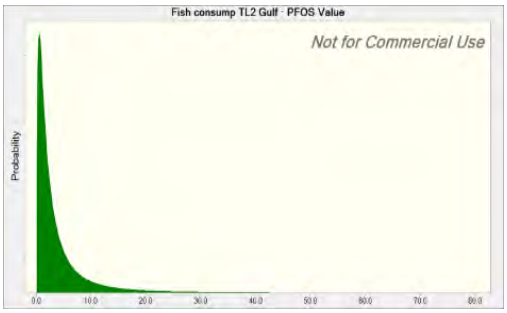
Location	0.0
Mean	4.2
95%	14.6



Assumption: Fish consump TL2 Gulf · PFOS Value

Lognormal distribution with parameters:

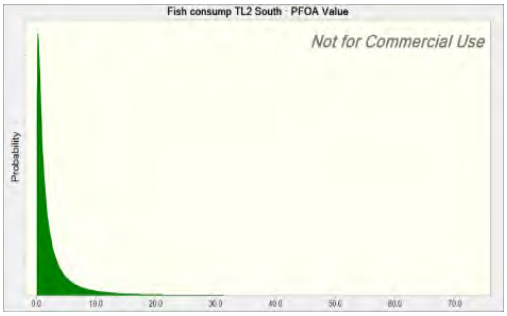
Location	0.0
Mean	4.2
95%	14.6



Assumption: Fish consump TL2 South · PFOA Value

Lognormal distribution with parameters:

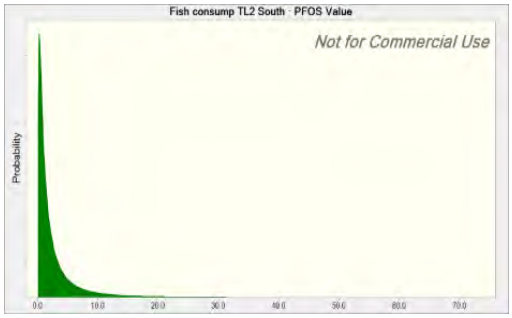
Location	0.0
Mean	3.1
95%	11.3



Assumption: Fish consump TL2 South · PFOS Value

Lognormal distribution with parameters:

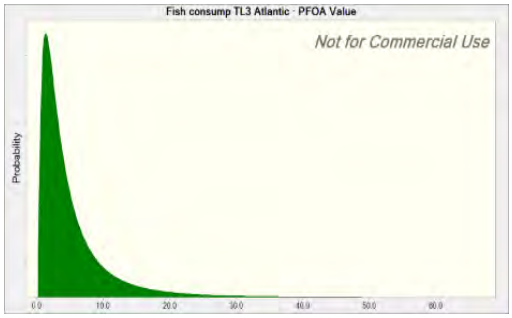
Location	0.0
Mean	3.1
95%	11.3



Assumption: Fish consump TL3 Atlantic · PFOA Value

Lognormal distribution with parameters:

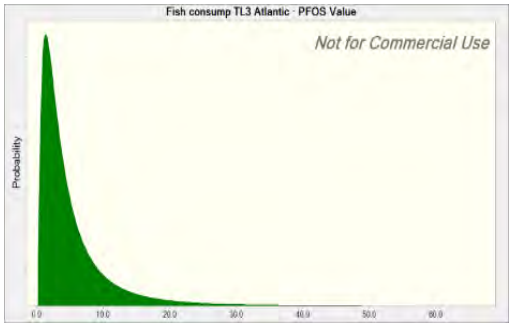
Location	0.0
Mean	5.4
95%	16.6



Assumption: Fish consump TL3 Atlantic · PFOS Value

Lognormal distribution with parameters:

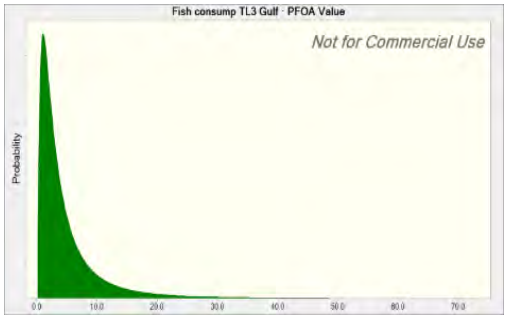
Location	0.0
Mean	5.4
95%	16.6



Assumption: Fish consump TL3 Gulf · PFOA Value

Lognormal distribution with parameters:

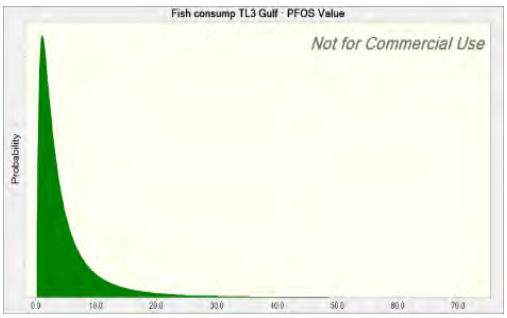
Location	0.0
Mean	5.1
95%	16.4



Assumption: Fish consump TL3 Gulf · PFOS Value

Lognormal distribution with parameters:

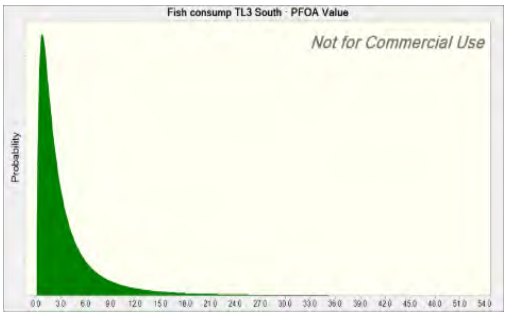
Location	0.0
Mean	5.1
95%	16.4



Assumption: Fish consump TL3 South · PFOA Value

Lognormal distribution with parameters:

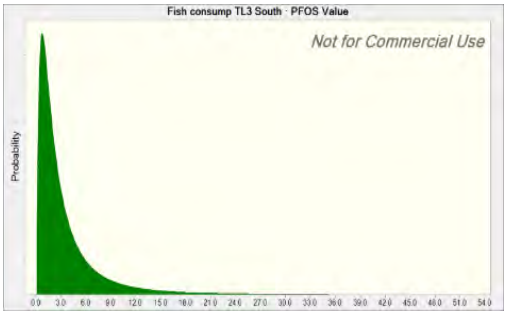
Location	0.0
Mean	3.7
95%	11.9



Assumption: Fish consump TL3 South · PFOS Value

Lognormal distribution with parameters:

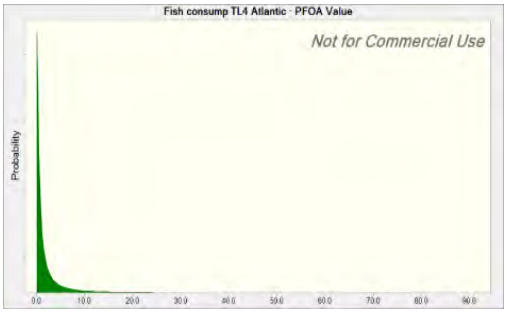
Location	0.0
Mean	3.7
95%	11.9



Assumption: Fish consump TL4 Atlantic · PFOA Value

Lognormal distribution with parameters:

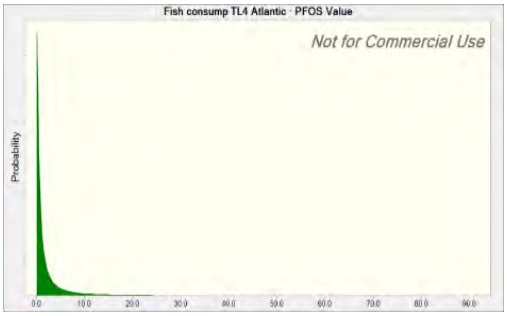
Location	0.0
Mean	2.6
50%	0.8



Assumption: Fish consump TL4 Atlantic · PFOS Value

Lognormal distribution with parameters:

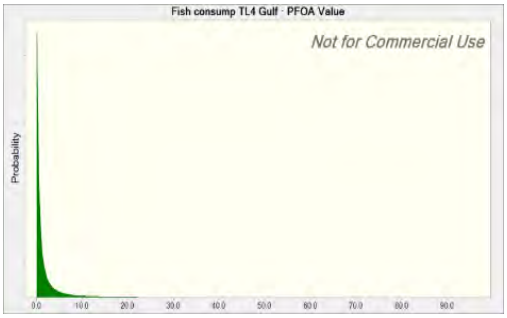
Location	0.0
Mean	2.6
50%	0.8



Assumption: Fish consump TL4 Gulf · PFOA Value

Lognormal distribution with parameters:

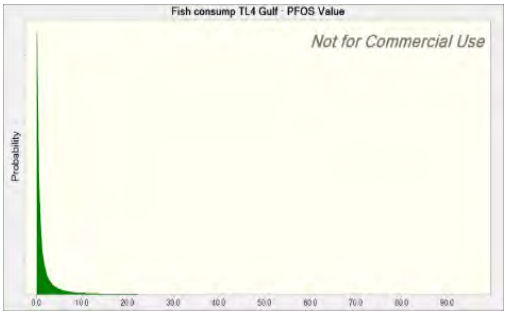
Location	0.0
Mean	2.5
50%	0.7



Assumption: Fish consump TL4 Gulf · PFOS Value

Lognormal distribution with parameters:

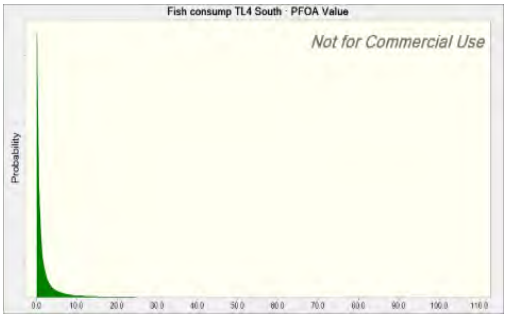
Location	0.0
Mean	2.5
50%	0.7



Assumption: Fish consump TL4 South · PFOA Value

Lognormal distribution with parameters:

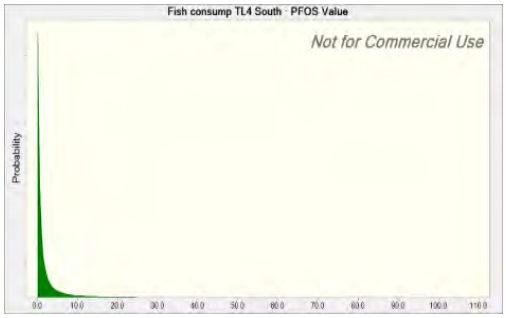
Location	0.0
Mean	2.8
97%	15.8



Assumption: Fish consump TL4 South · PFOS Value

Lognormal distribution with parameters:

Location	0.0
Mean	2.8
97%	15.8



Appendix B

Table B1 – Bioaccumulation factors for PFOA in fish fillets and shellfish tissue

Species	Place	Fresh or Marine	Exposure	Tissue	BAF	Study
Common carp	laboratory	Fresh	static 28d, 28d flow through depuration	muscle	3.85	Fang et al, 2016
Minnow	Taihu Lake, China	Fresh	wild caught	muscle	112.5	Fang et al., 2014
Silver carp	Taihu Lake, China	Fresh	wild caught	muscle	11.8	Fang et al., 2014
Whitebait	Taihu Lake, China	Fresh	wild caught	muscle	147	Fang et al., 2014
Crucian carp	Taihu Lake, China	Fresh	wild caught	muscle	81	Fang et al., 2014
Lake saury	Taihu Lake, China	Fresh	wild caught	muscle	284	Fang et al., 2014
Common carp	Taihu Lake, China	Fresh	wild caught	muscle	177	Fang et al., 2014
Mongolian culter	Taihu Lake, China	Fresh	wild caught	muscle	161	Fang et al., 2014
Mud fish	Taihu Lake, China	Fresh	wild caught	muscle	163	Fang et al., 2014
Chinese bitterling	Taihu Lake, China	Fresh	wild caught	muscle	87.9	Fang et al., 2014
Goby	Taihu Lake, China	Fresh	wild caught	muscle	37.7	Fang et al., 2014
Common carp	China	Fresh	wild caught	muscle	182	Zhou et al., 2012
White shrimp	Taihu Lake, China	Fresh	wild caught	soft part	12.5	Fang et al., 2014
Pearl mussel	Taihu Lake, China	Fresh	wild caught	soft part	39.7	Fang et al., 2014

BAF – bioaccumulation factor

Table B2 – Bioaccumulation factors for PFOS in fish fillets and shellfish tissue

Species	Place	Fresh or Marine	Exposure	Tissue	BAF (L/kg)	Study
Bluegill	Lake Calhoun, MN	Fresh	wild caught	fillet	2802	MPCA, 2007b
Bluegill and white bass	Mississippi River, MN	Fresh	wild caught	fillet	5737	MPCA, 2007b
Common carp	laboratory	Fresh	static 28d, 28d flow through depuration	muscle	9500	Fang et al, 2016
Minnow	Taihu Lake, China	Fresh	wild caught	muscle	3212	Fang et al., 2014
Silver carp	Taihu Lake, China	Fresh	wild caught	muscle	832	Fang et al., 2014
Whitebait	Taihu Lake, China	Fresh	wild caught	muscle	1350	Fang et al., 2014
Crucian carp	Taihu Lake, China	Fresh	wild caught	muscle	6898	Fang et al., 2014
Lake saury	Taihu Lake, China	Fresh	wild caught	muscle	4401	Fang et al., 2014
Common carp	Taihu Lake, China	Fresh	wild caught	muscle	3679	Fang et al., 2014
Mongolian culter	Taihu Lake, China	Fresh	wild caught	muscle	6927	Fang et al., 2014
Mud fish	Taihu Lake, China	Fresh	wild caught	muscle	4854	Fang et al., 2014
Chinese bitterling	Taihu Lake, China	Fresh	wild caught	muscle	2861	Fang et al., 2014
Goby	Taihu Lake, China	Fresh	wild caught	muscle	2876	Fang et al., 2014
Common carp	China	Fresh	wild caught	muscle	11749	Zhou et al., 2012
Taihu Lake shrimp	Taihu Lake, China	Fresh	wild caught	soft part	2161	Fang et al., 2014
White shrimp	Taihu Lake, China	Fresh	wild caught	soft part	978	Fang et al., 2014
Freshwater mussel	Taihu Lake, China	Fresh	wild caught	soft part	256	Fang et al., 2014
Pearl mussel	Taihu Lake, China	Fresh	wild caught	soft part	466	Fang et al., 2014

BAF – bioaccumulation factor

Table B3 – Trophic level weighting for fish and shellfish in the PFOA and PFOS bioaccumulation studies

Fish and shellfish	Scientific Name	Trophic Level 2 Weighting	Trophic Level 3 Weighting	Trophic Level 4 Weighting	Reference
Minnow	*Hemiculter leucisculus*	0	1	0	FishBase.org
Silver carp	*Hypophthalmichthys molitrix*	0	1	0	USEPA 2014
Whitebait	*Reganisalanx brachyrostralis*	0	1	0	FishBase.org
Crucian carp	*Carassius cuvieri*	0	1	0	USEPA 2014
Lake saury	*Coilia mystus*	0	1	0	FishBase.org
Common carp	*Cyprinus carpio*	0	1	0	USEPA 2014
Mongolian culter	*Culter mongolicus*	0	0.5	0.5	FishBase.org
Mud fish	*Misgurnus anguillicaudatus*	0	1	0	FishBase.org
Chinese bitterling	*Rhodeus sinensis*	0.5	0.5	0	FishBase.org
Goby	*Ctenogobius giurinus*	0	1	0	FishBase.org
White shrimp	*Exopalaemon sp.*	0.5	0.5	0	USEPA 2014
Pearl mussel	*Lamellibranchia sp.*	1	0	0	USEPA 2014
Bluegill	*Lepomis macrochirus*	0	1	0	FishBase.org
White bass[a]	*Morone chrysops*	0	0	1	USEPA 2014
Taihu Lake shrimp	*Macrobrachium nipponense*	0.5	0.5	0	USEPA 2014
Freshwater mussel	*Lamellibranchia sp.*	1	0	0	USEPA 2014

[a] – The white bass value is the geometric mean concentration of *Lepomis macrochirus* and *Morone chrysops*

Table B4 – Species-specific TL2 BAFs and geometric mean TL2 BAF for PFOA

Species	Scientific name	TL2 BAF
Chinese bitterling	*Rhodeus sinensis*	87.9
White shrimp	*Exopalaemon sp.*	12.5
Pearl mussel	*Lamellibranchia sp.*	39.7
	Geometric mean TL2 BAF	35

TL – trophic level
BAF – bioaccumulation factor

Table B5 – Species-specific TL3 BAFs and geometric mean TL3 BAF for PFOA

Species	Scientific name	TL3 BAF
Minnow	*Hemiculter leucisculus*	112.5
Silver carp	*Hypophthalmichthys molitrix*	11.8
Whitebait	*Reganisalanx brachyrostralis*	147
Crucian carp	*Carassius cuvieri*	81
Lake saury	*Coilia mystus*	284
Common carp	*Cyprinus carpio*	50
Mongolian culter	*Culter mongolicus*	161
Mud fish	*Misgurnus anguillicaudatus*	163
Chinese bitterling	*Rhodeus sinensis*	87.9
Goby	*Ctenogobius giurinus*	37.7
White shrimp	*Exopalaemon sp.*	12.5
	Geometric mean TL3 BAF	71

TL – trophic level
BAF – bioaccumulation factor

Table B6 – Species-specific TL4 BAFs and geometric mean TL4 BAF for PFOA

Species	Scientific name	TL4 BAF
Mongolian culter	*Culter mongolicus*	161
	Geometric mean TL4 BAF	161

TL – trophic level
BAF – bioaccumulation factor

Table B7 – Species-specific TL2 BAFs and geometric mean TL2 BAF for PFOS

Species	Scientific name	TL2 BAF
Chinese bitterling	*Rhodeus sinensis*	2861
White shrimp	*Exopalaemon sp.*	978
Pearl mussel	*Lamellibranchia sp.*	466
Taihu Lake shrimp	*Macrobrachium nipponense*	2161
Freshwater mussel	*Lamellibranchia sp.*	256
	Geometric mean TL2 BAF	937

TL – trophic level
BAF – bioaccumulation factor

Table B8 – Species-specific TL3 BAFs and geometric mean TL3 BAF for PFOS

Species	Scientific name	TL3 BAF
Minnow	*Hemiculter leucisculus*	3212
Silver carp	*Hypophthalmichthys molitrix*	832
Whitebait	*Reganisalanx brachyrostralis*	1350
Crucian carp	*Carassius cuvieri*	6898
Lake saury	*Coilia mystus*	4401
Common carp	*Cyprinus carpio*	7433
Mongolian culter	*Culter mongolicus*	6927
Mud fish	*Misgurnus anguillicaudatus*	4854
Chinese bitterling	*Rhodeus sinensis*	2861
Goby	*Ctenogobius giurinus*	2876
White shrimp	*Exopalaemon sp.*	978
Bluegill	*Lepomis macrochirus*	2802
Taihu Lake shrimp	*Macrobrachium nipponense*	2161
	Geometric mean TL3 BAF	2959

TL – trophic level
BAF – bioaccumulation factor

Table B9 – Species-specific TL4 BAFs and geometric mean TL4 BAF for PFOS

Species	Scientific name	TL4 BAF
Mongolian culter	*Culter mongolicus*	6927
White bass	*Morone chrysops*	5737
	Geometric mean TL4 BAF	6304

TL – trophic level
BAF – bioaccumulation factor

Appendix C

Crystal Ball Report - Forecasts

Run preferences:	
Number of trials run	100,000
Monte Carlo	
Seed	123457
Precision control on	
Confidence level	95.00%
Run statistics:	
Total running time (sec)	57.11
Trials/second (average)	1,751
Random numbers per sec	38,525
Crystal Ball data:	
Assumptions	22
Correlations	0
Correlation matrices	0
Decision variables	0
Forecasts	12

Forecasts

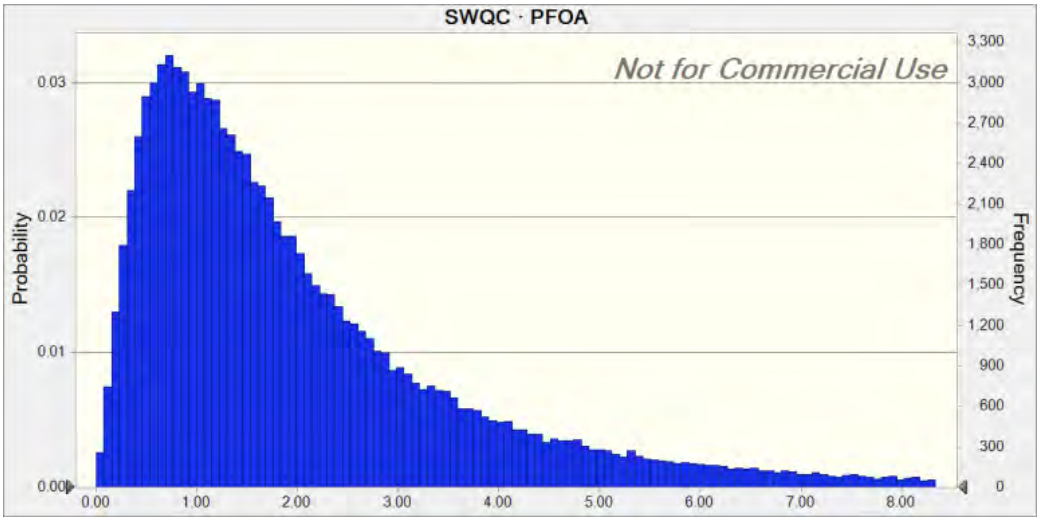
Forecast: SWQC · PFOA

Summary:

Entire range is from 0.00 to 55.36

Base case is 1.16

After 100,000 trials, the std. error of the mean is 0.01



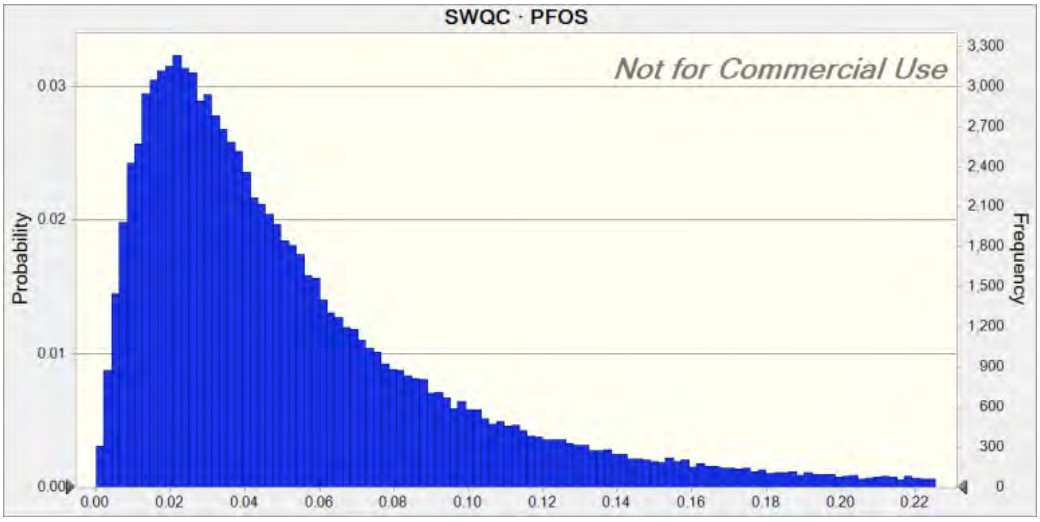
Statistics:	Forecast values
Trials	100,000
Base Case	1.16
Mean	2.19
Median	1.56
Mode	---
Standard Deviation	2.20
Variance	4.82
Skewness	3.91
Kurtosis	36.47
Coeff. of Variation	1.00
Minimum	0.00
Maximum	55.36
Range Width	55.36
Mean Std. Error	0.01

Forecast: SWQC · PFOA (cont'd)

Percentiles:	Forecast values
0%	0.00
10%	0.49
20%	0.74
30%	0.99
40%	1.26
50%	1.56
60%	1.93
70%	2.42
80%	3.15
90%	4.53
100%	55.36

Forecast: SWQC · PFOS

Summary:
Entire range is from 0.00 to 1.30
Base case is 0.03
After 100,000 trials, the std. error of the mean is 0.00



Statistics:	Forecast values
Trials	100,000
Base Case	0.03
Mean	0.06
Median	0.04
Mode	---
Standard Deviation	0.06
Variance	0.00
Skewness	3.61
Kurtosis	28.36
Coeff. of Variation	1.01
Minimum	0.00
Maximum	1.30
Range Width	1.30
Mean Std. Error	0.00

Forecast: SWQC · PFOS (cont'd)

Percentiles:	Forecast values
0%	0.00
10%	0.01
20%	0.02
30%	0.03
40%	0.03

50%	0.04
60%	0.05
70%	0.06
80%	0.09
90%	0.12
100%	1.30

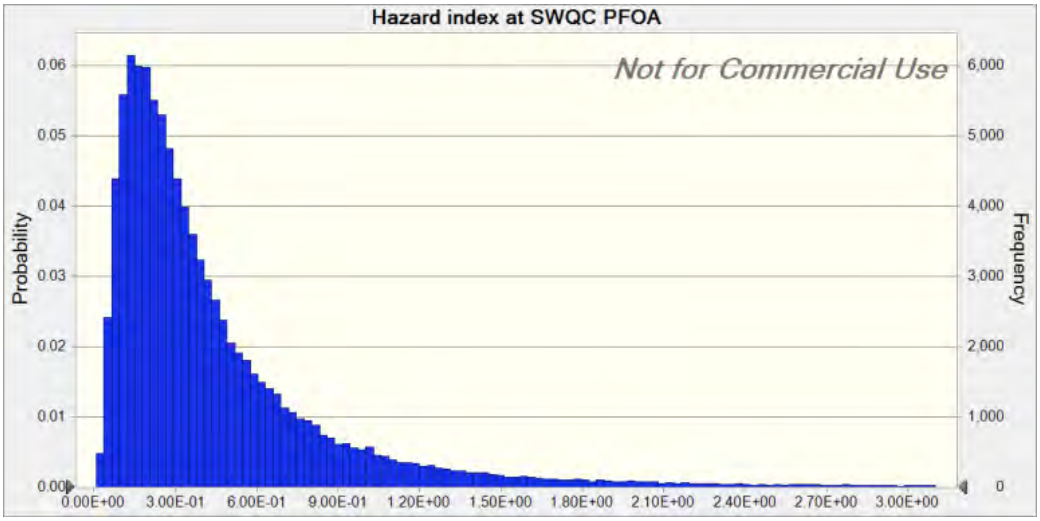
Forecast: Hazard index at SWQC PFOA

Summary:

Entire range is from 8.85E-03 to 1.30E+02

Base case is 4.21E-01

After 100,000 trials, the std. error of the mean is 2.93E-03



Statistics:	Forecast values
Trials	100,000
Base Case	4.21E-01
Mean	5.04E-01
Median	3.14E-01
Mode	---
Standard Deviation	9.28E-01
Variance	8.60E-01
Skewness	39.79
Kurtosis	4,200.66
Coeff. of Variation	1.84
Minimum	8.85E-03
Maximum	1.30E+02
Range Width	1.30E+02
Mean Std. Error	2.93E-03

Forecast: Hazard index at SWQC PFOA (cont'd)

Percentiles:	Forecast values
0%	8.85E-03
10%	1.08E-01
20%	1.55E-01
30%	2.03E-01
40%	2.54E-01
50%	3.14E-01
60%	3.90E-01
70%	4.94E-01
80%	6.61E-01
90%	9.99E-01
100%	1.30E+02

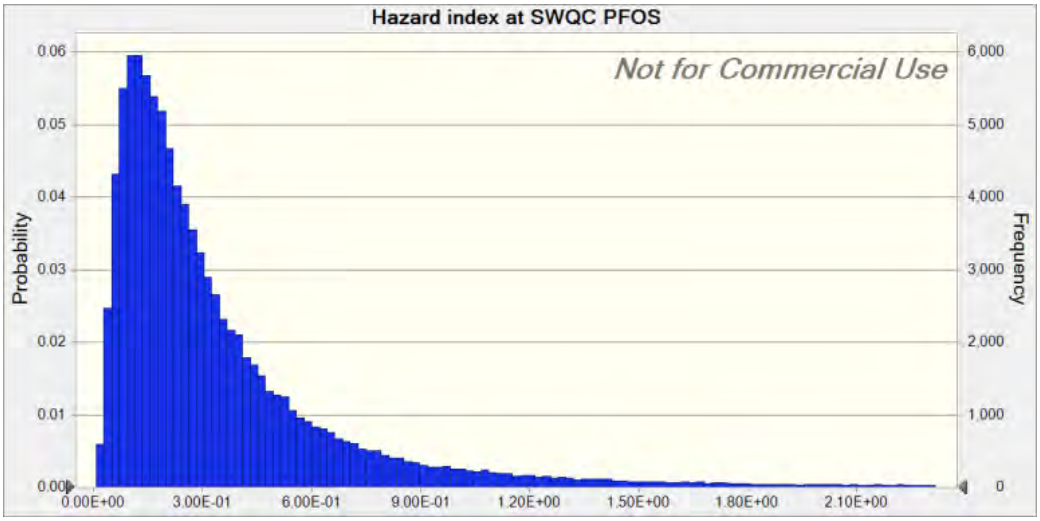
Forecast: Hazard index at SWQC PFOS

Summary:

Entire range is from 7.67E-03 to 6.68E+01

Base case is 3.28E-01

After 100,000 trials, the std. error of the mean is 2.17E-03



Statistics:	Forecast values
Trials	100,000
Base Case	3.28E-01
Mean	3.93E-01
Median	2.42E-01
Mode	---
Standard Deviation	6.87E-01
Variance	4.72E-01
Skewness	23.39

Kurtosis	1,359.36
Coeff. of Variation	1.75
Minimum	7.67E-03
Maximum	6.68E+01
Range Width	6.68E+01
Mean Std. Error	2.17E-03

Forecast: Hazard index at SWQC PFOS (cont'd)

Percentiles:	Forecast values
0%	7.67E-03
10%	8.16E-02
20%	1.18E-01
30%	1.54E-01
40%	1.94E-01
50%	2.42E-01
60%	3.01E-01
70%	3.83E-01
80%	5.11E-01
90%	7.79E-01
100%	6.68E+01

APPENDIX B
Historical Site Photos

APPENDIX C
Field Forms

Daily PFAS Sampling Checklist

Date: 3/28/22

Site Name: Farmer Florida State Fire College

Weather (*temperature/precipitation*): 59°/86° - 10% Chance of rain

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

While Sediment Sampling, Contractor trash bags were used over field boots as a precaution to prevent Cross-Contamination

Field Team Leader Name (Print): Ethan Upton

Field Team Leader Signature: Ethan Upton

Date/Time: 3/28/22 - 0940

Daily PFAS Sampling Checklist

Date: 3/29/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): 84/54° – Chance of rain 0%

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): Ethan Upton

Field Team Leader Signature: [signature]

Date/Time: 3/29/22 – 0900

Daily PFAS Sampling Checklist

Date: 3/30/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): 88°/57° - 0% Chance of rain

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- ☑ No food or drink on-site, except within staging area
- ☑ Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): Ethan Upton

Field Team Leader Signature: [signature]

Date/Time: 3/30/22 - 0935

Daily PFAS Sampling Checklist

Date: 3/31/22

Site Name: Former Florida State File College

Weather (*temperature/precipitation*): 86°/70° - Chance of rain 70%

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- ☑ No food or drink on-site, except within staging area
- ☑ Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): Ethan Upton

Field Team Leader Signature:

Date/Time: 3/31/22 – 0815

Daily PFAS Sampling Checklist

Date: 4/1/2022

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): 82°/63° - Chance of rain 10%

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- ☑ No food or drink on-site, except within staging area
- ☑ Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): Ethan Upton

Field Team Leader Signature: [signature]

Date/Time: 4/1/2022 - 0815

Daily PFAS Sampling Checklist

Date: 4/4/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): 83°/63° – 10% chance of rain

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- ☑ No food or drink on-site, except within staging area
- ☑ Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): Ethan Upton

Field Team Leader Signature: Ethan Upton

Date/Time: 4/4/22 - 0845

Daily PFAS Sampling Checklist

Date: 4/5/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): 88°/64° – Chance of rain 30%

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- ☑ No food or drink on-site, except within staging area
- ☑ Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): Ethan Upton

Field Team Leader Signature: Ethan Upton

Date/Time: 4/5/22 - 0815

Daily PFAS Sampling Checklist

Date: 4/6/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): 88°/70° – 20% Chance of rain

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): Ethan Gruton

Field Team Leader Signature: [signature]

Date/Time: 4/6/22 - 0815

Daily PFAS Sampling Checklist

Date: 4/7/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): 79/61 – 100% Chance of rain

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☐ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): Ethan Upton

Field Team Leader Signature: [signature]

Date/Time: 4/7/22 -0810

Daily PFAS Sampling Checklist

Date: 11/28/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Sunny

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [X] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- N/A [ ] During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- see note [ ] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [X] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [X] Clothing has not been recently laundered with a fabric softener
- [X] No coated HDPE suits (e.g., coated Tyvek® suits)
- [X] Field crew has not used cosmetics, moisturizers, or other related products today
- [X] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- N/A [X] Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- N/A [X] Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [X] No materials containing Teflon™, Viton™, or fluoropolymers
- [X] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [X] No plastic clipboards, binders, or spiral hard cover notebooks
- [X] No waterproof field books
- [X] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [X] No chemical (blue) ice, unless it is contained in a sealed bag
- [X] No aluminum foil
- [X] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [X] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [X] "PFAS-free" water is on-site for decontamination of field equipment
- [X] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [X] No food or drink on-site, except within staging area
- [X] Food in staging area is contained in HDPE or stainless steel container

Notes:

-treated leather were worn on-site

Field Team Leader Name (Print): James Mills

Field Team Leader Signature: James Mills

Date/Time: 11/28/22 | 0925

Daily PFAS Sampling Checklist

Date: 11/29/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Sunny

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [x] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- N/A ☐ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- see notes [x] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [x] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [x] Clothing has not been recently laundered with a fabric softener
- [x] No coated HDPE suits (e.g., coated Tyvek® suits)
- [x] Field crew has not used cosmetics, moisturizers, or other related products today
- [x] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- N/A ☐ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- N/A ☐ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [x] No materials containing Teflon™, Viton™, or fluoropolymers
- [x] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [x] No plastic clipboards, binders, or spiral hard cover notebooks
- [x] No waterproof field books
- [x] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [x] No chemical (blue) ice, unless it is contained in a sealed bag
- [x] No aluminum foil
- [x] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [x] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [x] "PFAS-free" water is on-site for decontamination of field equipment
- [x] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

treated leather boots worn on-site

Field Team Leader Name (Print): James Mills

Field Team Leader Signature: James Mills

Date/Time: 11/29/22

Daily PFAS Sampling Checklist

Date: 11/30/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Sunny

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [X] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- [N/A] During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- [ ] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [X] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [X] Clothing has not been recently laundered with a fabric softener
- [X] No coated HDPE suits (e.g., coated Tyvek® suits)
- [X] Field crew has not used cosmetics, moisturizers, or other related products today
- [X] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- [N/A] Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- [N/A] Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [X] No materials containing Teflon™, Viton™, or fluoropolymers
- [X] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [X] No plastic clipboards, binders, or spiral hard cover notebooks
- [X] No waterproof field books
- [X] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [X] No chemical (blue) ice, unless it is contained in a sealed bag
- [X] No aluminum foil
- [X] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [X] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [X] "PFAS-free" water is on-site for decontamination of field equipment
- [X] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [X] No food or drink on-site, except within staging area
- [X] Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): James Mills

Field Team Leader Signature: James Mills

Date/Time: ~~11/29/22~~ 11/30/22

Daily PFAS Sampling Checklist

Date: 12/1/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Sunny

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [X] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- [N/A] During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- [see note] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [X] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [X] Clothing has not been recently laundered with a fabric softener
- [X] No coated HDPE suits (e.g., coated Tyvek® suits)
- [X] Field crew has not used cosmetics, moisturizers, or other related products today
- [X] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- [N/A] Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- [N/A] Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [X] No materials containing Teflon™, Viton™, or fluoropolymers
- [X] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [X] No plastic clipboards, binders, or spiral hard cover notebooks
- [X] No waterproof field books
- [X] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [X] No chemical (blue) ice, unless it is contained in a sealed bag
- [X] No aluminum foil
- [X] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [X] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [X] "PFAS-free" water is on-site for decontamination of field equipment
- [X] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

treated leather boots worn on-site

Field Team Leader Name (Print): James Mills

Field Team Leader Signature: James Mills

Date/Time: 12/1/22

Daily PFAS Sampling Checklist

Date: 12/2/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Sunny

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [X] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- N/A ☐ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- See notes ☐ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [X] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [X] Clothing has not been recently laundered with a fabric softener
- [X] No coated HDPE suits (e.g., coated Tyvek® suits)
- [X] Field crew has not used cosmetics, moisturizers, or other related products today
- [X] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- N/A ☐ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- N/A ☐ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [X] No materials containing Teflon™, Viton™, or fluoropolymers
- [X] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [X] No plastic clipboards, binders, or spiral hard cover notebooks
- [X] No waterproof field books
- [X] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [X] No chemical (blue) ice, unless it is contained in a sealed bag
- [X] No aluminum foil
- [X] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [X] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [X] "PFAS-free" water is on-site for decontamination of field equipment
- [X] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

-treated leather boots worn on-site

Field Team Leader Name (Print): James Mills

Field Team Leader Signature: James Mills

Date/Time: 12/2/22

Daily PFAS Sampling Checklist

Date: 12/5/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Foggy/overcast

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [X] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- N/A ☐ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- notes ☐ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [X] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [X] Clothing has not been recently laundered with a fabric softener
- [X] No coated HDPE suits (e.g., coated Tyvek® suits)
- [X] Field crew has not used cosmetics, moisturizers, or other related products today
- [X] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- N/A ☐ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- N/A ☐ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [X] No materials containing Teflon™, Viton™, or fluoropolymers
- [X] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [X] No plastic clipboards, binders, or spiral hard cover notebooks
- [X] No waterproof field books
- [X] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [X] No chemical (blue) ice, unless it is contained in a sealed bag
- [X] No aluminum foil
- [X] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [X] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [X] "PFAS-free" water is on-site for decontamination of field equipment
- [X] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [X] No food or drink on-site, except within staging area
- [X] Food in staging area is contained in HDPE or stainless steel container

Notes:

-treated leather boots worn on-site

Field Team Leader Name (Print): James Mills

Field Team Leader Signature: James Mills

Date/Time: 12/5/22

Daily PFAS Sampling Checklist

Date: 12/6/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Sunny

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [x] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- [ ] During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- [ ] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [x] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [x] Clothing has not been recently laundered with a fabric softener
- [x] No coated HDPE suits (e.g., coated Tyvek® suits)
- [x] Field crew has not used cosmetics, moisturizers, or other related products today
- [x] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Notes:

Field Equipment:

- [x] Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- [x] Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [x] No materials containing Teflon™, Viton™, or fluoropolymers
- [x] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [x] No plastic clipboards, binders, or spiral hard cover notebooks
- [x] No waterproof field books
- [x] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [x] No chemical (blue) ice, unless it is contained in a sealed bag
- [x] No aluminum foil
- [x] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [x] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [x] "PFAS-free" water is on-site for decontamination of field equipment
- [x] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

treated leather boots worn on-site

Field Team Leader Name (Print): James Mills

Field Team Leader Signature: James Mills

Date/Time: 12/6/22

Daily PFAS Sampling Checklist

Date: 12/6/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Sunny, no precip, high of 81°F

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- N/A ☐ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes: _____

Field Team Leader Name (Print): Alex Lamore

Field Team Leader Signature: [signature]

Date/Time: 12/7/22

Daily PFAS Sampling Checklist

Date: 12/8/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Partly Cloudy, high of 81°F

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☐ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots (NA)
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☐ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber (NA)
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes: _____

Field Team Leader Name (Print): Alex Lamore

Field Team Leader Signature: [signature]

Date/Time: 12/8/22

Daily PFAS Sampling Checklist

Date: 12/9/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Partly cloudy, high of 79°F

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☐ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots (NA)
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☐ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber (NA)
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- ☑ No food or drink on-site, except within staging area
- ☑ Food in staging area is contained in HDPE or stainless steel container

Notes: _____

Field Team Leader Name (Print): Alex Lamore

Field Team Leader Signature: [signature]

Date/Time: 12/4/22 07:38

Daily PFAS Sampling Checklist

Date: 12/12/2022

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): cool, sunny

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [x] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- [x] During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- [ ] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [x] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [x] Clothing has not been recently laundered with a fabric softener
- [x] No coated HDPE suits (e.g., coated Tyvek® suits)
- [x] Field crew has not used cosmetics, moisturizers, or other related products today
- [x] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- [x] Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- [x] Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [x] No materials containing Teflon™, Viton™, or fluoropolymers
- [x] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [x] No plastic clipboards, binders, or spiral hard cover notebooks
- [x] No waterproof field books
- [x] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [x] No chemical (blue) ice, unless it is contained in a sealed bag
- [x] No aluminum foil
- [x] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [x] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [x] "PFAS-free" water is on-site for decontamination of field equipment
- [x] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

Treated leather boots worn on site; FRB to be collected

Field Team Leader Name (Print): Olivia Cain / Geosyntec

Field Team Leader Signature:

Date/Time: 12/12/2022 0835

Daily PFAS Sampling Checklist

Date: 12/13/2022

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): warm/sunny

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [x] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- [ ] During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- [ ] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [x] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [x] Clothing has not been recently laundered with a fabric softener
- [x] No coated HDPE suits (e.g., coated Tyvek® suits)
- [x] Field crew has not used cosmetics, moisturizers, or other related products today
- [x] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- [x] Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- [x] Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [x] No materials containing Teflon™, Viton™, or fluoropolymers
- [x] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [x] No plastic clipboards, binders, or spiral hard cover notebooks
- [x] No waterproof field books
- [x] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [x] No chemical (blue) ice, unless it is contained in a sealed bag
- [x] No aluminum foil
- [x] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [x] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [x] "PFAS-free" water is on-site for decontamination of field equipment
- [x] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

Treated boots worn on site; FRB collected

Field Team Leader Name (Print): Olivia Cain

Field Team Leader Signature: [signature]

Date/Time: 12/13/2022 0715

Daily PFAS Sampling Checklist

Date: 12/14/2022

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Cool AM, warm/sunny PM

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [X] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- [ ] During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- [ ] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [X] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [X] Clothing has not been recently laundered with a fabric softener
- [X] No coated HDPE suits (e.g., coated Tyvek® suits)
- [X] Field crew has not used cosmetics, moisturizers, or other related products today
- [X] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- [X] Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- [X] Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [X] No materials containing Teflon™, Viton™, or fluoropolymers
- [X] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [X] No plastic clipboards, binders, or spiral hard cover notebooks
- [X] No waterproof field books
- [X] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [X] No chemical (blue) ice, unless it is contained in a sealed bag
- [X] No aluminum foil
- [X] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [X] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [X] "PFAS-free" water is on-site for decontamination of field equipment
- [X] Alconox® or Liquinox® used as decontamination detergent

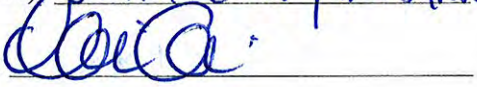
Food and Drink:

- [X] No food or drink on-site, except within staging area
- [X] Food in staging area is contained in HDPE or stainless steel container

Notes:

Treated leather boots worn on site; FRB to be collected

Field Team Leader Name (Print): Olivia Cain / Geosyntec

Field Team Leader Signature: 

Date/Time: 12/14/2022 0750

Daily PFAS Sampling Checklist

Date: 12/15/2022

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): rain, cool, cloudy

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [x] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- [ ] During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- [x] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [x] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [x] Clothing has not been recently laundered with a fabric softener
- [x] No coated HDPE suits (e.g., coated Tyvek® suits)
- [x] Field crew has not used cosmetics, moisturizers, or other related products today
- [x] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- [x] Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- [x] Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [x] No materials containing Teflon™, Viton™, or fluoropolymers
- [x] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [x] No plastic clipboards, binders, or spiral hard cover notebooks
- [x] No waterproof field books
- [x] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [x] No chemical (blue) ice, unless it is contained in a sealed bag
- [x] No aluminum foil
- [x] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [x] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [x] "PFAS-free" water is on-site for decontamination of field equipment
- [x] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

Treated leather boots worn on site; FRB collected

Field Team Leader Name (Print): Olivia Cain

Field Team Leader Signature: [signature]

Date/Time: 12/15/2022 0745

Daily PFAS Sampling Checklist

Date: 12/16/2022

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): cool AM, warm/sunny PM

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [x] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- [ ] During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- [ ] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [x] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [x] Clothing has not been recently laundered with a fabric softener
- [x] No coated HDPE suits (e.g., coated Tyvek® suits)
- [x] Field crew has not used cosmetics, moisturizers, or other related products today
- [x] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- [x] Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- [x] Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [x] No materials containing Teflon™, Viton™, or fluoropolymers
- [x] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [x] No plastic clipboards, binders, or spiral hard cover notebooks
- [x] No waterproof field books
- [x] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [x] No chemical (blue) ice, unless it is contained in a sealed bag
- [x] No aluminum foil
- [x] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [x] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [x] "PFAS-free" water is on-site for decontamination of field equipment
- [x] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

Treated leather boots worn on site. FRB collected.

Field Team Leader Name (Print): Olivia Cain

Field Team Leader Signature: Olivia Cain Geosyntec

Date/Time: 12/16/2022 0715

Daily PFAS Sampling Checklist

Date: 12/19/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Partly Cloudy, high of 68°F

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- NA ☐ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- NA ☐ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- ☑ No food or drink on-site, except within staging area
- ☑ Food in staging area is contained in HDPE or stainless steel container

Notes: _____

Field Team Leader Name (Print): Alex Lamoie

Field Team Leader Signature: _____

Date/Time: 12/19/22

Daily PFAS Sampling Checklist

Date: 12/20/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Partly cloudy, high of 63, rain likely

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- NA ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- ☑ No food or drink on-site, except within staging area
- ☑ Food in staging area is contained in HDPE or stainless steel container

Notes: _____

Field Team Leader Name (Print): Alex Larue

Field Team Leader Signature: _____

Date/Time: 12/20/22

Daily PFAS Sampling Checklist

Date: 12/20/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Cloudy, high of 66°F

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- ☑ No food or drink on-site, except within staging area
- ☑ Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): Alex Lamore

Field Team Leader Signature: [signature]

Date/Time: 11/21/22

Daily PFAS Sampling Checklist

Date: 12/22/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Cloudy, misting, high of 66°F

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☐ NA During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

Field Team Leader Name (Print): Alex Gamse

Field Team Leader Signature: [signature]

Date/Time: 12/22/22

Daily PFAS Sampling Checklist

Date: 1/3/23

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Partly Sunny 70°-80°F

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

See note * ☑

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- ☑ No food or drink on-site, except within staging area
- ☑ Food in staging area is contained in HDPE or stainless steel container

Notes:

Treated leather boots worn. Never in contact w/ sample or container

Field Team Leader Name (Print): Alex Lamarre

Field Team Leader Signature: [signature]

Date/Time: 1/3/23

Daily PFAS Sampling Checklist

Date: 1/4/22

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Cloudy, high of 76°F, precip predicted in evening

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- ☑ No water- or stain-resistant clothing (e.g., GORE-TEX®)
- ☑ During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots (See note *)
- ☑ Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- ☑ Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- ☑ Clothing has not been recently laundered with a fabric softener
- ☑ No coated HDPE suits (e.g., coated Tyvek® suits)
- ☑ Field crew has not used cosmetics, moisturizers, or other related products today
- ☑ Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

Field Equipment:

- ☑ Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- ☑ Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- ☑ No materials containing Teflon™, Viton™, or fluoropolymers
- ☑ No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- ☑ No plastic clipboards, binders, or spiral hard cover notebooks
- ☑ No waterproof field books
- ☑ No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- ☑ No chemical (blue) ice, unless it is contained in a sealed bag
- ☑ No aluminum foil
- ☑ No sticky notes (e.g., certain Post-It® products)

Decontamination:

- ☑ Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- ☑ "PFAS-free" water is on-site for decontamination of field equipment
- ☑ Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

Treated leather boots worn. Never in contact w/ sample or container.

Field Team Leader Name (Print): Alex Lamore

Field Team Leader Signature: [signature]

Date/Time: 1/4/23

Daily PFAS Sampling Checklist

Date: 1/5/23

Site Name: Former Florida State Fire College

Weather (*temperature/precipitation*): Partly cloudy, 65-75°F

Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.

Field Clothing and PPE:

- [x] No water- or stain-resistant clothing (e.g., GORE-TEX®)
- [x] During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- [x] Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- [x] Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- [x] Clothing has not been recently laundered with a fabric softener
- [x] No coated HDPE suits (e.g., coated Tyvek® suits)
- [x] Field crew has not used cosmetics, moisturizers, or other related products today
- [x] Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

See note *

Field Equipment:

- [x] Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- [x] Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- [x] No materials containing Teflon™, Viton™, or fluoropolymers
- [x] No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- [x] No plastic clipboards, binders, or spiral hard cover notebooks
- [x] No waterproof field books
- [x] No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- [x] No chemical (blue) ice, unless it is contained in a sealed bag
- [x] No aluminum foil
- [x] No sticky notes (e.g., certain Post-It® products)

Decontamination:

- [x] Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- [x] "PFAS-free" water is on-site for decontamination of field equipment
- [x] Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- [x] No food or drink on-site, except within staging area
- [x] Food in staging area is contained in HDPE or stainless steel container

Notes:

Treated leather boots worn. Never in contact w/ sample or container

Field Team Leader Name (Print): Alex Lamore

Field Team Leader Signature: [signature]

Date/Time: 1/5/22

BORING LOG

Boring/Well Number: DEPMW-9	Permit Number:	FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: 12/20/22 End Date: 12/21/2022	Borehole Start Time: 1031 ☒ AM ☐ PM End Time: ~~1210~~ @ 1625 ☐ AM ☒ PM
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: A. LaMore	Environmental Technician's Name: —

Drilling Company: PDS	Pavement Thickness (inches): 2"	Borehole Diameter (inches): 6"	Borehole Depth (feet): 200
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): NA	Measured Well DTW (in feet after water recharges in well): 31.22	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA				0-5: Hand cleared, not recorded			
	5-10'	33"/60"		5-10: SAND (SP), yellowish-brown, dry, trace silt, loose, fine to very fine grained, well sorted	D	SP/SM	
	10-20'	72"/120"		10-20: Silty SAND (SP), grayish-brown, dry, loose, medium to coarse grained, well sorted	SM	D	
SC	20-30'	NR		20-30': No recovery			
	30-40'	76"/120"		30-40': SAND (SP) w/ silt, yellowish brown to gray brown, wet, loose, medium grained,	SP	W	
	40-50'	110/120"		40-50': 40-48': Silty SAND (SP/SM), brownish gray, wet, loose, very fine to fine grained	SP/SM	W	
				48-50': sandy CLAY (CH), gray-brown, wet, loose, non-plastic, fine to v. fine grained, mottling	CH	W	

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW-4	FDEP Facility Identification Number: ERIC_5641	Site Name: FFSFC	Borehole Start Date: 12/20/22 End Date: 12/21/2022

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
	50-60'	108"/120"		50'-58': silty SAND (SP/SM), brownish gray, wet, loose, fine to coarse grained, fining downwards		W	
				58'-60': SAND w/clay (SP/SC), bright yellowish brown, wet, very loose, very fine grained, likely relic sinkhole material: very soupy and loose	SP/SC	W	
	60-70'	72"/120"		60-69': Heavily weathered limestone, cream, wet, very loose, very fine to cobble, few competent limestone pieces		W	
SC	70-80'	114"/120"		69-71': Marly LIMESTONE, white, wet, semi-cohesive, non-plastic, very fine,		W	
				71-90': weathered LIMESTONE, white, wet, loose, very fine to pebble size,		W	
	80-90'	98"/120"					Set 8" casing to 80' BGS @ 1642
				90-100: Competent LIMESTONE, white, wet, cohesive to friable, very fine to cobble size chunks among competent sections		W	
	90-100'	113"/120"		100-110: weathered LIMESTONE, white, wet, friable, very fine to cobbles,		W	
	100-110	61"/120"					

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 12/12/22
DEPMW-9	ERIC_5641	FFSFC	End Date: 12/21/2022

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	NOTES ~~Lab Soil and Groundwater Samples~~ (list sample number and depth or temporary screen interval)
				weathered			
	110-120	120"/120"		110-120: LIMESTONE, reddish-cream wet, trace organics @ 112', loose, v. fine grained to cobble,		W	
	120-130	120"/120"		120-130': Heavily weathered LIMESTONE, light brownish gray, wet, loose, v. fine to pebble size,		W	
	130-140	25"/120"		130-140': very heavily weathered ~~LIMESTONE~~, pale brown, wet, very loose, very fine grained to pebble		W	Rig chatter ~135'
SC	140-150			140-: 140'-141': SAA 141'-142': competent LIMESTONE, gray, dry, slightly friable, cohesive. Partially converted to dust via drilling 142-150: SAA, cream			160-170 very easy advancement, likely void
	150-160	NR		150-160': No recovery ~160'/165' to ~200': VOID			170-198 void. Tooling fell to ~198' BLS

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW- 10 (160-180')	Permit Number:		FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: 12/15/2022 End Date: 12/19/2022	Borehole Start Time: 1008 AM ☒ PM ☐ End Time: 1210 AM ☐ PM ☒	
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: A-Lamore		Environmental Technician's Name: O.Cain
Drilling Company: PDS	Pavement Thickness (inches): 1.5	Borehole Diameter (inches): 8/6	Borehole Depth (feet): 190
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): 30	Measured Well DTW (in feet after water recharges in well): 30.69	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA				0-5': not recorded			
SC	5-10	60/60	10	5-10': 5-7': silty SAND, fine grain w/ some limestone fragments; brown, dry, non-plastic, loose, soft; basecodrse from 13-17"		D	NONE
				7-8.5: SAND, reddish brown to yellowish red, well sorted, loose, soft, dry		D	
				8.5-9': Clayey SAND, fine grain, firm, brown, dry, low plasticity		D	
				9-10': CLAY w/ limestone, brown w/ cream fragments (fine), firm, dry, plastic		D	
SC	10-20	12/120	20	10-20': SAND w/ shell fragments, gray/ brown, fine grain, loose, saturated		S	NONE

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW-10	FDEP Facility Identification Number: ERIC_5641	Site Name: FFSFC	Borehole Start Date: 12/15/2022 End Date: 12/19/2022

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	20-30	120/120	30	20-30': 20-24.5: SAND w/ some silt; well sorted, soft, loose, light brown to yellowish brown, moist 24.5-26': CLAY w/ sand, firm, plastic, moist, light gray 26-30': CLAY w/ limestone, cream, soft, friable, fragments from fine to 1", low plasticity, moist		M	None
SC	30-40	120/120	40	30-40: LIMESTONE; cream, loose, fine to 8" fragments, wet, fragments are hard, fossiliferous w/ shells and leps 8" temporary override casing set @ 40'		W	None
SC	40-50	120/120	50	40-50': SAA w/ saturated sections from 40-42 and 43.5-44.5, fragments up to 5", ~~fewer SF~~ @		W/S	None
SC	50-60	118/120	60	50-60': SAA, cream to 53.5', then tan; fragments up to 5", fewer shells, more friable, some clay nodules (soft, saturated, mod. plastic) from 58-60'		W	None

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings
Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW-10	FDEP Facility Identification Number: ERIC_5641	Site Name: FFSFC	Borehole Start Date: 12/15/2022 End Date: 12/19/2022

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	60-70	120/120	70	60-70': same as 58-60 except from 67-68': LIMESTONE w/ CLAY; weathered, cream, soft clay w/ hard limestone, 1" fragments to 0.25" disks, saturated		M/S	None
SC	70-80	75/120	80	70-80': LIMESTONE; cream, saturated, weathered, friable, hard from 6-14", firm to soft from 0-6", 14-20@55", very soft + fine from 55-75"		S	None
SC	80-90	100/120	90	80-90': 0-31": same as 55-75" above 31-90": same as other 70-80' intervals 90-100": CHERT w/ CLAY; rock is hard, 0.25" disks, tan to yellowish cream; CLAY is soft, plastic, saturated, cream		S/M	None
SC	90-100	82/120	100	90-100': 0-11": same as 90-100' 11-33": LIMESTONE; friable w/ fragments ranging from very fine to 5", hard fragments, dry w/ dusty section from 11-20", cream 33-62": ~~competent~~ LIMESTONE@, hard, friable, dry, cream		S D D W	None

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings
Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 12/15/2022
DEPMW-10	ERIC_5641	FFSFC	End Date: 12/19/2022

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	90-100	82/120	100	90-100': 62-82": LIMESTONE w/ CLAY + organics, hard, fragments ranging from fine to 1" to 0.25" disks, CLAY is SOFT, low plasticity, cream, wet from 62-72", saturated from 72-82"		W S	None
SC	N/A	N/A	110	100-110': no sample recovered due to hammer stuck in tooling and recovered via 100-110 ft advancement		N/A	None
SC	110-120	101/120	120	110-120': LIMESTONE w/ clay; cream, saturated, fragments ranging from very fine to 0.5"; clay is soft, mod. plastic, cream; very soft from 33-72"; wet to moist from 88-101"		S	None
SC	N/A	N/A	130	120-130': not recovered due to rig malfunctions/repairs.		N/A	None
SC	130-140	106/120	140	130-140': 0-106"; LIMESTONE w/ clay; cream to light gray (0-70"), light brown/gray 70-88", cream/light gray 88-106"; soft to firm, friable w/ fragments ranging from very fine to 2" cores, mod. plastic, saturated to moist. Light odor 70-88"		S/M	None

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 12/15/2022
DEPMW-10	ERIC_5641	FFSFC	End Date: 12/19/2022

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	140-150	110/120	150	140-150': 0-12": SAA, dry 12-32": LIMESTONE, very hard to fine, dry "dusty" from 29-32"; white to cream 32-60": same as 0-12", CLAY more plastic and hard 60-83": same as 12-32" but saturated from 73-83" 83-110": same as 0-12", but moist w/ some cores of competent limestone & hard, plastic CLAY from 97-103"		D D D S M	None
SC	150-160	120/120	160	150-160': LIMESTONE w/ clay; gray w/ brown (156-157), hard, some fragments (fine to 1") and competent cores; saturated from 150-156'; wet to moist from 156-160'	S→ W→ M→		None
SC	160-170	10/44 (54)/120	170	160-170': CHERT with 44" of groundwater, hard rock, core disks to 2" sections		S	None
SC	170-180	120/120	180	170-180': CHERT with clay; saturated, mod. plastic, soft CLAY (170-178') 178-180': dolomitic LIMESTONE, some clay (mod. plastic, saturated, soft)		S	

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 12/15/2022
DEPMW-10	ERIC_5641	FFSFC	End Date: 12/19/2022

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
				180'-190':			
SC	180-190	6"/120"	190	No recovery. A few LIMESTONE and CHERT fragments were recovered.			
—	—	—	—	End of boring	—	—	—

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW-11 (165-185') ~~(180-200')~~ DC	Permit Number:	FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: 12/13/2022 End Date: 12/13/2022	Borehole Start Time: ~~0853~~ 0846 ☒ AM ☐ PM End Time: 1714 ☐ AM ☒ PM
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: ✓	Environmental Technician's Name: Olivia Cain

Drilling Company: PDS	Pavement Thickness (inches): none	Borehole Diameter (inches): 8/6	Borehole Depth (feet): 200
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): NM	Measured Well DTW (in feet after water recharges in well): 32.79	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
N/A	N/A	N/A	0-120	0-120': see DEPMW-5(100-120') boring log. ▽ @ DEPMW-6(25-45') 30.78' 8" override casing installed to 40' from 0911 to 0925	N/A	N/A	None
SC	120-130	113/120	130	120-~~130~~ 124': Clayey LIMESTONE, cream to light grey, friable w/ fine to 2" fragments, non-plastic, saturated; plastic nodules, loose 124-128': very fine SAND, light brown to tan, ~~dry~~, firm, moist 128-130': SAA; weathered limestone fragments up to 2" w/ 4" disk @ 1291	~~S~~ S / ~~M~~ M / ~~D~~ D	S / M / D	NONE
SC	130-140	~~113~~ 116/120	140	130-133': CLAY w/ limestone, cream to light brown, firm, mod. plastic, fine to med. fragments, dry	D	D	NONE

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 12/13/2022
DEPMW-1 (180-200')	ERIC_5641	FFSFC	End Date: "

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	130-140'	116/120	140	133-140': LIMESTONE; white (133-137) and cream (137-140'), very fine to competent, up to 6", dry, loose to very hard (dolomitic)		D	None
SC	140-150	54/120	150	140-150': LIMESTONE w/ clay, cream, saturated (possibly due to drilling fluid), friable, fine to 4" fragments, mod. to low plasticity, firm			None
SC	150-160	120/120	160	150-160': LIMESTONE, cream, moist, fine to 3" fragments to 7" cores, hard w/ loose fragmented sections		M	None
SC	160-170	120/120	170	160-170': Clayey SAND w/ LIMESTONE; very fine, mod to low plasticity, fine to 2" fragments (hard), moist, light brown/grey w/ cream fragments, light odor, firm ~~w/ very hard sections~~		M	None
SC	170-180	108/120	180	170-180': SAA; gray, soft from 56-82", fragments/weathered gravel up to 2", light odor, mod. to low plasticity saturated from 56-82"		W	None

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings
Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 12/13/2022
DEPMW-11 (165-185')	ERIC_5641	FFSFC	End Date: "

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
				moist			
SC	180-190	111/120	190	180-190': SAA; ~~saturated~~ from 48-72", grey, fragments up to 3", ~~moist remainder of section~~, grey w/ brain saturated from 0-48"	SI/M		None
—	—	—	—	190-200': same as 133-140'; moist from 1-17" and 104-112"; very dry from 17-104", grey to white; cores up to 5"	—	—	—
SC	190-200	112/120	200	End of boring @ 200'		D/M	None

Monitoring well to be installed from 165-185' on 12/14/2022

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEP MW-12	Permit Number: NA	FDEP Facility Identification Number: ERIC 5641
Site Name: Former FSFL	Borehole Start Date: 11/16/22 End Date: 11/16/22	Borehole Start Time: 0910 End Time: 1155 ☑ AM ☐ PM ☑ AM ☐ PM
Environmental Contractor: Geosyntec Consultants	Geologist's Name: A. Lamore	Environmental Technician's Name: Daniel Mansfield
Drilling Company: PDS ~~Geotech~~	Pavement Thickness: N/A	Borehole Diameter (inches): 6"	Borehole Depth (feet): 120'
Drilling Method(s): Sonic	Apparent borehole DTW (in ft from soil moisture content): 28'	Measured well DTW (in feet after water recharges in well): 28	OVA (list model and check type): N/A ☐ FID PID

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other
(describe if other or multiple items are checked):

Borehole Completion (check one): (Well) ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	~~SPT Blows (per six inches)~~	~~Unfiltered OVA~~	~~Filtered OVA~~	~~Net OVA~~	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-5							0-3: Sand w/ silt (SP), brown-dark brown, fine to v. fine grained, loose, dry, root/plant material	SP	D	N/A
								3-8.5: ~~Sand~~ SAA, yellow-brown, no plant/root fragments	SP	D	
SC	5-10	55" / 60"						8.5-: Sandy CLAY (CL), light gray, abundant mottling, cohesive, slightly plastic, fine to v. fine grained, dry	CL	D	
	10-20	NR									
								20-23.5': Sand (SP) w/ silt, brown to red-brown, loose, fine to v. fine, moist	SP	M	
	20-30	112" / 120"		28' ▽				23.5-31': Limestone, cream to white, friable, dry to wet, marly, fossiliferous, wackestone, cobble sized limestone rocks	LS	D ↓ W	

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings
Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification	Site Name:	Borehole Start Date: 11/16/22
~~DEEP~~ DEPMW	12 ERIC 5641	EFSFC	End Date: 11

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	~~SPT Blows~~ (per six inches)	~~Unfiltered OVA~~	~~Filtered OVA~~	~~Net OVA~~	~~Depth (feet)~~	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	30 — 40	120" / 120"						31-87': Limestone, white, friable, wet, ~~fossiliferous~~, wackestone, pebble to cobble size limestone chunks; cream/	LS	W	N/A
SC	40 — 50	120" / 120"									
SC	50-60	119" / 120"									
SC	60-70	115" / 120"									
SC	70 — 80	116" / 120"									

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification	Site Name:	Borehole Start Date: / End Date:
DEPMW-12	ERIC 5641	ERSEC	11/16/22

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	~~SPT Blows~~ (per six inches)	~~Unfiltered OVA~~	~~Filtered OVA~~	~~Net OVA~~	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	70-80	55"/120"									
	80-90										
SC	90-100	116"/120"						87-90': Sandy CLAY (CH), light red-brown to dark red-brown w/ dark gray inclusions, non-plastic, sem. cohesive, wet, very fine grained	CH	W	
SC	100-110	118"/120"						90-100': Limestone, cream/white, friable, wet, fossiliferous, wackestone, pebble to cobble size limeston pieces. Light red brown from 97'-99'	LS	W	Rig chatter ~100' BLS
SC	110-112	NR									
SC	112-120	118"/120"						110-112': Limestone, cream/white, friable, wet, fossiliferous, wackestone, pebble to cobble size LS pieces	LS	W	Rig chatter 113'-115'
								EOB @ 120' BLS			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW-13	Permit Number: NA	FDEP Facility Identification Number: ERIC 5641
Site Name: Former FL State Fire College	Borehole Start Date: 11/13/12 End Date:	Borehole Start Time: 1257 ☐ AM ☑ PM End Time: 1345 ☐ AM ☑ PM
Environmental Contractor: Geosyntec Consultants	Geologist's Name: A. Lamore	Environmental Technician's Name: Daniel Manfiel
Drilling Company: PDS	Pavement Thickness N/A	Borehole Diameter (inches): 6"	Borehole Depth (feet): 45'
Drilling Method(s): Sonic	Apparent borehole DTW (in ft from soil moisture content) ~28	Measured well DTW (in feet after water recharges in well: 28	OVA (list model and check type): N/A ☐ FID PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other
(describe if other or multiple items are checked):

Borehole Completion (check one): (Well) ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	~~SPT Blows (per six inches)~~	~~Unfiltered OVA~~	~~Filtered OVA~~	~~Net OVA~~	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
								SAND			
SC	20-25	46"/60"					20	20-25: Clayey ~~Sand~~ (SC), reddish brown, w/ limestone gravel, fine to v. fine, low plasticity, dry, poorly sorted	SC	D	N/A
	25-35	100"/120"		~28 ppm			25	25-27': Sandy CLAY (CL), light brownish gray w/ mottling, very fine grained, well sorted, plastic, dry, cohesive	CL	D	
SC							30	27-35: Limestone, white/cream, friable, dry to wet, fossiliferous (including corals), wackestone	LS	D to W	
	35-45						35	35-45': SAA, w/ several competent limestone cobbles			
SC		120"/120"					40				
							45				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings
Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

O-

BORING LOG

Boring/Well Number: DEPMW- 14 (100-120')	Permit Number:	FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: 12/8/22 End Date: 11	Borehole Start Time: 0919 ☑ AM ☐ PM End Time: 1309 ☐ AM ☑ PM
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: A. Lamore	Environmental Technician's Name:

Drilling Company: PDS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 6	Borehole Depth (feet): 120
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): NM	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	0-5'	NM		0-5: Hand cleared on 12/7/22, see DEPMW-15 for details			none
	5'-10'	46"/60"		5'-10': SAND (SP), yellowish brown, dry, trace gravel, loose, fine grained, some plant/root fragments	SP	D	
SC	10'-20'	6"/120"		10'-20': SAND (SP), grayish brown, dry, loose, medium to coarse grained, trace limestone	SP	D	
	20'-30'	120"/120"		20'-30': 20'-23': clayey SAND (SC), burnt-reddish brown, dry, semi-cohesive, non-plastic, fine to very fine grained, fining downward, mottling throughout	SC		
				23'-29': sandy lean CLAY (CL), gray, dry, trace limestone, non-plastic, very fine grained, mottling	CL		
				29'-30': weathered LIMESTONE, cream, dry, loose, very fine grained to pebble,			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEP MW-14	FDEP Facility Identification Number: ERIC_5641	Site Name: FFSFC	Borehole Start Date: End Date: 12/8/22

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
				8" Casing installed to 35' @ 1024			None
	30-40'	118" / 120"		30'-78': heavily weathered fossiliferous LIMESTONE, cream w/ pale brown lenses wet, loose, very fine to cobble size, some shell fossils		W	
	40'-50'	120" / 120"					
SC	50-60'	124" / 120"					
	60'-70'	70" / 120"					
	70'-80'	117" / 120"		78'-82': Marly LIMESTONE, cream, wet, cohesive, very fine grained w/ trace cobbles, friable		W	
	80'-90'	103" / 120"		82'-100': heavily weathered LIMESTONE, cream, wet, loose, very fine grained to cobble, very friable. 85'-87': Marly Limestone			
	90'-100'	118" / 120"					

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date:
DEPMW-14	ERIC_5641	FFSFC	End Date: 12/8/22

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	100-110'	11" / 110 / 120"		100'-110': 100'-102'; Marly LIMESTONE, cream, wet, semi-cohesive, very fine grained 102'-104'- heavily weathered LIMESTONE, v. pale brown, wet, loose, very fine grained to pebble, friable		W	
	110-120'	117" / 120"		104'-120'; competent LIMESTONE, white/pale-cream, wet, cohesive, coarse to cobble size, semi-friable, fossiliferous		W	

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings
Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW- 15 (25'-45')	Permit Number:	FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: 12/7/22 End Date: 11	Borehole Start Time: 1310 ☐ AM ☑ PM End Time: 1352 ☐ AM ☑ PM
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: Al Lamore	Environmental Technician's Name:

Drilling Company: PDS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 6"	Borehole Depth (feet): 45
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): NM	Measured Well DTW (in feet after water recharges in well): 30.53'	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	NA	NA	NA	0-5: Hand cleared on 12/7/22. SAND (SP), gray-brown to yellow brown, dry, some gravel, loose, fine grained	SP	D	N/A
SL				5-20' Lithology not observed at location per scope of work. Refer to DEPMW-14 for details			
	20-30	54" / 120"		20'-30': SAND (SP) with clay, brownish gray, moist, loose, very fine grained, mottling throughout, trace organics	SP	M	
	30-40	115" / 120"		30'-45': 30'-32': lean sandy CLAY (CL), gray, moist, hard, non-plastic, very fine grained, mottling	CL	W	
	40-45	40" / 60"		32'-45': LIMESTONE, cream, wet, loose, fine grained to pebble, fossiliferous			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW- 16 (100-120')	Permit Number:		FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: 12/1/22 End Date: 12/1/22	Borehole Start Time: 0920 ☒ AM ☐ PM End Time: 1250 ☐ AM ☒ PM	
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: N/A		Environmental Technician's Name: J. Mills
Drilling Company: PDS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 8" to 40', 6" to 120'	Borehole Depth (feet): 120'
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): NM	Measured Well DTW (in feet after water recharges in well): 32.40	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	N/A	N/A	N/A	0-5': location hand cleared using post hole digger on 11/30/22; no lithology recorded			None
	5-10'	60"/60"		5-10': 0-24" - Clayey-SAND; brown to light brown; moist; trace limestone fragments; loose; clay has no plasity; sand is very fine to fine; trace rootlets			
SC				24-60" - Sandy-CLAY; gray to light brown mottled; moist; trace limestone fragments; clay is stiff, ~~no~~ low plasiticity; sand is very fine to fine			
	10-20'	120"/120"		10-20': 0-42": Silty-SAND w/ clay nodules; brown to dark brown; saturated; clay is low to medium plasticity and firm; sand is loose; very fine to fine			
				42-120": Sandy-CLAY; light brown to gray mottled; moist; trace limestone fragments; hard; clay has medium plasticity; sand is very fine to fine			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 12/1/22
DEPMW-16 (100-120')	ERIC_5641	FFSFC	End Date: 12/1/22

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
	20-30'	44"/120"		20-30': Limestone with sand and clay; cream; saturated; sand is very fine to fine; clay is soft w/ low plasticity; limestone is hard, very fine to 4" gravel w/ shell and shell fragments			None
	30-40'	125"/120"		30-40': 0-125" - LIMESTONE; cream to light brown; saturated; hard; very fine to 4" fragments; some shell fragments / imprints			
				~~40-50'~~ set 8" ~~OD~~ temporary override casing at 40' BLS			
SC	40-50'	112"/120"		40-50': 0-112" - Same as above (S.AA.)			
	50-60'	120"/120"		50-60': 0-120" - S.AA.			
	60-70'	124"/120"		60-70': 0-124" - S.AA.			
	70-80'	112"/120"		70-80' 0-84" - S.AA. 84-112" - SAND with limestone fragments; cream; saturated; limestone is very fine to coarse; sand is loose; very fine to fine			X

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date:
DEPMW-116(100-120')	ERIC_5641	FFSFC	12/1/22
			End Date: 12/1/22

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	80-90'	114"/120"		80-90': 0-32" - S.A.A. 32-114" - LIMESTONE; cream; saturated; hard; very fine to 4" fragments; hard; trace ~~shells fr~~ shell fragments / molds			NONE
	90-100'	124"/120"		90-100': 0-124" - S.A.A.			
	100-110'	80"/120"		~~110~~ 100-110': 0-80" - S.A.A. but fossiliferous w/ abundant shells / shell fragments / molds			
	110-120'	120"/120"		110-120': 0-22" - S.A.A. 22-120" - S.A.A. but trace shell fragments / molds			
				End of boring @ ~120' BLS			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

BORING LOG

Boring/Well Number: DEPMW- 17 (25-45')	Permit Number:		FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: ~~12/1/22~~ 12/2/22 End Date: 12/2/22	Borehole Start Time: 0940 ☒ AM ☐ PM End Time: 1010 ☒ AM ☐ PM	
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: N/A		Environmental Technician's Name: J. Mills
Drilling Company: PDS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 6"	Borehole Depth (feet): 45
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): NM	Measured Well DTW (in feet after water recharges in well): 31.85	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	N/A	N/A	N/A	0-5': location hand cleared using post hole digger on ~~12/1~~ 11/30/22, no soil logged			None
				5- : no lithology logged per scope of work, see boring log for DEPMW-16 for adjacent reference			
SC				End of boring at ~ 45 ft BLS			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

Geosyntec consultants

Boring Log

Borehole Location Map

Start @ 0915
12/6/22
Finish @ 1150
12/6/22

DTW: 33.05' BTOC

Boring No.: DEPMW-18 Date: 12/6/22 Page 1 of
Site: FFSFC Project No.: FR7522D
Tools and Methods: Sonic Bit Diameter: 8"
Total Depth: Depth to GW: TOC Elevation: NM
Drilling Company: PDS Rig: Terra Sonic
Driller: T. Logger: J. Mills

Sample Time	Sample Interval	~~PID~~ Recovery	Depth Scale	Lithological Description (PRIMARY soil, color, moisture, minor soil, density/consistency, plasticity, grain size, other, odors/staining)	Recovery/ Run	Graphic Log
				0-5' - hand cleared location on 11/30/22 using post hole diggers; no lithology collected		
	5-10'	60"/60"		5-10' 0-60" - SAND; brown to light brown; moist; some rootlets/organics; loose; very fine to fine grain		
	10-20'	130"/120"		10-20' 0-34" - same as above (S.A.A.) but no organics/rootlets; saturated 34-112" - Sandy-CLAY; gray to light brown mottled; moist; sand is very fine to fine; clay is very stiff; moderate to high plasticity 112-130" - Clayey-LIMESTONE; gray to cream; moist; clay is firm, moderate plasticity; limestone is very fine to 3" fragments; hard Set temporary 8" override casing at ~20' BLS due to 1.5' limestone and very stiff clay above		

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 12/6/22
DEPMW-18	ERIC_5641	FFSFC	End Date:

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	20-30'	122"/120"		20-30': 0-122" - LIMESTONE; cream; saturated; some shells/shell fragments; very fine to 4" fragments, hard;			NONE
	30-40'	122"/120"		30-40': 0-122" - S.AA.			
	40-50'	124"/120"		40-50': 0-124" - S.AA. but cream to light brown color; limestone is weathered			
	50-60'	128"/120"		50-60': 0-128" - S.AA. but trace shells/shell molds			
	60-70'	124"/120"		60-70': 0-124" - S.AA.			
	70-80'	122"/120"		70-80': 0-122" - SAND with limestone fragments; light brown; saturated; limestone is very fine to 2", hard; Sand is very fine to Fine, loose;			
	80-90'	92"/120"		80'-90': Heavily weathered marly LIMESTONE; Cream, wet, some pebble sized limestone rock, very fine grained, 0-39" + 67-92" loose) 39"-67" Hard/cohesive			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW-18	FDEP Facility Identification Number: ERIC_5641	Site Name: FFSFC	Borehole Start Date: 12/6/22 End Date:

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
	90'-100'	125"/120"		90-100': weathered LIMESTONE, cream, wet, trace gravel, very fine to pebble size fragments, loose			NONE
	100'-110'	85"/120'		100-110': 0"-60": LIMESTONE, cream, wet, very fine w/ many limestone cobbles + pebbles, loose 60"-85": weathered LIMESTONE, light brown, wet, very fine to pebble, loose			
SC	110'-120'	114"/120"		110'-120': weathered LIMESTONE, light brown, wet, very fine to pebble, loose EOB @ 120' @ 1150 12/6/22			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW- 19 (25-45')	Permit Number:	FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: 12/5/22 End Date: 12/5/22	Borehole Start Time: 1210 ☐ AM ☒ PM End Time: 1250 ☐ AM ☒ PM
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: N/A	Environmental Technician's Name: J. Mills
Drilling Company: PDS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 6
Borehole Depth (feet): 45		
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): NM	Measured Well DTW (in feet after water recharges in well):
OVA (list model and check type): N/A ☐ FID ☐ PID		

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	0-5'	NM	NM	0-5': hand cleared location on 11/30/22 via post hole diggers; no soil lithology recorded			NONE
	5-20'	Ø		5-20': no lithology recorded per scope of work; start recording lithology after 20' to evaluate screened interval prior to drilling DEPMW-18			
SC	20-30'	138"/120"		20-30': LIMESTONE; cream; moist to saturated; hard; very fine to 4" fragments; some shells/fragments			
	30-40'	132"/120"		30-40': 0-132" - Same as above (S.AA.) but Saturated			
	40-45'	74"/60"		40-45': 0-74" - S.AA but cream to light brown			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

End of boring @ ~45' BLS

BORING LOG

Boring/Well Number: DEPMW-20	Permit Number: NA	FDEP Facility Identification Number: ERIC 5641
Site Name: FFSFC	Borehole Start Date: 11/17/22 End Date: 11/17/22	Borehole Start Time: 11/17/22 ☒ AM ☐ PM End Time: 11/17/22 ☐ AM ☒ PM
Environmental Contractor: Geosyntec Consultants	Geologist's Name: A. Lamore	Environmental Technician's Name: Samuel Montel
Drilling Company: PDS	Pavement Thickness: N/A	Borehole Diameter (inches): 6"
Drilling Method(s): Sonic	Apparent borehole DTW (in ft from soil moisture content):	Measured well DTW (in feet after water recharges in well):
Borehole Depth (feet): 120	OVA (list model and check type): N/A ☐ FID ☐ PID	

Disposition of Drill Cuttings [check method(s)]: ☒ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other
(describe if other or multiple items are checked):

Borehole Completion (check one): (Well) ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-5							0-2': Sand (SP) w/ 5% H brown to dark brown, fine to v. fine grained, loose, dry, plant/root fragments	SP	D	N/A
								2-3.5': SAA, yellowish-brown, no plant/root fragments	SP	D	
SC	5-10	53"/60"						3.5-10': Heavily weathered limestone w/ sand and fines, cream to brown, friable, loose, dry, fine grained.	SP/LS	D	
SC	10-20	69"/120"						10-55': Limestone, cream/white, friable, dry to wet, wackestone, slightly fossiliferous, few competent limestone pieces	LS	D → M	
SC	20-30	120"/120"								M → W	

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings
Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW-20	FDEP Facility Identification: ERIC 5611	Site Name: FBSFC	Borehole Start Date: 11/17/22 End Date:

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	~~Unfiltered OVA~~	~~Filtered OVA~~	~~Net OVA~~	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	35-40	114"/120"								D	N/A
SC	40-50	123"/120"									
SC	50-60	110"/120"						55'-57': limestone, cream, friable, marl, heavily weathered, slightly cohesive, wet	LS	~~D~~	SDW
								57'-80': limestone, cream, ~~fine~~ fragments, wet, slightly fossiliferous, wackestone, pebble sized limestone rock pieces, marly, strong.	LS	~~D~~	SDW
SC	60-70	70"/120"						SAA, lighter colored. Increasing abundance of competent LS pieces.	LS	~~D~~	SDW
								Noticed void during drilling of 1'-2' in thickness.			
SC	70-							No recovery			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification	Site Name:	Borehole Start Date: 11/17/22
DEPMW-20	ERIC 5641	FFSEC	End Date: 11/17/22

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	70-80							No recovery	LS	~~W~~ S	NA
SC	80-90							80-90: Limestone, white to cream, friable, saturated, marly, fossiliferous, strong, 2"-5" discs of competent LS (packstone).			
SC	90-100							Dark grey. 97-100: Limestone, white, friable, dry, non fossiliferous, weak, little pieces of competent LS (1"-2") (wackestone)			
SC	100-110							100-120: Marl and marly limestone, dark grey, some phosphate nodules, some pieces of competent LS (non fully lemented), abundant calcareous clay. Likely dolomitic limestone to dolostone.			
SC	110-120										

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW-~~20~~ 21 (25-45')	Permit Number:	FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: 11/28/22 End Date: 11	Borehole Start Time: 1130 [X] AM [ ] PM End Time: 1235 [ ] AM [X] PM
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: —	Environmental Technician's Name: J. Mills

Drilling Company: PDS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 6"	Borehole Depth (feet): 45
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): NM	Measured Well DTW (in feet after water recharges in well): ~29.5	OVA (list model and check type): N/A [ ] FID [ ] PID

Disposition of Drill Cuttings [check method(s)]: [x] Drum [ ] Spread [ ] Backfill [ ] Stockpile [ ] Other

(describe if other or multiple items are checked):

Borehole Completion (check one): [x] Well [ ] Grout [ ] Bentonite [ ] Backfill [ ] Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH				0-5': hand cleared on 11/18/22, no description provided			None
SC	N/A	N/A	N/A	5-45': no soil cores collected per scope of work; refer to DEPMW-20 for details	N/A	N/A	
				End of boring @ 45' BLS			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW-22 (100-120')	Permit Number:	FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: 11/29/22 End Date: 11/29/22	Borehole Start Time: 0915 [X] AM [ ] PM End Time: ~~1215~~ 1230 [ ] AM [X] PM
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: N/A	Environmental Technician's Name: J. Mills
Drilling Company: PDS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 8" to 30'; 6" to 120'
Borehole Depth (feet): 120		
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): NM	Measured Well DTW (in feet after water recharges in well): 28.95
OVA (list model and check type): N/A [ ] FID [ ] PID		

Disposition of Drill Cuttings [check method(s)]: [x] Drum [ ] Spread [ ] Backfill [ ] Stockpile [ ] Other

(describe if other or multiple items are checked):

Borehole Completion (check one): [x] Well [ ] Grout [ ] Bentonite [ ] Backfill [ ] Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	N/A	N/A	N/A	0-5': hand cleared on 11/18/22, soil not logged	N/A	N/A	None
	5-10'	32"/60"		5-10': 0-6" - SAND w/ silt, dark brown, saturated; trace organics/rootlets loose; very fine to fine			
SC	10-20'	60"/120"		6-32" - Same as above (S.A.A.); brown to light brown, no organics			
				10-20': 0-30": S.AA. but lens w/ some limestone at 10-12", light brown			
				30-60": Sandy-CLAY; light brown to cream, moist, sand is very to fine; very stiff, medium plasticity; some iron staining in clay			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; ~~**W** = Wet~~; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 11/29/22
DEPMW-22	ERIC_5641	FFSFC	End Date: 11/29/22

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
	20-30'	88"/120"		20-30' 0-36": CLAY with limestone and sand, gray to light brown mottled, saturated, firm, medium plasticity, sand is very to fine grain, limestone is median to coarse, 36-88": LIMESTONE, cream, saturated, loose (weathered), very fine to 3" gravel placed temporary 8" casing at ~30' BLS or ~4.25' into limestone			None
SC	30-40'	110"/120"		30-40': 0-110": S.AA. but fine to 5" gravel, some gravel is very hard, has shell fragments and shell imprints			
	40-50'	120"/120"		40-50': 0-120" - S.AA.			
	50-60'	120"/120"		50-60': 0-120" - S.AA. but fine to 4" gravel, gravel is weathered, trace shell fragments and shell imprints			X

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings
Moisture Content Codes: **D** = Dry; **M** = Moist; ~~**W** = Wet~~; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 11/29/22
DEPMW-22	ERIC_5641	FFSFC	End Date: 11/29/22

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	60-70'	110"/120"		60-70': 0-110" - S.AA.			None
	70-80'	110"/120"		70-80': 0-110" - S.AA.			
	80-90'	110"/120"		80-90': 0-72" - LIMESTONE; cream; saturated; fossiliferous - abundant shells and shell fragments; dense; clay is firm; low plasticity; very fine to 5" fragments 72-110" - S.AA. but trace shells/shell fragments; medium dense; no plasticity; very fine to 3" fragments; weathered			
	90-100'	115"/120"		90-100': 0-115" - LIMESTONE; cream to light brown; saturated; fossiliferous - abundant shells/shell fragments; dense; very fine to 5" fragments; weathered			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings
Moisture Content Codes: **D** = Dry; **M** = Moist; ~~**W** = Wet~~; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name:	Borehole Start Date: 11/29/22
DEPMW-22	ERIC_5641	FFSFC	End Date: 11/29/22

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
SC	100-110'	120"/120"		100-110': 0-60" - SAA but trace shells/shell fragments. 60-110" - SAND with limestone, gray, saturated; limestone is fine to 3", sand is loose; 110-120" - LIMESTONE, gray, saturated; trace shells/shell fragments.			NONE
SC	110-120'	120"/120"		110-120': 0-120" - S.AA.			
				End of boring at 120' BLS			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: DEPMW- 23 (25-45')	Permit Number:		FDEP Facility Identification Number: ERIC_5641
Site Name: Former Florida State Fire College	Borehole Start Date: 11/29/22 End Date:	Borehole Start Time: 1515 ☐ AM ☒ PM End Time: 1605 ☐ AM ☒ PM	
Environmental Contractor: Geosyntec Consultants, Inc.	Geologist's Name: N/A		Environmental Technician's Name: J. Mills
Drilling Company: PDS	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 6"	Borehole Depth (feet): 45'
Drilling Method(s): Sonic	Apparent Borehole DTW (in feet from soil moisture content): NM	Measured Well DTW (in feet after water recharges in well): 29.39	OVA (list model and check type): N/A ☐ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☑ Drum ☐ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	N/A	N/A	N/A	0-5' - hand clear on 11/18/22, soil was not logged			NONE
				5-45' - lithology not observed at location per scope of work; refer to DEPMW-22 for details			
SC	N/A	N/A	N/A	End of boring @ ~45' BLS			X

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW- 9 (150-170')	Former Florida State Fire College (Former FSFC)	ERIC_5641	12/21/22

Well Location and Type (check appropriate boxes):
- [x] On-Site
- [ ] Right-of-Way
- [ ] Off-Site Private Property
- [ ] Above Grade (AG)
- [x] Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- [ ] Perched Monitoring
- [ ] Shallow (Water-Table) Monitoring
- [x] Intermediate or Deep Monitoring
- [ ] Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: Sonic

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
200	170	6	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	[x] Flush-Threaded [ ] Other (describe)	150 feet from 0 feet to 150 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet from 150 feet to 170 feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: [ ] Permanent [x] Temporary	8"	80 feet from 0 feet to 80 feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: [ ] Permanent [ ] Temporary		feet from feet to feet

3rd Surface Casing Material:	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length:
also check: [ ] Permanent [ ] Temporary		feet from feet to feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
20/30 silica sand	[x] Yes ~~[ ] No~~ AC.	20 feet from 150 feet to 170 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
30/65 silica sand	5 feet from 145 feet to 150 feet

Surface Seal Material:	Surface Seal Length:
Portland Type I/II Cement	145 feet from 0 feet to 145 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):	
12/21/22	[x] Surge/Pump [ ] Pump [ ] Compressed Air [ ] Other (describe)	

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
[x] Submersible [ ] Centrifugal [ ] Peristaltic [ ] Other (describe)	32.31

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
~ 1.5	32.68	[ ] Yes [x] No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
[x] Continuous [ ] Intermittent	~ 65	55	[x] Yes [ ] No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
Cloudy Brown Turbidity: Out of range	Cloudy 161 NTU

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

VOID from 150-200' BLS. Bore hole/void filled to 170' w/ cave in material
Start: 1247 Stop: 1836

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW-10 (160-180')	Former Florida State Fire College (Former FSFC)	ERIC_5641	12/19/22

Well Location and Type (check appropriate boxes):
- [x] On-Site
- [ ] Right-of-Way
- [ ] Off-Site Private Property
- [ ] Above Grade (AG)
- [x] Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- [ ] Perched Monitoring
- [ ] Shallow (Water-Table) Monitoring
- [x] Intermediate or Deep Monitoring
- [ ] Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: Sonic (temporary)

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):
196	180	6	8

Well Pad Size: 2 feet by 2 feet

Riser Diameter and Material: 2-inch Sch 40 PVC

Riser/Screen Connections:
- [x] Flush-Threaded
- [ ] Other (describe)

Riser Length: 160 feet — from 0 feet to 160 feet

Screen Diameter and Material: 2-inch Sch 40 PVC

Screen Slot Size: 0.010"

Screen Length: 20 feet — from 160 feet to 180 feet

1st Surface Casing Material: also check: [ ] Permanent [x] Temporary

1st Surface Casing I.D. (inches): 8"

1st Surface Casing Length: 40 feet — from 0 feet to 40 feet

2nd Surface Casing Material: also check: [ ] Permanent [ ] Temporary

2nd Surface Casing I.D. (inches):

2nd Surface Casing Length: ____ feet — from ____ feet to ____ feet

3rd Surface Casing Material: also check: [ ] Permanent [ ] Temporary

3rd Surface Casing I.D. (inches):

3rd Surface Casing Length: ____ feet — from ____ feet to ____ feet

Filter Pack Material and Size: 20/30 silica sand

Prepacked Filter Around Screen (check one):
- [ ] Yes
- [x] No

Filter Pack Length: 22 feet — from 158 feet to 180 feet

Filter Pack Seal Material and Size: 30/65 Silica Sand

Filter Pack Seal Length: 10 feet — from 148 feet to 158 feet

Surface Seal Material: Portland Type I/II Cement

Surface Seal Length: 148 feet — from 0 feet to 148 feet

WELL DEVELOPMENT DATA

Well Development Date: 12/20/22

Well Development Method (check one):
- [x] Surge/Pump
- [ ] Pump
- [ ] Compressed Air
- [ ] Other (describe)

Development Pump Type (check):
- [ ] Centrifugal
- [ ] Peristaltic
- [x] Submersible
- [ ] Other (describe)

Depth to Groundwater (before developing in feet): 30.69

Pumping Rate (gallons per minute): ~18

Maximum Drawdown of Groundwater During Development (feet): 33.12

Well Purged Dry (check one):
- [ ] Yes
- [x] No

Pumping Condition (check one):
- [x] Continuous
- [ ] Intermittent

Total Development Water Removed (gallons): ~30

Development Duration (minutes): 24

Development Water Drummed (check one):
- [x] Yes
- [ ] No

Water Appearance (color and odor) At Start of Development: Opaque White

Water Appearance (color and odor) At End of Development: Clear 6.81 NTU

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Start: 1444

Stop: 1506

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEP MW-11	Former FSFC (Former Florida State Fire College)	ERIC - 5641	12/14/2022

Well Location and Type (check appropriate boxes):
- ☐ On-Site ☐ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☐ Shallow (Water-Table) Monitoring
- ☑ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: Sonic (Temporary)

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
200	185	6	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	☑ Flush-Threaded ☐ Other (describe)	165 feet from 0 feet to 165 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet from 165 feet to 185 feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: ☐ Permanent ☑ Temporary	8	40 feet from 0 feet to 40 feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

3rd Surface Casing Material:	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
(~12 bags) 20/30 Silica Sand	☐ Yes ☑ No	23 feet from 162 feet to 185 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
(4 bags) 30/65 Silica Sand	11 feet from 151 feet to 162 feet

Surface Seal Material:	Surface Seal Length:
Portland Type I/II Cement	151 feet from 0 feet to 151 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):
12/14/2022	☑ Surge/Pump ☐ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☑ Submersible ☐ Centrifugal ☐ Peristaltic ☐ Other (describe)	32.79 btoc

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
~1.25	0.41	☐ Yes ☑ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	55	45	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
Brown, no odor	Clear, no odor

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Backfilled from 185' to 200' with uncoated bentonite pellets (2 buckets), pea gravel (1 bag), and 20/30 Silica Sand (2 bags). Bentonite allowed to hydrate ~60 minutes (09:20 - 10:20).

Centralizers installed on PVC risers at 50' bls, 100' bls, and 150' bls.

Development Start: 1200 Start Turbidity: 189 NTU

Development Stop: 1245 Stop Turbidity: 34.4 NTU

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW- 12	Former Florida State Fire College (Former FSFC)	ERIC_5641	11/16/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site ☐ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☐ Shallow (Water-Table) Monitoring
- ☒ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: Sonic

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
120	120	6	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	☑ Flush-Threaded ☐ Other (describe)	____ feet from ____ feet to ____ feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet from ____ feet to ____ feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: ☐ Permanent ☑ Temporary	8	39 feet from 0 feet to 39 feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

3rd Surface Casing Material:	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
20/30 silica sand	☐ Yes ☑ No	22 feet from 98 feet to 120 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
3/8 bentonite chips (non coated pellets)	4 feet from 94 feet to 98 feet

Surface Seal Material:	Surface Seal Length:
Portland Type I/II Cement	94 feet from 0 feet to 94 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):
11/16/22	☑ Surge/Pump ☐ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☑ Submersible ☐ Centrifugal ☐ Peristaltic ☐ Other (describe)	28

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
2	1	☐ Yes ☒ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	50	25	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
Brownish/white cloudy	Clear

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW-13	Former Florida State Fire College (Former FSFC)	ERIC_5641	11/15/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site ☐ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☒ Shallow (Water-Table) Monitoring
- ☐ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: NA

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
45	45	6	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	☑ Flush-Threaded ☐ Other (describe)	____ feet from ____ feet to ____ feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet from 25 feet to 45 feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: ☐ Permanent ☑ Temporary		____ feet from ____ feet to ____ feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

3rd Surface Casing Material:	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
20/30 silica sand	☐ Yes ☑ No	22 feet from 23 feet to 45 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
30/65 sand	4 feet from 23 feet to 19 feet

Surface Seal Material:	Surface Seal Length:
Portland Type I/II Cement	19 feet from 19 feet to 0 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):
11/16/22	☑ Surge/Pump ☐ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☐ Centrifugal ☐ Peristaltic ☑ Submersible ☐ Other (describe)	27

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
2	1	☐ Yes ☒ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	60	30	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
Brownish/cloudy	Clear

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW- 14 (100-120)	Former Florida State Fire College (Former FSFC)	ERIC_5641	12/8/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site
- ☒ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG)
- ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☐ Shallow (Water-Table) Monitoring
- ☐ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method:

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
120	120	6	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	☑ Flush-Threaded ☐ Other (describe)	100 feet from 0 feet to 100 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet from 100 feet to 120 feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: ☐ Permanent ☑ Temporary	8"	35.0 feet from 0 feet to 35 feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

3rd Surface Casing Material:	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
20/30 silica sand	☐ Yes ☑ No	22 feet from 98 feet to 120 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
3/8" non-coated bentonite chips	5 feet from 93 feet to 98 feet

Surface Seal Material:	Surface Seal Length:
Portland Type I/II Cement	93 feet from 0 feet to 93 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):
12/8/22	☑ Surge/Pump ☐ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☐ Centrifugal ☐ Peristaltic ☑ Submersible ☐ Other (describe)	32.58

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
~1.8		☐ Yes ☐ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	~33	18	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
Opaque White	Clear, 38 NTU

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Start: 1557
Stop 1615

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number: DEPMW- 15 (25'-45')	Site Name: Former Florida State Fire College (Former FSFC)	FDEP Facility I.D. Number: ERIC_5641	Well Install Date(s): 12/7/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site ☒ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☒ Shallow (Water-Table) Monitoring
- ☐ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: ~~Sonic~~ AL NA

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
45	45	6	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	☑ Flush-Threaded ☐ Other (describe)	25 feet from 0 feet to 25 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet from 25 feet to 45 feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: ☐ Permanent ☑ Temporary	N/A	– feet from – feet to – feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		~~feet~~ from ____ feet to ____ feet

3rd Surface Casing Material:	3rd ~~Surface~~ Casing I.D. (inches):	3rd Surface Casing Length:
also check: ~~☐ Permanent~~ ☐ Temporary		____ feet from ____ feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
20/30 silica sand	☐ Yes ☑ No	22 feet from 23 feet to 45 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
30/65 Silica Sand	3 feet from 20 feet to 23 feet

Surface Seal Material:	Surface Seal Length:
Portland Type ~~III~~ II Cement	20 feet from 0 feet to 20 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):
12/9/22	☑ Surge/Pump ☐ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☐ Centrifugal ☐ Peristaltic ☑ Submersible ☐ Other (describe)	30.53'

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
~1.9	4/1.23	☐ Yes ☒ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	55	30	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
Opaque White	Clear

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Start: 1006

Stop: 1036 65.0 NTU

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW- 16	Former Florida State Fire College (Former FSFC)	ERIC_5641	12/1/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site
- ☒ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG)
- ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☐ Shallow (Water-Table) Monitoring
- ☒ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: Sonic

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
120	120	8"/6"	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	☑ Flush-Threaded ☐ Other (describe)	100 feet from 0 feet to 100 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet from 100 feet to 120 feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: ☐ Permanent ☑ Temporary	8"	40 feet from 0 feet to 40 feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

3rd Surface Casing Material:	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
20/30 silica sand	☐ Yes ☑ No	22 feet from 98 feet to 120 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
3/8" non-coated bentonite pellets	4 feet from 94 feet to 98 feet

Surface Seal Material:	Surface Seal Length:
Portland Type ~~I/II~~ I/L Cement	94 feet from 0 feet to 94 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):	
12/1/22	☒ Surge/Pump ☒ Pump ☐ Compressed Air ☐ Other (describe)	

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☑ Submersible ☐ Centrifugal ☐ Peristaltic ☐ Other (describe)	32.40

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
~2.1	none	☐ Yes ☒ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	~55	27	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
cloudy white, no odor	clear, no odor (14.2 NTU)

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Start @ 1504
End @ 1531

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW- 17 (25-45')	Former Florida State Fire College (Former FSFC)	ERIC_5641	12/2/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site ☒ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☒ Shallow (Water-Table) Monitoring
- ☐ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: N/A

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):
45	45	6	8

Well Pad Size: 2 feet by 2 feet

Riser Diameter and Material: 2-inch Sch 40 PVC

Riser/Screen Connections: ☑ Flush-Threaded ☐ Other (describe)

Riser Length: 25 feet (from 0 feet to 25 feet)

Screen Diameter and Material: 2-inch Sch 40 PVC

Screen Slot Size: 0.010"

Screen Length: 20 feet (from 25 feet to 45 feet)

1st Surface Casing Material: also check: ☐ Permanent ☑ Temporary

1st Surface Casing I.D. (inches): N/A

1st Surface Casing Length: — feet (from — feet to — feet)

2nd Surface Casing Material: also check: ☐ Permanent ☐ Temporary

2nd Surface Casing I.D. (inches):

2nd Surface Casing Length: feet (from feet to feet)

3rd Surface Casing Material: also check: ☐ Permanent ☐ Temporary

3rd Surface Casing I.D. (inches):

3rd Surface Casing Length: feet (from feet to feet)

Filter Pack Material and Size: 20/30 silica sand

Prepacked Filter Around Screen (check one): ☐ Yes ☑ No

Filter Pack Length: 22.5 feet (from 22.5 feet to 45 feet)

Filter Pack Seal Material and Size: 30/65 silica sand

Filter Pack Seal Length: 3.5 feet (from 19 feet to 22.5 feet)

Surface Seal Material: Portland Type ~~I/II~~ IL Cement

Surface Seal Length: 19 feet (from 0 feet to 19 feet)

WELL DEVELOPMENT DATA

Well Development Date: 12/2/22

Well Development Method (check one): ☑ Surge/Pump ☒ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check): ☐ Centrifugal ☐ Peristaltic ☑ Submersible ☐ Other (describe)

Depth to Groundwater (before developing in feet): 31.85

Pumping Rate (gallons per minute): ~2.1

Maximum Drawdown of Groundwater During Development (feet): 0.15

Well Purged Dry (check one): ☐ Yes ☒ No

Pumping Condition (check one): ☑ Continuous ☐ Intermittent

Total Development Water Removed (gallons): ~55

Development Duration (minutes): 25

Development Water Drummed (check one): ☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development: brown; no odor

Water Appearance (color and odor) At End of Development: clear; no odor (22.4 NTU)

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

start @ 1043
end @ 1108

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW-18 (IW-120')	Former Florida State Fire College (Former FSFC)	ERIC_5641	12/6/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site ☒ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☐ Shallow (Water-Table) Monitoring
- ☑ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: Sonic

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
120	120	6"	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	☑ Flush-Threaded ☐ Other (describe)	100 feet from 0 feet to 100 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet from 100 feet to 120 feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: ☐ Permanent ☑ Temporary	8"	35 feet from 0 feet to 35 feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

3rd Surface Casing Material:	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
20/30 silica sand	☐ Yes ☑ No	22 feet from 98 feet to 120 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
3/8" non-coated bentonite chips	5 feet from 93 feet to 98 feet

Surface Seal Material:	Surface Seal Length:
Portland Type I/II Cement EL	93 feet from 0 feet to 93 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):
12/6/22	☑ Surge/Pump ☐ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☐ Centrifugal ☐ Peristaltic ☑ Submersible ☐ Other (describe)	33.05

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
~1.9	33.78	☐ Yes ☒ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	~70	29	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
Opaque/Cloudy white	slightly cloudy, 63 NTU

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Start: 1402

End: 1431

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW- 19 (25-45')	Former Florida State Fire College (Former FSFC)	ERIC_5641	12/5/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site ☒ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☒ Shallow (Water-Table) Monitoring
- ☐ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: N/A

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):
45	45	6	8

Well Pad Size: 2 feet by 2 feet

Riser Diameter and Material: 2-inch Sch 40 PVC

Riser/Screen Connections: ☑ Flush-Threaded ☐ Other (describe)

Riser Length: 25 feet (from 0 feet to 25 feet)

Screen Diameter and Material: 2-inch Sch 40 PVC

Screen Slot Size: 0.010"

Screen Length: 20 feet (from 25 feet to 45 feet)

1st Surface Casing Material: also check: ☐ Permanent ☑ Temporary

1st Surface Casing I.D. (inches): N/A

1st Surface Casing Length: — feet (from — feet to — feet)

2nd Surface Casing Material: also check: ☐ Permanent ☐ Temporary

2nd Surface Casing I.D. (inches):

2nd Surface Casing Length: feet (from feet to feet)

3rd Surface Casing Material: also check: ☐ Permanent ☐ Temporary

3rd Surface Casing I.D. (inches):

3rd Surface Casing Length: feet (from feet to feet)

Filter Pack Material and Size: 20/30 silica sand

Prepacked Filter Around Screen (check one): ☐ Yes ☑ No

Filter Pack Length: 22.5 feet (from 22.5 feet to 45 feet)

Filter Pack Seal Material and Size: 30/65 Silica Sand

Filter Pack Seal Length: 3.5 feet (from 19 feet to 22.5 feet)

Surface Seal Material: Portland Type ~~I/II~~ IL Cement

Surface Seal Length: 19 feet (from 0 feet to 19 feet)

WELL DEVELOPMENT DATA

Well Development Date: 12/6/22

Well Development Method (check one): ☑ Surge/Pump ☐ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check): ☐ Centrifugal ☐ Peristaltic ☑ Submersible ☐ Other (describe)

Depth to Groundwater (before developing in feet): 30.64

Pumping Rate (gallons per minute): ~20.0

Maximum Drawdown of Groundwater During Development (feet): 30.90

Well Purged Dry (check one): ☐ Yes ☒ No

Pumping Condition (check one): ☑ Continuous ☐ Intermittent

Total Development Water Removed (gallons): ~35

Development Duration (minutes): 15

Development Water Drummed (check one): ☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development: Opaque white

Water Appearance (color and odor) At End of Development: Clear 26.2 NTU

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Start: 1610

Stop: 1625

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW- 20	Former Florida State Fire College (Former FSFC)	ERIC_5641	11/18/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site ☐ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☐ Shallow (Water-Table) Monitoring
- ☒ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: Sonic

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
120	120	6	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	☑ Flush-Threaded ☐ Other (describe)	100 feet; from 0 feet to 100 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet; from 100 feet to 120 feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: ☐ Permanent ☑ Temporary	8	30 feet; from 0 feet to 30 feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet; from ____ feet to ____ feet

3rd Surface Casing Material:	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet; from ____ feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
20/30 silica sand	☐ Yes ☑ No	22 feet; from 98 feet to 120 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
3/8" bentonite chips (non coated pellets)	5 feet; from 93 feet to 98 feet

Surface Seal Material:	Surface Seal Length:
Portland Type I/II Cement	93 feet; from 0 feet to 93 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):
11/18/22	☑ Surge/Pump ☐ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☐ Centrifugal ☐ Peristaltic ☑ Submersible ☐ Other (describe)	33

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
2	0.5	☐ Yes ☒ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	140	80	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
Gray/cloudy	Clear

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW- 21 (25-45')	Former Florida State Fire College (Former FSFC)	ERIC_5641	11/28/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site ☒ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG) ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☒ Shallow (Water-Table) Monitoring
- ☐ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: S N/A

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):
45	45	6	8

Well Pad Size: 2 feet by 2 feet

Riser Diameter and Material: 2-inch Sch 40 PVC

Riser/Screen Connections: ☑ Flush-Threaded ☐ Other (describe)

Riser Length: 25 feet from 0 feet to 25 feet

Screen Diameter and Material: 2-inch Sch 40 PVC

Screen Slot Size: 0.010"

Screen Length: 20 feet from 25 feet to 45 feet

1st Surface Casing Material: also check: ☐ Permanent ☑ Temporary

1st Surface Casing I.D. (inches): N/A

1st Surface Casing Length: — feet from — feet to — feet

2nd Surface Casing Material: also check: ☐ Permanent ☐ Temporary

2nd Surface Casing I.D. (inches):

2nd Surface Casing Length: feet from feet to feet

3rd Surface Casing Material: also check: ☐ Permanent ☐ Temporary

3rd Surface Casing I.D. (inches):

3rd Surface Casing Length: feet from feet to feet

Filter Pack Material and Size: 20/30 silica sand

Prepacked Filter Around Screen (check one): ☐ Yes ☑ No

Filter Pack Length: 22 feet from 23 feet to 45 feet

Filter Pack Seal Material and Size: 30/65 silica sand

Filter Pack Seal Length: 4 feet from 19 feet to 23 feet

Surface Seal Material: Portland Type I/II Cement IL

Surface Seal Length: 19 feet from 0 feet to 19 feet

WELL DEVELOPMENT DATA

Well Development Date: 11/28/22

Well Development Method (check one): ☑ Surge/Pump ☐ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check): ☐ Centrifugal ☐ Peristaltic ☑ Submersible ☐ Other (describe)

Depth to Groundwater (before developing in feet): 29.5

Pumping Rate (gallons per minute): 1.7

Maximum Drawdown of Groundwater During Development (feet): ~7.5'

Well Purged Dry (check one): ☐ Yes ☒ No

Pumping Condition (check one): ☑ Continuous ☐ Intermittent

Total Development Water Removed (gallons): 55

Development Duration (minutes): 32

Development Water Drummed (check one): ☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development: brown; no odor

Water Appearance (color and odor) At End of Development: clear; no odor (4.42 NTU)

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

- start @ 1320
- stop @ 1352

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW- 22 (100-120')	Former Florida State Fire College (Former FSFC)	ERIC_5641	11/29/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site
- ☒ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG)
- ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☐ Shallow (Water-Table) Monitoring
- ☒ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: Sonic

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
120	120	6"	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	☑ Flush-Threaded ☐ Other (describe)	100 feet from 0 feet to 100 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet from 100 feet to 120 feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: ☐ Permanent ☑ Temporary	8"	30 feet from 0 feet to 30 feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

3rd Surface Casing Material:	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
20/30 silica sand	☐ Yes ☑ No	22 feet from 98 feet to 120 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
3/8" non-coated bentonite pellets	5 feet from 93 feet to 98 feet

Surface Seal Material:	Surface Seal Length:
Portland Type I/II Cement	93 feet from 0 feet to 93 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):	
11/30/22	☑ Surge/Pump ☒ Pump ☐ Compressed Air ☐ Other (describe)	

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☑ Submersible ☐ Centrifugal ☐ Peristaltic ☐ Other (describe)	28.95

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
1.8	0.33	☐ Yes ☒ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	110	58	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
cloudy/white; no odor	clear; no odor (13.4 NTU)

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Start @ 0950
end @ 1048

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number:	Site Name:	FDEP Facility I.D. Number:	Well Install Date(s):
DEPMW-23 (25-45')	Former Florida State Fire College (Former FSFC)	ERIC_5641	11/29/22

Well Location and Type (check appropriate boxes):
- ☐ On-Site
- ☒ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG)
- ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☒ Shallow (Water-Table) Monitoring
- ☐ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Sonic

Surface Casing Install Method: N/A

Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size:
45	45	6	8	2 feet by 2 feet

Riser Diameter and Material:	Riser/Screen Connections:	Riser Length:
2-inch Sch 40 PVC	☑ Flush-Threaded ☐ Other (describe)	25 feet from 0 feet to 25 feet

Screen Diameter and Material:	Screen Slot Size:	Screen Length:
2-inch Sch 40 PVC	0.010"	20 feet from 25 feet to 45 feet

1st Surface Casing Material:	1st Surface Casing I.D. (inches):	1st Surface Casing Length:
also check: ☐ Permanent ☑ Temporary	N/A	— feet from — feet to — feet

2nd Surface Casing Material:	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

3rd Surface Casing Material:	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length:
also check: ☐ Permanent ☐ Temporary		____ feet from ____ feet to ____ feet

Filter Pack Material and Size:	Prepacked Filter Around Screen (check one):	Filter Pack Length:
20/30 silica sand	☐ Yes ☑ No	22.5 ~~23.5~~ feet from 22.5 feet to 45 feet

Filter Pack Seal Material and Size:	Filter Pack Seal Length:
30/65 silica sand	3.5 feet from 19 feet to 22.5 feet

Surface Seal Material:	Surface Seal Length:
Portland Type ~~I/II~~ IL Cement	19 feet from 0 feet to 19 feet

WELL DEVELOPMENT DATA

Well Development Date:	Well Development Method (check one):
11/30/22	☑ ~~Surge~~/Pump ☒ Pump ☐ Compressed Air ☐ Other (describe)

Development Pump Type (check):	Depth to Groundwater (before developing in feet):
☑ Submersible ☐ Centrifugal ☐ Peristaltic ☐ Other (describe)	29.39

Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one):
~2.1	0.11	☐ Yes ☒ No

Pumping Condition (check one):	Total Development Water Removed (gallons):	Development Duration (minutes):	Development Water Drummed (check one):
☑ Continuous ☐ Intermittent	55	25	☑ Yes ☐ No

Water Appearance (color and odor) At Start of Development:	Water Appearance (color and odor) At End of Development:
brown, no odor	clear, no odor (0.96 NTU)

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Start @ 0905
end @ 0930

Geosyntec consultants

Form #100

Water Level Measurement Field Form

Site: Former Florida State Fire College (Former FSFC) Project No.: FR7522C/03

Date 3/28/22 Page 1 of 1

Weather Sunny, low 80's, windy

Initials Luke Varner (LV)

Well ID	Status	Control Point	Measurement		
		Monitoring Point	Time of Measurement	Depth to Water feet	Depth to Bottom feet
DEPMW-1	New/Good	N	1425	31.21	--
DEPMW-2	"	"	1428	31.30	--
DEPMW-3	"	"	1433	~~26~~ 29.69	--
DEPMW-4	"	"	1434	29.72	--
DEPMW-5	"	"	1438	31.24	--
DEPMW-6	"	"	1440	31.32	--
DEPMW-7	"	"	1445	27.19	--
DEPMW-8	X	"	1446	27.21	--
VISAMW (M-200)	Fair	X	1450	32.81	--

Notes

Geosyntec consultants

Water Quality Instrument Calibration Form

Project/Site: Former FSFC | Project #: FR7522C/03 | Field Personnel: Luke Varner

Water Quality Meter - Model/Serial#: YSI 556 - R8859 | Turbidimeter - Model/Serial#: HACH 2100Q - ~~R8859~~

Dissolved Oxygen (FDEP SOP FT 1500)	Date	Time	Temp (°C)	Saturation (mg/L)*	Reading (mg/L)	Reading (%)	Pass or Fail
					Acceptance Criteria:+/-0.3 mg/L		
(CAL) ICV CCV	3/28/22	1514	26.7	8.01	8.02	100.1	(P) F
(CAL) ICV CCV	3/29/22	0630	15.6	9.96	9.96	100.0	(P) F
CAL ICV (CCV)	"	1801	26.9	7.98	8.06	101.0	(P) F
CAL ICV CCV							P F

Specific Conductance (FDEP SOP FT 1200)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mS/cm)	Reading (mS/cm)	Pass or Fail
Specific Conductance Probe Cleaned? Yes (NO)					**Acceptance Criteria: +/- 5%**		
(CAL) ICV (CCV)	3/28/22	1529	26A119	1/31/23	1.413		(P) F
CAL ICV (CCV)	3/29/22	0633	"	"	"		(P) F
CAL ICV (CCV)	"	1804	"	"	"		(P) F
CAL ICV CCV							P F

pH (FDEP SOP FT 1100)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (SU)	Reading (SU)	Pass or Fail
					Acceptance Criteria: +/- 0.2 SU		
CAL (ICV) CCV	3/28/22	1536	16L651	12/31/23	7.0	7.04	(P) F
CAL ICV (CCV)	3/29/22	0637	"	"	"	7.11	(P) F
CAL (ICV) CCV	3/28/22	1541	26K627	11/30/23	4.0	4.02	(P) F
CAL ICV (CCV)	3/29/22	0641	"	"	"	4.06	(P) F
CAL (ICV) CCV	3/28/22	1551	16I526	9/30/23	10.0	10.01	(P) F
CAL ICV (CCV)	3/29/22	0646	"	"	"	10.03	(P) F

ORP (FDEP SOP N/A)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mV @ Temp °C)	Reading (mV)	Pass or Fail
Dissolved Oxygen Membrane Changed? Yes No					**Geosyntec Acceptance Criteria: +/- 5%**		
(CAL) ICV CCV	3/28/22	1555	26A817	10/31/22	240.	240.0	(P) F
CAL ICV (CCV)	3/29/22	0649	"	"	"	242.6	(P) F
CAL ICV (CCV)	"	1824	"	"	"	243.9	(P) F
CAL ICV CCV							P F

Turbidity 0.1-10 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 10%		
CAL (ICV) CCV	3/28/22	10	10.1	(P) F
CAL ICV (CCV)	3/29/22	"	10.3	(P) F
CAL ICV (CCV)	"	"	10.2	(P) F
CAL ICV CCV				P F

Turbidity 11-40 NTU 20 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 8%		
CAL (ICV) CCV	3/28/22	20	20.6	(P) F
CAL ICV (CCV)	3/29/22	"	20.2	(P) F
CAL ICV (CCV)	"	"	21.2	(P) F
CAL ICV CCV				P F

Turbidity 41-100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 6.5%		
CAL (ICV) CCV	3/28/22	100	~~101~~ 102	(P) F
CAL ICV (CCV)	3/29/22	"	98	(P) F
CAL ICV (CCV)	"	"	99	(P) F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity >100 NTU 800 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 5%		
CAL (ICV) CCV	3/28/22	800	796	(P) F
CAL ICV (CCV)	3/29/22	"	801	(P) F
CAL ICV (CCV)	"	"	808	(P) F
CAL ICV CCV				P F

Notes:

CAL = Initial Calibration

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

* See Table FS 2200-2 on the back of this form

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings <0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Geosyntec consultants

Water Quality Instrument Calibration Form

Project/Site: Former FSFC Project #: FR7522C/03 Field Personnel: Luke Varner

Water Quality Meter - Model/Serial#: YSI 556 - R8859 Turbidimeter - Model/Serial#:

Dissolved Oxygen (FDEP SOP FT 1500)	Date	Time	Temp (°C)	Saturation (mg/L)*	Reading (mg/L)	Reading (%)	Pass or Fail
					Acceptance Criteria:+/-0.3 mg/L		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Specific Conductance (FDEP SOP FT 1200)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mS/cm)	Reading (mS/cm)	Pass or Fail
Specific Conductance Probe Cleaned? Yes (No)					**Acceptance Criteria: +/- 5%**		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

pH (FDEP SOP FT 1100)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (SU)	Reading (SU)	Pass or Fail
					Acceptance Criteria: +/- 0.2 SU		
CAL ICV CCV	3/29/22	1809	26L651	12/31/23	7.0	7.14	(P) F
CAL ICV CCV	"	1814	26K617	11/30/23	4.0	4.22	P (F)
CAL ICV CCV	"	1819	26I526	9/30/23	10.0	10.09	(P) F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

ORP (FDEP SOP N/A)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mV @ Temp °C)	Reading (mV)	Pass or Fail
Dissolved Oxygen Membrane Changed? Yes No					**Geosyntec Acceptance Criteria: +/- 5%**		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Turbidity 0.1-10 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 10%		
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity 11-40 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 8%		
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity 41-100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 6.5%		
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity >100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 5%		
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Notes:

CAL = Initial Calibration

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

* See Table FS 2200-2 on the back of this form

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings <0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEP MW-1 (100-120')	SAMPLE ID:	DEP MW-1 (100-120')
DATE:	3/29/22		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	3/8"	100 feet to 120 feet	31.22	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(120 ft - 31.22 ft) X 0.16 gallons/foot = 14.20 gal / 4 = 3.55 gal

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
32.75	32.75	1114	1126	24.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1122	16.0	16.0	2.0	31.35	7.30	25.96	599	2.03	0.26	clear	170.2	
1124	~~0.44.0~~	20.0	"	"	7.29	"	598	"	0.18	"	170.5	
1126	4.0	24.0	"	"	7.30	25.95	597	2.02	0.12	"	170.7	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Luke Vanner /GEOSYNTEC		1127	1128

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE ~~(mL~~ gal per minute):	TUBING MATERIAL CODE:
32.75	2	HDPE

FIELD DECONTAMINATION: Y (N)
FIELD-FILTERED: Y (N) FILTER SIZE: µm
Filtration Equipment Type:
DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE ~~(mL~~ gal per min)
DEP MW-2 (100-120')	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	2.0

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-2 (25-45')	SAMPLE ID:	DEPMW-2 (25-45')
DATE:	3/29/22		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	3/8"	25 feet to 45 feet	31.32	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
=(45 ft - 31.32 ft) X 0.16 gallons/foot = ~~2.19~~ EV = 2.19 gal / 4 = 0.55 gal

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
32.5	32.5	1045	1059	4.2

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1055	3.0	3.6	0.3	31.35	7.26	26.35	581	3.26	1.57	clear	158.2	
1057	0.6	3.6	0.3	"	"	"	"	"	1.14	"	158.9	
1059	0.6	4.2	0.3	"	"	"	580	3.28	0.96	"	160.3	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Luke Vann /GEOSYNTEC		1100	1102

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
32.5	300 0.3	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE ~~(mL~~ per min)
DEPMW-2(25-45')	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	300 0.3

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)	SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-3(100-120')	SAMPLE ID: DEPMW-3(100-120')	DATE: 3/29/22

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 100 feet to 120 feet	STATIC DEPTH TO WATER (feet): 29.68	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(120 ft - 29.68 ft) X 0.16 gallons/foot = 14.45 gal / 4 = 3.6 gal

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 31	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 31.5	PURGING INITIATED AT: 0741	PURGING ENDED AT: 0804	TOTAL VOLUME PURGED (gallons): 23.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
~~0756~~ 0856	15.0	15.0	1.0	30.46	7.56	25.63	495	0.57	6.37	clear	185.0	
0800	4.0	19.0	"	"	"	25.61	"	0.49	1.14	"	183.8	
0804	4.0	23.0	"	"	7.51	25.59	"	0.41	0.45	"	179.1	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Luke Varner /GEOSYNTEC	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 0805	SAMPLING ENDED AT: 0808
PUMP OR TUBING DEPTH IN WELL (feet): 31.5	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (~~mL~~ per min)
DEPMW-3(100-120')	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	1.0

REMARKS: Tubing placed in top 2' of water column. EQB-52 collected following.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College		SITE LOCATION: 1501 W. Silver Springs Blvd, Ocala, FL	
WELL NO: Pot DEP MW (25-45')	SAMPLE ID: DEP MW (25-45')	DATE: 3/28/22	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 25 feet to 45 feet	STATIC DEPTH TO WATER (feet): 29.72	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
=(45 feet - 29.72 feet) X 0.16 gallons/foot = 2.44 gal / 4 = 0.61 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 31.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 31.5	PURGING INITIATED AT: 1705	PURGING ENDED AT: 1744	TOTAL VOLUME PURGED (gallons): 3.9

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1730	2.5	2.5	0.1	29.86	6.82	26.15	163	5.50	17.6	clear	179.2
1737	0.7	3.2	"	"	"	26.20	161	5.51	12.3	"	180.0
1744	0.7	3.9	"	"	"	26.25	160	5.50	10.7	"	180.3

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Luke Varner / Geosyntec	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1745	SAMPLING ENDED AT: 1749
PUMP OR TUBING DEPTH IN WELL (feet): 31.5	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N (replaced))	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (~~mL~~ gal per min)
DEP MW-4(25-45')	2	HDPE	125mL	NONE	—	—	W-PFAS-MS	ESP	0.1

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 °C **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)	SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL
WELL NO: DEPMW-5 (100-120')	SAMPLE ID: DEPMW-5 (100-120') DATE: 3/29/22

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 100 feet to 120 feet	STATIC DEPTH TO WATER (feet): 31.25	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(120 ft - 31.25 ft) X 0.16 gallons/foot = 14.2 gal / 4 = 3.55 gal

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 32.75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 32.75	PURGING INITIATED AT: 1450	PURGING ENDED AT: 1502	TOTAL VOLUME PURGED (gallons): 24.0

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1458 ~~1500~~ 1458	16.0	16.0	2.0	31.48	7.38	25.26	599	0.28	9.33	clear	124.5	
1500 ~~1502~~ 1500	4.0	20.0	"	"	7.40	"	"	"	6.82	"	124.6	
1502 ~~1504~~ 1502	4.0	24.0	"	"	7.41	"	600	0.30	4.21	"	124.9	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Luke Varner /GEOSYNTEC	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1503	SAMPLING ENDED AT: 1505
PUMP OR TUBING DEPTH IN WELL (feet): 32.75	SAMPLE PUMP FLOW RATE ~~mL~~ gal per minute): 2.0	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE ~~mL~~ gal per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
DEPMW-5(100-120')	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	2.0

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-6(25-45')	SAMPLE ID: DEPMW-6(25-45')		DATE: 3/29/22

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 25 feet to 45 feet	STATIC DEPTH TO WATER (feet): 31.33	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(45 ft - 31.33 ft) X 0.16 gallons/foot = 2.19 gal / 4 = 0.55 gal

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 32.75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 32.75	PURGING INITIATED AT: 1425	PURGING ENDED AT: 1439	TOTAL VOLUME PURGED (gallons): 4.2

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1435	3.0	3.0	0.3	~~31.36~~ 31.66	7.04	25.60	625	4.81	4.13	clear	148.8	
1437	0.6	3.6	"	"	"	25.71	"	"	3.21	"	149.7	
1439	0.6	4.2	"	31.36	"	25.73	626	4.80	2.75	"	152.6	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Luke Varner /GEOSYNTEC	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1440	SAMPLING ENDED AT: 1442
PUMP OR TUBING DEPTH IN WELL (feet): 32.75	SAMPLE PUMP FLOW RATE (~~mL~~ per minute): 95	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (~~mL~~ per min)
~~DEPMW-6(25-45')TA~~ DUP	4	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	0.3
DEPMW-6(25-45') DUP	2	"	"	"	"	"	"	"	0.3

REMARKS: Labs QA/QC sample collected also

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL		
WELL NO:	DEPMW-7(100-120')	SAMPLE ID:	DEPMW-7(100-120')	DATE:	3/29/22

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	3/8"	100 feet to 120 feet	27.20	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
=(120 ft - 27.20 ft) X 0.16 gallons/foot = 14.85 gal / 4 = 3.7 gal

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
28.75	28.75	0854	0917	23.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
0909	15.0	15.0	1.0	27.25	7.29	25.69	634	0.62	3.63	clear	185.7	
0913	4.0	19.0	"	"	"	"	635	0.61	2.72	"	183.2	
0917	4.0	23.0	"	"	"	"	636	0.62	1.68	"	181.8	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Luke Varner /GEOSYNTEC		0918	0921

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
28.75	1.0 gal	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-7(100-120')	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	1.0 gal

REMARKS: Tubing placed in top 2' of water column.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College		SITE LOCATION: Ocala FL	
WELL NO: DEP MW-8 (20-40')	SAMPLE ID: DEP MW-8 (20-40')		DATE: 3/29/22

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 20 feet to 40 feet	STATIC DEPTH TO WATER (feet): 27.22	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
=(40 feet - 27.22 feet) X 0.16 gallons/foot = 2.04 / 4 = 0.51 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
28.75	28.75	1542	1556	4.2

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1552	3.0	3.0	0.3	27.28	7.07	26.73	546	5.39	14.7	clear	178.8
1554	0.6	3.6	"	"	"	26.75	548	5.40	7.63	"	179.2
1556	0.6	4.2	"	"	"	26.74	547	5.39	5.21	"	180.5

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Luke Varner / Geosyntec		1557	1559

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
28.75	HDPE, S		

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y (N (replaced)) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE ~~mL~~ per min)
DEP MW-8 (20-40')	2	PE	250mL	~~Ice~~	–	–	W. PFAS MS	ESP	0.3

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1 **1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 °C **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: VISA MW (M-200)	SAMPLE ID: VISA MW (M-200)		DATE: 3/29/22

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
~~4~~ 4"	3/8"	30 feet to 40 feet	32.81	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(40 ft - 32.81 ft) X 0.65 gallons/foot = 4.67 gal / 4 = 1.18 gal

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
34	34	1005	1014	9.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (µmhos/cm or (µS/cm))	OXYGEN (circle (mg/L) or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1010	5.0	5.0	1.0	32.83	6.97	25.09	621	0.16	2.48	clear	147.6	
1012	2.0	7.0	"	"	"	25.18	622	"	1.16	"	150.2	
1014	2.0	9.0	"	"	6.96	25.21	"	0.17	0.82	"	151.5	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Luke Varner /GEOSYNTEC		1015	1017

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (~~mL~~ per minute):	TUBING MATERIAL CODE: HDPE
34	0.2	

FIELD DECONTAMINATION:	FIELD-FILTERED:	FILTER SIZE:	DUPLICATE:
Y (N)	Y (N) Filtration Equipment Type:	µm	Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (~~mL~~ per min)
VISAMW (M-200)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	0.2

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: **1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

Geosyntec consultants

Water Quality Instrument Calibration Form

Project/Site: Former FSFC Project #: FR7522D Field Personnel: Daniel Montiel

Water Quality Meter - Model/Serial#: NA Turbidimeter - Model/Serial#: HACH 2100Q / 22070D000337

Dissolved Oxygen (FDEP SOP FT 1500)	Date	Time	Temp (°C)	Saturation (mg/L)*	Reading (mg/L)	Reading (%)	Pass or Fail
					Acceptance Criteria:+/-0.3 mg/L		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Specific Conductance (FDEP SOP FT 1200)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mS/cm)	Reading (mS/cm)	Pass or Fail
Specific Conductance Probe Cleaned? Yes No					**Acceptance Criteria: +/- 5%**		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

pH (FDEP SOP FT 1100)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (SU)	Reading (SU)	Pass or Fail
					Acceptance Criteria: +/- 0.2 SU		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

ORP (FDEP SOP N/A)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mV @ Temp °C)	Reading (mV)	Pass or Fail
Dissolved Oxygen Membrane Changed? Yes No					**Geosyntec Acceptance Criteria: +/- 5%**		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Turbidity 0.1-10 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 10%		
CAL (ICV) CCV	11/15/22	10	9.97	(P) F
CAL ICV (CCV)	11/16/22	↓	10.2	(P) F
CAL ICV (CCV)	11/17/22	↓	10.3	(P) F
CAL ICV (CCV)	11/18/22	↓	10.1	(P) F

Turbidity 11-40 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 8%		
CAL (ICV) CCV	11/15/22	20	20.4	(P) F
CAL ICV (CCV)	11/16/22	↓	19.6	(P) F
CAL ICV (CCV)	11/17/22	↓	19.8	(P) F
CAL ICV (CCV)	11/18/22	↓	20.2	(P) F

Turbidity 41-100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 6.5%		
CAL (ICV) CCV	11/15/22	100	101	(P) F
CAL ICV (CCV)	11/16/22	↓	103	(P) F
CAL ICV (CCV)	11/17/22	↓	104	(P) F
CAL ICV (CCV)	11/18/22	↓	101	(P) F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity >100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 5%		
CAL (ICV) CCV	11/15/22	800	792	(P) F
CAL ICV (CCV)	11/16/22	↓	790	(P) F
CAL ICV (CCV)	11/17/22	↓	804	(P) F
CAL ICV (CCV)	11/18/22	↓	797	(P) F

Notes:

CAL = Initial Calibration

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

* See Table FS 2200-2 on the back of this form

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings <0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Geosyntec consultants

Water Quality Instrument Calibration Form

Project/Site: Former FSFC Project #: FR7522D Field Personnel: James Mills

Water Quality Meter - Model/Serial#: N/A Turbidimeter - Model/Serial#: Hach 2100Q/22070D00320

Dissolved Oxygen (FDEP SOP FT 1500)	Date	Time	Temp (°C)	Saturation (mg/L)*	Reading (mg/L)	Reading (%)	Pass or Fail
					Acceptance Criteria:+/-0.3 mg/L		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Specific Conductance (FDEP SOP FT 1200)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mS/cm)	Reading (mS/cm)	Pass or Fail
Specific Conductance Probe Cleaned? Yes No					**Acceptance Criteria: +/- 5%**		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV				JCM			P F
CAL ICV CCV							P F

pH (FDEP SOP FT 1100)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (SU)	Reading (SU)	Pass or Fail
					Acceptance Criteria: +/- 0.2 SU		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

ORP (FDEP SOP N/A)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mV @ Temp °C)	Reading (mV)	Pass or Fail
Dissolved Oxygen Membrane Changed? Yes No					**Geosyntec Acceptance Criteria: +/- 5%**		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

~~10~~ 20 **Turbidity ~~0.1-10~~ NTU**	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 10%		
CAL ICV CCV	11/28/22	10	10.3	P F
CAL ICV CCV	11/30/22	10	10.6	P F
CAL ICV CCV	12/1/22	11	10.4	P F
CAL ICV CCV	12/2/22	11	10.4	P F

20 **Turbidity ~~11-40~~ NTU**	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 8%		
CAL ICV CCV	11/28/22	20	20.1	P F
CAL ICV CCV	11/30/22	20	20.3	P F
CAL ICV CCV	12/1/22	11	20.4	P F
CAL ICV CCV	12/2/22	11	20.7	P F

Turbidity 41-100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 6.5%		
CAL ICV CCV	11/28/22	100	98.1	P F
CAL ICV CCV	11/30/22	100	98.4	P F
CAL ICV CCV	12/1/22	11	97.8	P F
CAL ICV CCV	12/2/22	11	98.6	P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity >100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 5%		
CAL ICV CCV	11/28/22	800	787	P F
CAL ICV CCV	11/30/22	800	796	P F
CAL ICV CCV	12/1/22	11	795	P F
CAL ICV CCV	12/2/22	11	790	P F

Notes:

CAL = Initial Calibration

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

* See Table FS 2200-2 on the back of this form

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings <0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Geosyntec consultants

Water Quality Instrument Calibration Form

Project/Site: Former FSFC Project #: FR7522D Field Personnel: A. LaMore

Water Quality Meter - Model/Serial#: N/A Turbidimeter - Model/Serial#: Hach 21C3313

Dissolved Oxygen (FDEP SOP FT 1500)	Date	Time	Temp (°C)	Saturation (mg/L)*	Reading (mg/L)	Reading (%)	Pass or Fail
					Acceptance Criteria:+/-0.3 mg/L		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Specific Conductance (FDEP SOP FT 1200)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mS/cm)	Reading (mS/cm)	Pass or Fail
Specific Conductance Probe Cleaned? Yes No					**Acceptance Criteria: +/- 5%**		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

pH (FDEP SOP FT 1100)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (SU)	Reading (SU)	Pass or Fail
					Acceptance Criteria: +/- 0.2 SU		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

ORP (FDEP SOP N/A)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mV @ Temp °C)	Reading (mV)	Pass or Fail
Dissolved Oxygen Membrane Changed? Yes No					**Geosyntec Acceptance Criteria: +/- 5%**		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Turbidity 0.1-10 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
< 0.1		**Acceptance Criteria: +/- 10%**		
CAL ICV CCV	12/6	<0.1	0.02	P F
CAL ICV CCV	12/8	"	0.02	P F
CAL ICV CCV	12/9	"	0.02	P F
CAL ICV CCV				P F

Turbidity 11-40 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 8%		
CAL ICV CCV	12/6	20	20.7	P F
CAL ICV CCV	12/8	"	20.1	P F
CAL ICV CCV	12/9	"	20.3	P F
CAL ICV CCV				P F

Turbidity 41-100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 6.5%		
CAL ICV CCV	12/6	100	100	P F
CAL ICV CCV	12/8	"	101	P F
CAL ICV CCV	12/9	"	100	P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity >100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 5%		
CAL ICV CCV	12/6	800	800	P F
CAL ICV CCV	12/8	"	817	P F
CAL ICV CCV	12/9	"	808	P F
CAL ICV CCV				P F

Notes:

CAL = Initial Calibration

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

* See Table FS 2200-2 on the back of this form

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings <0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Geosyntec consultants

Water Quality Instrument Calibration Form

Project/Site: Former FSFC Project #: FR7522D Field Personnel: M. Rogowski, O. Cain

Water Quality Meter - Model/Serial#: ~~~~~~~~~~ Turbidimeter - Model/Serial#: geotech portable turbidimeter/21063313

Dissolved Oxygen (FDEP SOP FT 1500)	Date	Time	Temp (°C)	Saturation (mg/L)*	Reading (mg/L)	Reading (%)	Pass or Fail
					Acceptance Criteria:+/-0.3 mg/L		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Specific Conductance (FDEP SOP FT 1200)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mS/cm)	Reading (mS/cm)	Pass or Fail
Specific Conductance Probe Cleaned? Yes No					**Acceptance Criteria: +/- 5%**		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

pH (FDEP SOP FT 1100)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (SU)	Reading (SU)	Pass or Fail
					Acceptance Criteria: +/- 0.2 SU		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

ORP (FDEP SOP N/A)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mV @ Temp °C)	Reading (mV)	Pass or Fail
Dissolved Oxygen Membrane Changed? Yes No					**Geosyntec Acceptance Criteria: +/- 5%**		
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Turbidity 0.1-10 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 10%		
CAL (ICV) CCV	12/14/22	0.10	0.02	(P) F
CAL ICV (CCV)	" "	0.10	0.02	(P) F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity 11-40 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 8%		
CAL (ICV) CCV	12/14/22	20	20.3	(P) F
CAL ICV (CCV)	" "	20	19.9	(P) F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity 41-100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 6.5%		
CAL (ICV) CCV	12/14/22	100	102	(P) F
CAL ICV (CCV)	" "	100	100	(P) F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity >100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 5%		
CAL (ICV) CCV	12/14/22	800	883	(P) F
CAL ICV (CCV)	" "	800	811	(P) F
CAL ICV CCV				P F
CAL ICV CCV				P F

Notes:

CAL = Initial Calibration

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

* See Table FS 2200-2 on the back of this form

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings <0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Geosyntec Consultants
Water Quality Instrument Calibration Form

Project/Site: FFSFC Project #: FR7522D Field Personnel A. Lamore

Water Quality Meter - Model/Serial #: N/A Turbidimeter - Model/Serial # Geotech 21063313

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L)[1]	Reading (mg/L)	Reading (%)	Pass or Fail
						Acceptance Criteria: +/-0.3mg/L		
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (mS/cm)	Standard Lot #	Standard Exp. Date	Reading (mS/cm)	Pass or Fail
							Acceptance Criteria: +/- 5%	
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
							Acceptance Criteria: +/-0.2 SU	
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
							Geosyntec Acceptance Criteria: +/- 5%	
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Specific Conductance Probe Cleaned? Yes No Disolved Oxygen membrane Changed? Yes No

0.1 - 10 NTU Std 0.1 NTU	Date	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 10%	
CAL (ICV) CCV	12/20	0.02	(P) F
CAL (ICV) CCV	12/21	0.02	(P) F
CAL ICV CCV			P F
CAL ICV CCV			P F

11 - 40 NTU Std 20 NTU	Date	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 8%	
CAL (ICV) CCV	12/20	20.4	(P) F
CAL (ICV) CCV	12/21	21.5	(P) F
CAL ICV CCV			P F
CAL ICV CCV			P F

41 - 100 NTU Std 100 NTU	Date	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 6.5%	
CAL (ICV) CCV	12/20	104	(P) F
CAL (ICV) CCV	12/21	102	(P) F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F
CAL ICV CCV			P F

>100 NTU Std 800 NTU	Date	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 5%	
CAL (ICV) CCV	12/20	826	(P) F
CAL (ICV) CCV	12/21	824	(P) F
CAL ICV CCV			P F

1. See Table FS 2200-2 on the back of this form

CAL - Initial Calibration

ICV - Initial Calibration Verification

CCV - Continuing Calibration Verification

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Comments:

Geosyntec consultants

Geosyntec consultants

Form #100

Water Level Measurement Field Form

Site: Former Florida State Fire College (Former FSFC) Project No.: FR7522D

Date 1.3.2023 Page 1 of 2

Weather Sunny, 70°-80°F

Initials RM

Well ID	Status	Control Point	Measurement		
		Monitoring Point	Time of Measurement	Depth to Water feet	Depth to Bottom feet
DEPMW-1					--
DEPMW-2					--
DEPMW-3					--
DEPMW-4					--
DEPMW-5					--
DEPMW-6					--
DEPMW-7	GOOD	N	1220	26.98	--
DEPMW-8	GOOD	N	1222	27.00	--
DEPMW-9	NEW	N	1226	31.35	--
DEPMW-10	NEW	N	1240	30.42	--
DEPMW-11					--
DEPMW-12	NEW	N	0956	27.35	--
DEPMW-13	NEW	N	1000	27.30	--
DEPMW-14	NEW	N	0941	32.46	--
DEPMW-15	NEW	N	0945	32.44	--
DEPMW-16	NEW	N	1034	31.35	--
DEPMW-17	NEW	N	1038	31.30	--
DEPMW-18	NEW	N	1138	30.77	--
DEPMW-19	NEW	N	1143	31.02	--
DEPMW-20	NEW	N	1200	31.08	--
DEPMW-21	NEW	N	1204	31.13	--

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Form #100

Water Level Measurement Field Form

Site: Former Florida State Fire College (Former FSFC) Project No.: FR7522D

Date _____ Page 2 of 2

Weather _____

Initials _____

Well ID	Status	Control Point	Measurement		
		Monitoring Point	Time of Measurement	Depth to Water feet	Depth to Bottom feet
DEPMW-22	NEW	N	1020	29.45	--
DEPMW-23	NEW	N	1023	29.40	--
VISAMW (M-200)					--
Irrigation Well					--

Notes

Geosyntec consultants

Form #100

Water Level Measurement Field Form

Site: Former Florida State Fire College (Former FSFC) Project No.: FR7522D

Date 1/3/22 Page 1 of 2

Weather Partly Cloudy, high of 77°F

Initials AFL

Well ID	Status	Control Point	Measurement		
		Monitoring Point	Time of Measurement	Depth to Water feet	Depth to Bottom feet
DEPMW-1	ok	TOC-N	1221	31.00	--
DEPMW-2	ok	1	1223	31.10	--
DEPMW-3	ok	TOC-N	1138	29.49	--
DEPMW-4	ok		1142	29.55	--
DEPMW-5	ok		1153	31.02	--
DEPMW-6	ok		1154	31.10	--
DEPMW-7					--
DEPMW-8	ok		1248	27.01	--
DEPMW-9					--
DEPMW-10	ok		1245	30.45	--
DEPMW-11	ok		1156	30.85	--
DEPMW-12					--
DEPMW-13					--
DEPMW-14					--
DEPMW-15					--
DEPMW-16					--
DEPMW-17					--
DEPMW-18					--
DEPMW-19					--
DEPMW-20					--
DEPMW-21					--

Geosyntec consultants

Form #100

Water Level Measurement Field Form

Site: Former Florida State Fire College (Former FSFC) Project No.: FR7522D

Date _____ Page 2 of 2

Weather _____

Initials _____

Well ID	Status	Control Point	Measurement		
		Monitoring Point	Time of Measurement	Depth to Water feet	Depth to Bottom feet
DEPMW-22					--
DEPMW-23					--
VISAMW (M-200)	no lock. Broken stickup	TOC-N	1204	32.61	--
Irrigation Well					--

Notes

Geosyntec consultants

Water Quality Instrument Calibration Form

Project/Site: Former FSFC Project #: FR7522D Field Personnel: A. Lamore

Water Quality Meter - Model/Serial#: YSI 556 11E100 36 Turbidimeter - Model/Serial#: Hach 2100Q 16070C077578

Dissolved Oxygen (FDEP SOP FT 1500)	Date	Time	Temp (°C)	Saturation (mg/L)*	Reading (mg/L)	Reading (%)	Pass or Fail
					Acceptance Criteria:+/-0.3 mg/L		
CAL (ICV) CCV	1/3	1416	27.92	7.84	7.84	100	(P) F
CAL ICV (CCV)	1/4	0756	21.00	8.915	8.90	99.9	(P) F
CAL ICV CCV							P F
CAL ICV CCV							P F

Specific Conductance (FDEP SOP FT 1200)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mS/cm)	Reading (mS/cm)	Pass or Fail
Specific Conductance Probe Cleaned? Yes (No)					Acceptance Criteria: +/- 5%		
CAL (ICV) CCV	1/3	1424	26J674	10/23	1.413	1.381	(P) F
CAL ICV (CCV)	1/4	0759	"	"	"	1585	(P) F
CAL ICV CCV							P F
CAL ICV CCV							P F

pH (FDEP SOP FT 1100)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (SU)	Reading (SU)	Pass or Fail
					Acceptance Criteria: +/- 0.2 SU		
CAL (ICV) CCV	1/3	1428	26F143	6/24	10	10.14	(P) F
CAL (ICV) CCV	1/3	1430	26F053	6/24	7	7.04	(P) F
CAL (ICV) CCV	1/3	1433	26L572	9/24	4	3.97	(P) F
CAL ICV (CCV)	1/4	0805	"	"	10	10.01	(P) F
CAL ICV (CCV)	1/4	0809	"	"	7	6.93	(P) F
CAL ICV (CCV)	1/4	0815	"	"	4	3.97	(P) F

ORP (FDEP SOP N/A)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mV @ Temp °C)	Reading (mV)	Pass or Fail
Dissolved Oxygen Membrane Changed? Yes (No)					Geosyntec Acceptance Criteria: +/- 5%		
CAL (ICV) CCV	1/3	1435	26L755	6/23	240.0	233.7	(P) F
CAL ICV (CCV)	1/4	0817	"	"	4	241.1	(P) F
CAL ICV CCV							P F
CAL ICV CCV							P F

Turbidity 0.1-10 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 10%		
CAL (ICV) CCV	1/3/23	10	11.0	(P) F
CAL ICV (CCV)	1/4	"	11.0	(P) F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity 11-40 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 8%		
CAL (ICV) CCV	1/3/23	20	21.1	(P) F
CAL ICV (CCV)	1/4	"	21.4	(P) F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity 41-100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 6.5%		
CAL (ICV) CCV	1/3	100	104	(P) F
CAL ICV (CCV)	1/4	"	106	(P) F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity >100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 5%		
CAL (ICV) CCV	1/3	800	814	(P) F
CAL ICV (CCV)	1/4	"	835	(P) F
CAL ICV CCV				P F
CAL ICV CCV				P F

Notes:

CAL = Initial Calibration

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

* See Table FS 2200-2 on the back of this form

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings <0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Geosyntec
consultants

Water Quality Instrument Calibration Form

Project/Site: Former FSFC Project #: FR7522D Field Personnel: A. Lamore

Water Quality Meter - Model/Serial#: YSI 556 MPS 11E101030 Turbidimeter - Model/Serial#: Hach 2100Q 19070C027578

Dissolved Oxygen (FDEP SOP FT 1500)	Date	Time	Temp (°C)	Saturation (mg/L)*	Reading (mg/L)	Reading (%)	Pass or Fail
					Acceptance Criteria:+/-0.3 mg/L		
CAL ICV CCV	1/5	0751	19.45	9.092	9.02	99.1	P F
CAL ICV CCV	"	1819	20.7	8.968	9.04	101.3	P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Specific Conductance (FDEP SOP FT 1200)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mS/cm)	Reading (mS/cm)	Pass or Fail
Specific Conductance Probe Cleaned? Yes No					Acceptance Criteria: +/- 5%		
CAL ICV CCV	1/5	0754	2GF824	10/23	1.413	1.396	P F
CAL ICV CCV	"	1821	"	"	"	1.387	P F
CAL ICV CCV							P F
CAL ICV CCV							P F

pH (FDEP SOP FT 1100)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (SU)	Reading (SU)	Pass or Fail
					Acceptance Criteria: +/- 0.2 SU		
CAL ICV CCV	1/5	0756	2GH43	6/24	10	9.96	P F
CAL ICV CCV	1/5	0759	2GF083	6/24	7	6.92	P F
CAL ICV CCV	1/5	0802	2GL582	9/24	4	4.04	P F
CAL ICV CCV	"	"	"	"	10	9.97	P F
CAL ICV CCV	"	"	"	"	7	6.90	P F
CAL ICV CCV	"	"	"	"	4	3.80	P F

ORP (FDEP SOP N/A)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mV @ Temp °C)	Reading (mV)	Pass or Fail
Dissolved Oxygen Membrane Changed? Yes No					Geosyntec Acceptance Criteria: +/- 5%		
CAL ICV CCV	1/5	0806	2GL754	6/23	240	241.5	P F
CAL ICV CCV	"		"	"	"	238.6	P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Turbidity 0.1-10 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 10%		
CAL ICV CCV	1/5	10	10.9	P F
CAL ICV CCV	"	"	10.9	P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity 11-40 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 8%		
CAL ICV CCV	1/5	20	21.3	P F
CAL ICV CCV	"	"	21.5	P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity 41-100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 6.5%		
CAL ICV CCV	1/5	100	104	P F
CAL ICV CCV	"	"	105	P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity >100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 5%		
CAL ICV CCV	1/5	800	837	P F
CAL ICV CCV	"	"	832	P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Notes:

CAL = Initial Calibration

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

* See Table FS 2200-2 on the back of this form

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings <0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Geosyntec consultants

Water Quality Instrument Calibration Form

Project/Site: Former FSFC | Project #: FR7522D | Field Personnel: Rik Mathias

Water Quality Meter - Model/Serial#: YSI 556 06H2823AL | Turbidimeter - Model/Serial#: HACH 2100Q 10110C005228

Dissolved Oxygen (FDEP SOP FT 1500)	Date	Time	Temp (°C)	Saturation (mg/L)*	Reading (mg/L)	Reading (%)	Pass or Fail
					Acceptance Criteria:+/-0.3 mg/L		
CAL ICV CCV	1-3-23	1404	22.05	8.744	8.66	99.9	P F
CAL ICV CCV	1-4-23	0735	20.76	8.968	8.96	100.1	P F
CAL ICV CCV	1-5-23	0740	20.22	9.056	9.08	100.3	P F
CAL ICV CCV	1-5-23	1503	20.33	9.039	9.01	100.1	P F

Specific Conductance (FDEP SOP FT 1200)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mS/cm)	Reading (mS/cm)	Pass or Fail
Specific Conductance Probe Cleaned? Yes No					Acceptance Criteria: +/- 5%		
CAL ICV CCV	1-3-23	1408	2GJ674	10/23	1.413	1.413	P F
CAL ICV CCV	1-4-23	0740	"	"	"	1.420	P F
CAL ICV CCV	1-5-23	0744	"	"	"	1.418	P F
CAL ICV CCV	1-5-23	1507	"	"	"	1.412	P F

pH (FDEP SOP FT 1100)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (SU)	Reading (SU)	Pass or Fail
					Acceptance Criteria: +/- 0.2 SU		
CAL ICV CCV	1-3-23	1412	2GF083	6/24	7.00	7.00	P F
CAL ICV CCV		1416	2GJ592	9/24	4.00	4.00	P F
CAL ICV CCV		1420	2GF143	6/24	10.00	10.02	P F
CAL ICV CCV	1-4-23	0746	2GF083	6/24	7.00	6.99	P F
CAL ICV CCV	1-5-23	0750	2GF083	6/24	7.00	6.97	P F
CAL ICV CCV	1-5-23	0711	2GF083	6/24	7.00	7.03	P F

ORP (FDEP SOP N/A)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mV @ Temp °C)	Reading (mV)	Pass or Fail
Dissolved Oxygen Membrane Changed? Yes No					Geosyntec Acceptance Criteria: +/- 5%		
CAL ICV CCV	1-03-23	1423	2GJ755	6/23	240.0	239.1	P F
CAL ICV CCV	1-4-23	0750	"	"	"	241.6	P F
CAL ICV CCV	1-5-23	0755	"	"	"	240.9	P F
CAL ICV CCV	1-5-23	0716	"	"	"	238.4	P F

Turbidity 0.1-10 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 10%		
CAL ICV CCV	1-3-23	10	9.97	P F
CAL ICV CCV	1-4-23	10	10	P F
CAL ICV CCV	1-5-23	10	9.98	P F
CAL ICV CCV	1-5-23	10	10.1	P F

Turbidity 11-40 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 8%		
CAL ICV CCV	1-3-23	20	20.2	P F
CAL ICV CCV	1-4-23	20	19.9	P F
CAL ICV CCV	1-5-23	20	20.1	P F
CAL ICV CCV	1-5-23	20	20	P F

Turbidity 41-100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 6.5%		
CAL ICV CCV	1-3-23	100	100	P F
CAL ICV CCV	1-4-23	100	102	P F
CAL ICV CCV	1-5-23	100	99	P F
CAL ICV CCV	1-5-23	100	101	P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity >100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
		Acceptance Criteria: +/- 5%		
CAL ICV CCV	1-3-23	800	794	P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Notes:

CAL = Initial Calibration

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

* See Table FS 2200-2 on the back of this form

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings <0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-1 (100-120')	SAMPLE ID: DEPMW-1 (100-120')		DATE: 1/4/28

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	100 feet to 120 feet	31.05	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(120 ft - 31.05 ft) X 0.16 gallons/foot = 14.232 ÷4 = 3.56

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
33	33	1453	1505	24

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES
1501	16	16	2.0	31.05	7.06	25.57	659	2.76	2.09	clear	-25.9	
1503	4	20	1	31.05	7.06	25.53	666	2.59	1.89	"	-26.5	
1505	4	24	"	31.05	7.05	25.51	670	2.54	1.81	"	-26.3	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Alex Lamore /GEOSYNTEC		1506	1508

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (ml per minute): 2	TUBING MATERIAL CODE: HDPE
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-1 (100-120')	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	2

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-2 (25-45')	SAMPLE ID:	DEPMW-2 (25-45')
DATE:	1/4/22		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	25 feet to 45 feet	31.11	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(45 ft - 31.11 ft) X 0.16 gallons/foot = 2.22 ÷4 = 0.56

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
33	33	1537	1549	3.6

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1545	2.4	2.4	0.3	31.11	7.05	26.35	574	4.76	33.7	clear	-3.9	
1547	0.6	3.0	1	31.11	7.05	26.35	575	4.60	30.4	1	-5.0	
1549	0.6	3.6	1	31.11	7.04	26.24	577	4.49	28.1	1	-5.5	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Alex Lamore /GEOSYNTEC		1550	1552

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
33	0.3	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-2 (25-45)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	0.3

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-3 (100'-120')	SAMPLE ID: DEPMW-3 (100-120)		DATE: 1.5.2023

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	100 feet to 120 feet	29.48	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
=(120 ft - 29.48 ft) X .16 gallons/foot = 14.48

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT	TOTAL VOLUME PURGED (gallons):
~31	~31	1025	1048	23.0

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1040	15.0	15.0	1.00	30.00	7.48	24.92	454	0.62	0.39	clear	56.3	
1044	4.0	19.0	|	30.00	7.48	24.94	455	0.62	0.50	"	48.4	
1048	4.0	23.0	|	30.00	7.48	24.96	457	0.65	0.51	"	30.9	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
RIK MATHIAS /GEOSYNTEC	Rik Mathias	1049	1050

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
~31	1	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-3 (100-120')	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	1

REMARKS:
SAMPLE TIME: 1049

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-4 (25-45)	SAMPLE ID: DEPMW-4 (25-45)		DATE: 1.5.2023

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	25 feet to 45 feet	29.55	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(45 ft - 29.55 ft) X .16 gallons/foot = 2.47

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
~ 31	~ 31	0948	1004	4.00

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
0958	2.50	2.50	.25	29.58	6.48	25.46	126	4.86	62.8	slightly cloudy	117.5	
1001	.75	3.25	1	29.58	6.49	25.48	127	4.85	60.9	"	117.6	
1004	.75	4.00	1	29.58	6.49	25.48	128	4.82	58.0	"	117.4	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
RIK MATHIAS /GEOSYNTEC	Rik Mathias	1005	1006

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
~ 31	0.25	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-4 (25-45)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	.25

REMARKS:
SAMPLE TIME: 1005

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 oC **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-5 (100-120)	SAMPLE ID:	DEPMW-5 (100-120)
DATE:	1.5.2023		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	100 feet to 120 feet	31.02	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
=(120 ft - 31.02 ft) X .16 gallons/foot = 14.23

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
~33	~33	1315	1338	23.0

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1330	15.0	15.0	1.0	31.07	7.32	24.76	478	0.46	1.46	Clear	-9.8	
1334	4.0	19.0	1	31.07	7.43	24.73	483	0.52	1.38	11	3.9	
1338	4.0	23.0	1	31.07	7.43	24.76	489	0.43	1.32	11	15.1	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
RIK MATHIAS /GEOSYNTEC	Rik Mathias	1339	1340

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
~33	1.0	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-5 (100-120)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	1.0

REMARKS:
SAMPLE TIME: 1339

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 oC **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-6 (25-45)	SAMPLE ID: DEPMW-6 (25-45)		DATE: 1.5.2023

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 25 feet to 45 feet	STATIC DEPTH TO WATER (feet): 31.12	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(45 ft - 31.12 ft) X .16 gallons/foot = 2.22

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~33	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~33	PURGING INITIATED AT: 1235	PURGING ENDED AT: 1250	TOTAL VOLUME PURGED (gallons): 3.75

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1244	2.25	2.25	.25	31.12	7.03	25.37	606	4.64	40.2	Slight cloudy	104.6	
1247	.75	3.00	1	31.12	7.03	25.38	606	4.68	37.8	"	104.3	
1250	.75	3.75	1	31.12	7.03	25.39	606	4.71	35.2	"	103.7	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Rik Mathias /GEOSYNTEC	SAMPLER(S) SIGNATURES: Rik Mathias	SAMPLING INITIATED AT: 1251	SAMPLING ENDED AT: 1253
PUMP OR TUBING DEPTH IN WELL (feet): ~33	SAMPLE PUMP FLOW RATE (mL per minute): .25	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: (Y) N *	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-6 (25-45)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	.25
DEPMW-6 (25-45) DUP	2	"	"	"	—	—	"	"	"

REMARKS:
SAMPLE TIME: 1251 * DUP collected here

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING/PURGING APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump
EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0 2 units **Temperature:** + 0 2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-7 (160-120)	SAMPLE ID	DEPMW-7 (160-120)
DATE:	1/5/23		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	160 feet to 120 feet	27.05	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(160 ft - 27.05 ft) X 0.16 gallons/foot = 14.82 ÷ 4 = 3.70

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
29	29	1153	1207	28

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1201	16	16	2.0	27.06	7.05	25.54	636	2.50		clear	-1.4	
1203	4	20	|	27.06	7.04	25.50	640	2.87		|	-13.0	
1205	4	24	|	27.06	7.04	25.47	645	2.91		|	-13.0	
1207	4	28	|	27.06	7.04	25.47	647	2.89		|	-13.2	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02, 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Alex Lamorie/GEOSYNTEC		1208	1210

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE ~~(mL per~~ minute):	TUBING MATERIAL CODE: HDPE
29	2.0	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE ~~(mL per~~ min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
DEPMW-7 (160-120)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	2.0

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPmw-8 (20-40')	SAMPLE ID: DEPmw-8 (20-40')		DATE: 1/5/23

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 20 feet to 40 feet	STATIC DEPTH TO WATER (feet): 27.05	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(40 ft - 27.05 ft) X 0.16 gallons/foot = 2.072 ÷4 = 0.518

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 29	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 29	PURGING INITIATED AT: 1111	PURGING ENDED AT: 1122	TOTAL VOLUME PURGED (gallons): 3.3

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1118	2.1	2.1	0.3	27.05	6.90	26.45	541	5.25	9.04	clear	10.8	
1120	0.6	2.7	1	27.06	6.90	26.51	542	5.23	9.01	"	12.3	
1122	0.6	3.3	1	27.06	6.89	26.50	543	5.23	2.05	"	16.3	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Alex Lamore /GEOSYNTEC	AxR	1123	1125

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute): 0.3	TUBING MATERIAL CODE: HDPE
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPmw-8 (20-40)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	0.3

REMARKS

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-9 (150-170')	SAMPLE ID: DEPMW-9 (150-170')		DATE: 1/5/23

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 150 feet to 170 feet	STATIC DEPTH TO WATER (feet): 31.41	PURGE PUMP TYPE OR BAILER: ESP	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(170 ft - 31.41 ft) X 0.16 gallons/foot = 22.17 ÷4= 5.54

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 34	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 34	PURGING INITIATED AT: 1343	PURGING ENDED AT: 1410	TOTAL VOLUME PURGED (gallons): 54

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1355	24	24	2.0	31.46	7.45	25.70	413	0.16	1.95	clear	-171.2	
1358	6	30	|	31.46	7.27	25.64	535	1.03	1.91	|	-140.1	
1401	6	36	|	31.46	7.13	25.56	637	1.76	1.94	|	-108.1	
1404	6	42	|	31.46	7.10	25.51	677	2.23	1.80	|	-89.2	
1407	6	48	|	31.46	7.09	25.53	678	2.30	1.64	|	-79.1	
1410	6	54	|	31.46	7.09	25.52	679	2.33	1.58	|	-75.1	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Alex Lamore /GEOSYNTEC	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1411	SAMPLING ENDED AT: 1413
PUMP OR TUBING DEPTH IN WELL (feet): 34	SAMPLE PUMP FLOW RATE (mL per minute): 2.0	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-9	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	2.0
(150-170)	2	"	"	"			"	"	2.0
DEPMW-9									
(150-170) DUP									

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-10 (160-180)	SAMPLE ID:	DEPMW-10 (160-180)
DATE:	1.5.2023		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	160 feet to 180 feet	30.51	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(180 ft - 30.51 ft) X .16 gallons/foot = 23.91

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
~33	~33	1559	1617	36.0

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1611	24.0	24.0	2.00	31.25	7.79	26.08	266	0.14	1.07	Clear	-133.9	
1614	6.0	30.0	1	31.24	7.79	26.08	265	0.13	0.97	"	-136.0	
1617	6.0	36.0	1	31.25	7.79	26.08	266	0.13	1.00	"	-138.5	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
RIK MATHIAS /GEOSYNTEC	Rik Mathias	1618	1619

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
~33	210	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-10 (160-180)		HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	210

REMARKS: Sample Time: 1618

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-11 (165-185)	SAMPLE ID:	DEPMW-11 (165-185)
DATE:	1.5.2023		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	165 feet to 185 feet	30.86	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
=(185 ft - 30.86 ft) X .16 gallons/foot = 24.66

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
~32	~32	1358	1435	37.0

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1423	25.0	25.0	1.0	31.01	7.70	24.89	464	0.15	1.18	clear	-12.7	
1429	6.0	31.0	"	31.01	7.67	24.93	471	0.13	1.74	"	-28.6	
1435	6.0	37.0	"	31.01	7.64	24.95	478	0.12	1.82	"	-85.0	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
RIK MATHIAS /GEOSYNTEC	Rik Mathias	1436	1437

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
~32	1.0	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
DEPMW-11 (165-185)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	1.0

REMARKS:
Sample Time: 1436

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES:
1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-12 (100-120) (speed) (RM)	SAMPLE ID: DEPMW-12 (100-120) (speed) (RM)		DATE: 1.4.2023

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	100 feet to 120 feet	27.35	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(120 ft - 27.35 ft) X .16 gallons/foot = 14.82

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
~29	~29	1205	1228	23.0

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1220	15.0	15.0	1.0	27.40	7.38	25.27	577	0.61	1.62	clear	13.1	
1224	4.0	19.0	1	27.40	7.37	25.28	579	0.61	1.56	"	16.4	
1228	4.0	23.0	1	27.40	7.37	25.29	582	0.60	1.48	"	18.1	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
RIK MATHIAS /GEOSYNTEC	Rik Mathias	1229	1230

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
~29	100	

FIELD DECONTAMINATION:	FIELD-FILTERED:	FILTER SIZE:	DUPLICATE:
Y (N)	Y (N)	µm	Y (N)
	Filtration Equipment Type:		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-12 (100-120) (speed) (RM)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	100

REMARKS: SAMPLE TIME: 1229

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-13 (25-45) ~~(Spare)~~ (PM)	SAMPLE ID:	DEPMW-13 (25-45) ~~(Spare)~~ (PM)
DATE:	1.4.2023		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	25 feet to 45 feet	27.31	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(45 ft - 27.31 ft) X .16 gallons/foot = 2.83

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT	TOTAL VOLUME PURGED (gallons):
~29	~29	1118	1136	4.50

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or ~~µS/cm~~)	OXYGEN (circle ~~mg/L~~ or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1130	3.00	3.00	.25	27.35	7.95	25.74	559	1.62	37.6	clear	-48.7	
1133	.75	3.75	"	27.35	7.98	25.73	563	1.58	34.9	"	-54.4	
1136	.75	4.50	"	27.35	8.01	25.73	564	1.67	35.1	"	-57.7	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
RIK MATHIAS /GEOSYNTEC	Rik Mathias	1137	1138

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
~29	0.25	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-13 (25-45) ~~(Spare)~~ (PM)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	.25

REMARKS:
SAMPLE TIME: 1137

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)	SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-14 (100-120')	SAMPLE ID: DEPMW-14 (100-120')	DATE: 1/4/23

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 100 feet to 120 feet	STATIC DEPTH TO WATER (feet): 32.55	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(120 ft - 32.55 ft) X 0.16 gallons/foot = 13.992 =: 3.498

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 34	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 34	PURGING INITIATED AT: 1051	PURGING ENDED AT: 1117	TOTAL VOLUME PURGED (gallons): 26

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1105	14	14	1.0	32.60	9.69	26.16	175	5.19	61.0	clear	-53.0	
1109	4.0	18	|	32.60	9.69	26.17	175	5.13	52.3	|	-80.5	
1113	4.0	22	|	32.60	9.69	26.16	175	5.01	2.70	|	-83.2	
1117	4.0	26	|	32.60	9.72	26.10	176	5.04	1.58	|	-85.7	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Alex Lamore /GEOSYNTEC	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1118	SAMPLING ENDED AT: 1120
PUMP OR TUBING DEPTH IN WELL (feet): 34	SAMPLE PUMP FLOW RATE (mL per minute): 1.0	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
DEPMW-14 (100-120')	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	1.0

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)	SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-15(25-45')	SAMPLE ID: DEPMW-15(25-45')	DATE: 1/4/23

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 25 feet to 45 feet	STATIC DEPTH TO WATER (feet): 32.50	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(45 ft - 32.5 ft) X 0.16 gallons/foot = 2 ÷4= 0.5

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 35	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT 1225	PURGING ENDED AT 1239	TOTAL VOLUME PURGED (gallons): 3.5

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES
1233	2	2	0.25	32.51	6.87	25.87	581	2.61	17.7	Clear	-19.6	
1235	0.5	2.5	|	32.51	6.85	25.89	582	3.03	15.6	|	-20.8	
1237	0.5	3.0	|	32.51	6.84	25.90	583	2.97	14.5	|	-20.8	
1239	0.5	3.5	|	32.51	6.84	25.84	583	2.86	12.1	|	-21.4	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Alex Lamore /GEOSYNTEC	SAMPLER(S) SIGNATURES: Alex R	SAMPLING INITIATED AT: 1240	SAMPLING ENDED AT: 1242
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute): 0.25	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (~~mL~~ per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
DEPMW-15 (25-45')	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	0.25

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0 2 units **Temperature:** + 0 2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPmw-16 (100-120')	SAMPLE ID: DEPmw-16 (100-120') (DUP)	DATE: 1/4/23	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 100 feet to 120 feet	STATIC DEPTH TO WATER (feet): 31.40	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(120 ft - 31.40 ft) X 0.16 gallons/foot = 14.17 ÷4= 3.544

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 33	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 33	PURGING INITIATED AT: 0851	PURGING ENDED AT: 0918	TOTAL VOLUME PURGED (gallons): 27

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
0906	15	15	1.0	31.42	7.18	25.86	603	1.12	51.9	clear	-5.2	
0910	4	19	"	31.42	7.16	25.78	615	1.20	20.7	"	-0.7	
0914	4	23	"	31.42	7.16	25.60	618	1.20	16.7	"	-0.6	
0918	4	27	"	31.42	7.15	25.77	621	1.20	15.9	"	-2.1	

AL

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Alex Lemore /GEOSYNTEC	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 0919	SAMPLING ENDED AT: 0921
PUMP OR TUBING DEPTH IN WELL (feet): 33	SAMPLE PUMP FLOW RATE (~~ml~~ per minute): 1.0	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (~~ml~~ per min)
DEPmw-16 (100-120)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	1.0
(DUP)									

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 oC **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)	SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPmw-17(25-45')	SAMPLE ID: DEPmw-17(25-45')	DATE: 1/4/23

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 25 feet to 45 feet	STATIC DEPTH TO WATER (feet): 31.35	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(45 ft – 31.35 ft) X 0.16 gallons/foot = 2.184 ÷4 = 0.546

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 33	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 33	PURGING INITIATED AT: 0955	PURGING ENDED AT: 1012	TOTAL VOLUME PURGED (gallons): 8.5

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1000	2.5	2.5	0.5	31.35	7.20	25.51	426	2.84	511	cloudy	30.1	
1002	1.0	3.5	|	31.35	7.20	24.87	424	3.24	321	|	26.0	
1004	1.0	4.5	|	31.35	7.20	24.86	423	3.18	290	|	23.0	
1006	1.0	5.5	|	31.35	7.19	24.77	422	3.37	226	|	21.2	
1008	1.0	6.5	|	31.35	7.19	24.97	421	2.97	209	|	6.7	
1010	1.0	7.5	|	31.35	7.19	24.99	422	2.97	206	|	-1.2	
1012	1.0	8.5	|	31.35	7.19	25.09	423	3.02	210	|	-3.8	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Alex Lamore /GEOSYNTEC	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1013	SAMPLING ENDED AT: 1015
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute): 0.5	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
DEPmw-17 (25-45') (Spec)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	0.5

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-18 (100-120)	SAMPLE ID:	DEPMW-18 (100-120)
DATE:	1.4.2023		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	100 feet to 120 feet	30.79	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(120 ft - 30.79 ft) X .16 gallons/foot = 14.27

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
~32	~32	0952	1015	23.00

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1007	15.00	15.00	1.0	30.82	7.52	24.73	334	.13	1.00	clear	41.3	
1011	4.00	19.00	"	30.82	7.49	24.73	340	.10	.84	"	39.1	
1015	4.00	23.00	"	30.82	7.49	24.74	348	.07	.75	"	38.2	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
RIK MATHIAS /GEOSYNTEC	R.K. Mathias	1016	1017

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
~32	110	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-18 (100-120) (RM)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	110

REMARKS: Sample Time: 1016

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES:
1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Florida State Fire College (Former FSFC)		SITE LOCATION: 1501 West Silver Springs Blvd, Ocala, FL	
WELL NO: DEPMW-19 (25-45)!	SAMPLE ID: DEPMW-19 (25-45)		DATE: 1.4.2023

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 25 feet to 45 feet	STATIC DEPTH TO WATER (feet): 31.06	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
=(45 ft - 31.06 ft) X .16 gallons/foot = 2.23

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~33	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~33	PURGING INITIATED AT: 0910	PURGING ENDED AT: 0925	TOTAL VOLUME PURGED (gallons): 3.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
0919	2.25	2.25	.25	31.08	7.08	25.47	612	2.47	34.1	slight cloudy	112.4	
0922	.75	3.00	1	31.08	7.08	25.40	613	2.45	32.5	4	110.8	
0925	.75	3.75	1	31.08	7.08	25.38	614	2.44	32.9	11	106.1	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: RICK MATHIAS /GEOSYNTEC	SAMPLER(S) SIGNATURES: Rick Mathias	SAMPLING INITIATED AT: 0926	SAMPLING ENDED AT: 0927
PUMP OR TUBING DEPTH IN WELL (feet): ~33	SAMPLE PUMP FLOW RATE (mL per minute): 0.25	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-19 (25-45) (Split) (MW)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	0.25

REMARKS: Sample Time: 0926

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-20 (100-120)	SAMPLE ID:	DEPMW-20 (100-120)
DATE:	1-4-2023		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	100 feet to 120 feet	31.10	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
=(120 ft - 31.10 ft) X .16 gallons/foot = 14.22

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
~33	~33	1615	1638	23.00

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1630	15.0	15.00	1.0	31.15	7.98	25.29	297	.10	2.27	clear	-180.0	
1634	4.0	19.00	|	31.15	7.98	25.28	297	.12	2.23	"	-179.1	
1638	4.0	23.00	|	31.15	7.97	25.28	297	.11	2.19	"	-178.8	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
RIK MATHIAS /GEOSYNTEC	Rik Mathias	1639	1640

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
~33	1.0	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
DEPMW-20 (100-120)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	1.0

REMARKS:
SAMPLE TIME: 1639

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-21 (25-45)	SAMPLE ID:	DEPMW-21 (25-45)
DATE:	1.4.2023		

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 25 feet to 45 feet	STATIC DEPTH TO WATER (feet): 31.13	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(45 ft - 31.13 ft) X .16 gallons/foot = 2.21

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~33	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~33	PURGING INITIATED AT: 1541	PURGING ENDED AT: 1556	TOTAL VOLUME PURGED (gallons): 3.75

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES
1550	2.25	2.25	.25	31.25	7.13	27.74	512	4.49	4.54	Clear	101.1	
1553	.75	3.00	1	31.25	7.12	27.79	512	4.56	4.38	"	101.1	
1556	.75	3.75	1	31.25	7.12	27.83	512	4.44	4.22	"	101.3	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Rik Mathias /GEOSYNTEC	SAMPLER(S) SIGNATURES: Rik Mathias	SAMPLING INITIATED AT: 1557	SAMPLING ENDED AT: 1558
PUMP OR TUBING DEPTH IN WELL (feet): ~33	SAMPLE PUMP FLOW RATE (mL per minute): 0.25	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-21 (25-45)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	0.25

REMARKS: SAMPLE TIME: 1557

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-22 (100-120) (SPLIT)	SAMPLE ID:	DEPMW-22 (100-120) ( )
		DATE:	1-3-2023

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 100 feet to 120 feet	STATIC DEPTH TO WATER (feet): 29.45	PURGE PUMP TYPE OR BAILER: ESP	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(120 ft - 29.45 ft) X .16 gallons/foot = 14.48

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~31 (BTOC)	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~31	PURGING INITIATED AT: 1639	PURGING ENDED AT: 1713	TOTAL VOLUME PURGED (gallons): 32.5	

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1653	14.5	14.5	1.0	29.55	7.61	25.15	306	0.09	0.78	Clear	-104.2	
1657	3.6	18.1	|	29.55	7.52	25.14	414	0.08	4.40	"	-87.1	
1701	3.6	21.7	|	29.55	7.45	25.14	476	0.07	6.73	"	-74.7	
1705	3.6	25.3	|	29.55	7.43	25.17	497	0.06	17.4	"	-69.6	
1709	3.6	28.9	|	29.55	7.43	25.20	501	0.09	18.4	"	-71.4	
1713	3.6	32.5	|	29.55	7.43	25.25	502	0.08	14.5	"	-72.2	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: RIK MATHIAS /GEOSYNTEC	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1714	SAMPLING ENDED AT: 1715
PUMP OR TUBING DEPTH IN WELL (feet): ~31	SAMPLE PUMP FLOW RATE (mL per minute): ~3800	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEPMW-22 (100-120)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	~3800

REMARKS: Sample Time: 1714

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	DEPMW-23(25-45')	SAMPLE ID:	DEPMW-23(25-45')C,)
DATE:	1/3/22		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/8"	25 feet to 45 feet	29.42	ESP

WELL VOLUME PURGE (only fill out if applicable): 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
=(45 ft 29.42 ft) X 0.16 gallons/foot = 2.492 /4 = 0.62

EQUIPMENT VOLUME PURGE (only fill out if applicable): 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
= gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
31	31	1641	1656	5.25

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1650	3.15	3.15	0.35	29.45	7.82	26.72	391	0.45	79.0	cloudy	-167.0	~~99.0~~ AL
1654	1.40	4.55	0.35	29.45	7.83	26.59	393	0.42	81.3	"	-167.9	
1656	0.70	5.25	"	29.45	7.83	26.57	393	0.38	80.5	"	-168.2	
							AL					

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Alex Lamore /GEOSYNTEC		1657	1659

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (~~ml~~ per minute):	TUBING MATERIAL CODE: HDPE
31	0.35	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) Filtration Equipment Type	FILTER SIZE: µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE ~~(ml~~ per min)
DEPMW-23 (25-45)C	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	0.35

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0 2 units **Temperature:** + 0 2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	VISAMW (M-200)	SAMPLE ID:	VISAMW (M-200)
DATE:	1/5/23		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
4	3/8"	30 feet to 40 feet	32.64	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(40 ft - 32.64 ft) X 0.65 gallons/foot = 4.784 ÷4: 1.196

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
34	34	0942	0955	13.0

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
0947	5.0	5.0	1.0	32.68	6.75	24.72	607	0.69	16.2	clear	-48.1	
0949	2.0	7.0	|	32.68	6.74	24.78	606	0.91	14.0	|	-56.3	
0951	2.0	9.0	|	32.68	6.74	24.92	606	1.50	5.0	|	-62.3	
0953	2.0	11.0	|	32.68	6.74	24.92	605	1.55	1.95	|	-61.7	
0955	2.0	13.0	|	32.68	6.74	24.90	604	1.68	1.62	|	-58.9	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Alex LaMore /GEOSYNTEC	Alex L	0956	0958

PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
34	1.0	

FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
VISAMW (M-200)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	1.0

REMARKS

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES:
1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01
FS 220 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Florida State Fire College (Former FSFC)	SITE LOCATION:	1501 West Silver Springs Blvd, Ocala, FL
WELL NO:	IRRIGATION well (105-140)	SAMPLE ID: IRRIGATION Well (105-140)	DATE: 1.3.2023

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 105 feet to 140 feet	STATIC DEPTH TO WATER (feet): NM	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) =(ft - ft) X gallons/foot =

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet)+ gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: 1530	PURGING ENDED AT: 1540	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1530		opened	spigot & let run for 8 minutes									
1538	—	—	—	—	7.67	24.67	639	4.26	35.5	Clear	-100.6	
1540	—	—	—	NM	7.68	24.54	639	4.31	38.9	"	-96.5	
			COULD NOT ACCESS (PM)									

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1541	SAMPLING ENDED AT: 1543
RIK MATHIAS /GEOSYNTEC	Rik Mathias		

PUMP OR TUBING DEPTH IN WELL (feet): NA	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: HDPE
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:	DUPLICATE: (Y) N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
IRRIGATION well (105-140)	2	HDPE	125 mL	None	--	--	W-PFAS-MS	ESP	
IRRIGATION Well (105-140) DUP	2	"	"	"	"	"	"	"	

REMARKS: SAMPLE Time: 1541

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)
SAMPLING/PURGING **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
EQUIPMENT CODES: **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1 **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: + 0.2 units **Temperature:** + 0.2 oC **Specific Conductance:** + 5% **Dissolved Oxygen:** all readings < 20% saturation (see Table FS 2200-2); **optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity:** all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

Table 1: Sampling Work Plan
Palm Beach State College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Soil							
Delineation Sampling (Grab Batt B)	SB-75	SB-75 (0-0.5')	3/28/22 1230	Soil	0-0.5	HA	
		SB-75 (0.5-2')	3/28/22 1235		0.5-2		
		SB-75 (2-4')	3/28/22 1240		2-4		
	SB-76	SB-76 (0-0.5')	3/28/22 1315		0-0.5		
		SB-76 (0.5-2')	3/28/22 1317		0.5-2		
		SB-76 (2-4')	3/28/22 1320		2-4		Few burnt wood pieces observed in 2-4' interval
	SB-77	SB-77 (0-0.5')	3/28/22 1402		0-0.5		
		SB-77 (0.5-2')	3/28/22 1405		0.5-2		
		SB-77 (2-4')	3/28/22 1407		2-4		
Sediment Samples							
B Assess Potential PFAS Impacts	Sed-1	Sed-1 (0-1')	3/28/22 1111	Sediment	0-1	HA	
	Sed-2	Sed-2 (0-1')	3/28/22 1140		0-1		
	Sed-3	Sed-3 (0-1')	3/28/22 1155		0-1		
Surface Water Samples							
A Surface Water Assessment	SW-1	SW-1	3/28/22 1100	Surface Water	N/A	Grab	
	SW-2	SW-2	3/28/22 1135				
	SW-3	SW-3	3/28/22 1150				

Initials: EH

Table 1: Sampling Work Plan
Palm Beach State College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Monitoring Wells							
Delineation Sampling	DEPMW-1 (100-120')	DEPMW-1 (100-120')	3/29/22 1127	Groundwater	100-120	Submersible Pump	
	DEPMW-2 (25-45')	DEPMW-2 (25-45')	3/29/22 1100		25-45		
	DEPMW-3 (100-120')	DEPMW-3 (100-120')	3/29/22 0805		100-120		collected EQB-52 following.
	DEPMW-4 (25-45')	DEPMW-4 (25-45')	3/28/22 1745		25-45		
	DEPMW-5 (100-120')	DEPMW-5 (100-120')	3/29/22 1503		100-120		
	DEPMW-6 (25-45')	DEPMW-6 (25-45')	3/29/22 1440		25-45		Lab QA/QC sample collected
		DEPMW-6 (25-45') DUP					
	DEPMW-7 (100-120')	DEPMW-7 (100-120')	3/29/22 0918		100-120		collected EQB-52 prior to.
	DEPMW-8 (20-40')	DEPMW-8 (20-40')	3/29/22 1557		20-40		
	VISAMW (M-200)	VISAMW (M-200)	3/29/22 1014		30-40		
	Irrigation Well (105-140')	Irrigation Well (105-140')	~~3/29/22~~ ~~1352~~ NW	3/31/22 0910	105-140	Grab	No access to pump. Gate locked. Need to contact College of Central Florida

Still need to collect

EC collected.
Purged irrigation well for 5 minutes from 0905 to 0910 and sampled.

Initials: EC

Table 1: Sar g Work Plan
Palm Beac.. ate College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
DPT Sampling Points							
Groundwater Assessment	SP-26	SP-26 (36-40')	3/29/22 1430	Groundwater	36-40	DPT	Lab QA/QC collected
		SP-26 (46-50')	3/29/22 1450		46-50		—
		SP-26 (66-70')	3/29/22 1655		66-70		Low production / High turbidity
		SP-26 (86-90')	3/30/22 1025		86-90		—
	SP-27	SP-27 (36-40')	3/28/22 1445		36-40		—
		SP-27 (46-50')	3/28/22 1505		46-50		—
		SP-27 (46-50') DUP					—
		SP-27 (66-70')	3/28/22 1525		66-70		—
		SP-27 (74-78') ~~SP-27 (86-90')~~ EU	3/28/22 1600		(74-78') ~~86-90~~		Refusal encountered at 78' BLS. Adjusted interval to 74-78' BLS
	SP-28	SP-28 (41-45') ~~SP-28 (36-40')~~	3/29/22 0950		(41-45') ~~36-40~~		Dry at 40' BLS. Adjusted interval to 45' BLS and encountered water. Hard rock encountered at 45'
		SP-28 (46-50')	3/29/22 1010		46-50		—
		SP-28 (66-70')	3/29/22 1030		66-70		—
		SP-28 (86-90')	3/29/22 1055		86-90		—

Initials: EU

Table 1: Sa[illegible]g Work Plan
Palm Beac[illegible]ate College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Groundwater Assessment	SP-29	SP-29 (36-40')	3/30/22 1355	Groundwater	36-40	DPT	—
		SP-29 (46-50')	3/30/22 1410		46-50		—
		SP-29 (66-70')	3/30/22 1450		66-70		—
		SP-29 (86-90')	—		86-90		Refusal encountered. EU
	SP-30	SP-30 ~~(36-40')~~ (41-45')	3/31/22 1115		~~36-40~~ 41-45		Dry at 40' BLS. Encountered water at 45' BLS.
		SP-30 (46-50')	3/31/22 1135		46-50		—
		SP-30 (66-70')	3/31/22 1150		66-70		—
		SP-30 (66-70') DUP					
		SP-30 (86-90')	3/31/22 1215		86-90		—
	SP-31	SP-31 ~~(36-40')~~ (41-45')	4/1/22 0925		~~36-40~~ (41-45')		Dry at 40' BLS. Encountered water at 45' BLS
		SP-31 (46-50')	4/1/22 0940		46-50		—
		SP-31 (66-70')	4/1/22 1010		66-70		—
		SP-31 ~~(86-90')~~ (82-86)	4/1/22 1050		~~86-90~~ 82-86		—

Initials: EU

Table 1: Sar ; Work Plan
Palm Beac.. ..ate College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Groundwater Assessment	SP-32	SP-32 (36-40')	4/4/22 1035	Groundwater	36-40	DPT	—
		SP-32 (46-50')	4/4/22 1055		46-50		—
		SP-32 (66-70')	4/4/22 1115		66-70		—
		SP-32 (86-90')	4/4/22 1135		86-90		High turbidity
	SP-33	SP-33 (36-40')	4/4/22 1530		36-40		—
		SP-33 (46-50')	4/4/22 1605		46-50		—
		SP-33 (46-50') DUP					
		SP-33 (66-70')	4/4/22 1630		66-70		—
		SP-33 (86-90')	4/4/22 1655		86-90		—
	SP-34	SP-34 (36-40')	4/5/22 1055		36-40		—
		SP-34 (46-50')	4/5/22 1115		46-50		—
		SP-34 (66-70')	4/5/22 1145		66-70		—
		SP-34 (86-90')	4/5/22 1435		86-90		Due to extremely high turbidity, 4 bottles were collected

Initials: EH

Table 1: Sar ₃ Work Plan
Palm Beac.. ..ate College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Groundwater Assessment	SP-35	SP-35 (36-40')	4/6/22 1045	Groundwater	36-40	DPT	—
		SP-35 (46-50')	4/6/22 1105		46-50		—
		SP-35 (66-70') (7P-P2')	4/6/22 1140		66-70		—
		SP-35 ~~(86-90')~~	4/6/22 1330		7P-P2 ~~86-90~~		Refusal at P2' BLS. Adjust final interval to (7P-P2').
		SP-35 ~~(86-90')~~ DUP (7P-P2)					
	SP-36	SP-36 (36-40')	4/6/22 1555		36-40		Lab QA/QC collected
		SP-36 (46-50')	4/6/22 1640		46-50		—
		SP-36 (66-70')	4/7/22 1105		66-70		—
		SP-36 ~~(86-90')~~ (P1-P5)	4/7/22 1150		P1-P5 ~~86-90~~		Refusal at P5' BLS. Adjust final interval to (P1-P5').
	SP-37	SP-37 (36-40')	4/7/22		36-40		Moves DUP to next interval due to low production.
		EK ~~SP-37 (36-40') DUP~~	~~1430~~ EK 1425				
		SP-37 (46-50') SP-37(46-50) DUP	4/7/22 1440		46-50		Collected DUP
		SP-37 (66-70')	4/7/22 1500		66-70		—
		SP-37 (86-90')	—		86-90		Refusal at 71' BLS

Table 1: Sar ɜ Work Plan
Palm Beac.. ..ate College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Laboratory Quality Assurance/Quality Control							EC
Assess potential sources of contamination from DPT samplers	Equipment Blanks (ratio of 1:10)	EQB-44	3/29/22 1320	Water	N/A		Interval before: SP-29 (86-90) Interval after: SP-~~30~~ 26 (46-50) Container #: 004P68
		EQB-45	3/31/22 1440				Interval before: SP-30 (86-90) Interval after: SP-31 (46-50) Container #: 004P69
		EQB-46	4/5/22 0950				Interval before: SP-33 (86-90) Interval after: SP-34 (46-50) Container #: 004P60
		EQB-47	4/4/22 ~~1445~~ 1335				Interval before: SP-36 (81-85) Interval after: SP-37 (46-50) Container #: 004P66
		EQB-48	—				Interval before: — Interval after: — Container #: —
Assess potential sources of contamination from soil sampling equipment		EQB-49	3/28/22 1345				Boring before: SB-76 Boring after: SB-75 Container #: 004P56
Assess potential sources of contamination from sed sampling equipment		EQB-50	3/28/22 1042 ~~NA~~ EC				Boring before: Sed-1 Boring after: Container #: 064P56 NO re-use of buckets
Assess potential sources of contamination from SW sampling equipment		EQB-51	NA				Sample before: Sample after: NO Equipment used for SW Sampling Container #:
Assess potential sources of contamination from MW sampling equipment		EQB-52	3/29/22 0936				Sample before: DEPMW-7 Sample after: DEPMW-3 Container #: 001P37

Table 1: Sar ..g Work Plan
Palm Beac.. ..ate College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Evaluate potential impact of sample cross-contamination	Field Reagent Blanks	FRB-8	3/29/22 1020	Water	DPT Groundwater Sampling		Taken by SP-28
		FRB-9	3/29/22 0915		Groundwater Sampling		Collected during DEPM-7 sample collection
		FRB-10	4/6/22 1425		Decontamination		Taken by decon pit while decanning rods
		FRB-11	—		Extra		—
Additional Samples							

Notes:

1. SP indicates sampling point (via direct-push technology [DPT]).
2. ft BLS indicates feet below land surface.
3. SB indicates soil boring.
4. MW indicates monitoring well.
5. HA indicates hand auger.
6. SED indicates sediment sample
7. SW indicates surface water sample
8. PFAS indicates per- and polyfluoroalkyl substances.
9. N/A indicates not applicable.
10. DUP indicates duplicate.
11. EQB indicates equipment blank.
12. FRB indicates field reagent blank.

Initials: EY

Table 1: Sampling Work Plan
Former Florida State Fire College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Soil							
Delineation Sampling	SB-78	SB-78 (0-0.5')	12/6/22 1235	Soil	0-0.5	HA	
		SB-78 (0.5-2')	12/6/22 1240		0.5-2		
		SB-78 (2-4')	12/6/22 1245		2-4		
	SB-79	SB-79 (0-0.5')	12/6/22 1310		0-0.5		
		SB-79 (0.5-2')	12/6/22 1315		0.5-2		
		SB-79 (2-4')	12/6/22 1320		2-4		
Monitoring Wells							
Delineation Sampling	DEPMW-1 (100-120')	DEPMW-1 (100-120')		Ground Water	100-120	Submersible Pump	
	DEPMW-2 (25-45')	DEPMW-2 (25-45')			25-45		
	DEPMW-3 (100-120')	DEPMW-3 (100-120')			100-120		
	DEPMW-4 (25-45')	DEPMW-4 (25-45')			25-45		
	DEPMW-5 (100-120')	DEPMW-5 (100-120')			100-120		
	DEPMW-6 (25-45')	DEPMW-6 (25-45')			25-45		
		DEPMW-6 (25-45') DUP					
	DEPMW-7 (100-120')	DEPMW-7 (100-120')			100-120		
	DEPMW-8 (20-40')	DEPMW-8 (20-40')			20-40		

Initials: _____

Table 1: Sampling Work Plan
Former Florida State Fire College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Monitoring Wells							
Delineation Sampling	VISAMW (M-200)	VISAMW (M-200)		Ground Water	30-40	Submersible Pump	
	Irrigation Well (105-140')	Irrigation Well (105-140')			105-140	Grab	
		Irrigation Well (105-140') DUP					
Laboratory Quality Assurance/Quality Control							
Assess potential sources of contamination from HA sampling equipment	Equipment Blanks (ratio of 1:10)	EQB-53	12/6/22 1305	Water	N/A		Boring before: SB-78 (2-4) Boring after: SB-79 (0-0.5') Container #: 001042
Assess potential sources of contamination from sonic MW installation equipment		EQB-54	12/7/22 1678				Well before: DEPMW-17 Well after: DEPMW-15 Container #: 001042
		EQB-55	12/7/22 1023				Well before: DEPMW-18 Well after: DEPMW-15 Container #: 001042
		EQB-56 OC, deep	12/15/2022 1020				Well before: DEPMW-11 Well after: DEPMW-10 Container #: 001434
Assess potential sources of contamination from MW sampling equipment		EQB-57					Sample before: Sample after: Container #:
		EQB-58					Sample before: Sample after: Container #:
		EQB-59					Sample before: Sample after: Container #:
Evaluate potential impact of sample cross-contamination	Field Reagent Blanks	FRB-11	12/7/22 1031	Water	Sonic Decontamination		Container # 001042
		FRB-12	12/6/22 1303		Soil Sampling Decontamination		
		FRB-13			Monitoring Well Decontamination		
		OC FRB-14	12/5/2022 0809		Extra		Rain conditions; Container # 001434 & 001042

Table 1: Sampling Work Plan
Former Florida State Fire College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Additional Samples							

Notes:

1. ft BLS indicates feet below land surface.
2. SB indicates soil boring.
3. MW indicates monitoring well.
4. HA indicates hand auger.
5. PFAS indicates per- and polyfluoroalkyl substances.
6. N/A indicates not applicable.
7. DUP indicates duplicate.
8. EQB indicates equipment blank.
9. FRB indicates field reagent blank.

Initials: _____

Table 1: Sampling Work Plan
Former Florida State Fire College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Soil							
Delineation Sampling	SB-78	SB-78 (0-0.5')		Soil	0-0.5	HA	
		SB-78 (0.5-2')			0.5-2		
		SB-78 (2-4')			2-4		
	SB-79	SB-79 (0-0.5')			0-0.5		
		SB-79 (0.5-2')			0.5-2		
		SB-79 (2-4')			2-4		
Monitoring Wells							
Delineation Sampling	DEPMW-1 (100-120')	DEPMW-1 (100-120')	1/4 1506	Ground Water	100-120	Submersible Pump	
	DEPMW-2 (25-45')	DEPMW-2 (25-45')	1/4 1550		25-45		
	DEPMW-3 (100-120')	DEPMW-3 (100-120')	1/5 1049		100-120		
	DEPMW-4 (25-45')	DEPMW-4 (25-45')	1/5 1005		25-45		
	DEPMW-5 (100-120')	DEPMW-5 (100-120')	1/5 1339		100-120		
	DEPMW-6 (25-45')	DEPMW-6 (25-45')	1/5 1251		25-45		
		DEPMW-6 (25-45') DUP					
	DEPMW-7 (100-120')	DEPMW-7 (100-120')	1/5 1208		100-120		
	DEPMW-8 (20-40')	DEPMW-8 (20-40')	1/5 1123		20-40		

Initials: _____

Table 1: Sampling Work Plan
Former Florida State Fire College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Monitoring Wells							
Delineation Sampling	DEPMW-9 (150-170')	DEPMW-9 (150-170')	1/5 1411	Ground Water	150 - 170	Sonic; Submersible Pump	
		DEPMW-9 (150-170') DUP					
	DEPMW-10 (160-180')	DEPMW-10 (160-180')	1/5 1618		160 - 180		
	DEPMW-11 (165-185')	DEPMW-11 (165-185')	1/5 1436		165 - 185		
	DEPMW-12 (100-120')	DEPMW-12 (100-120')	1/4 1229		100 - 120		
	DEPMW-13 (25-45')	DEPMW-13 (25-45')	1/4 1137		25 - 45		
	DEPMW-14 (100-120')	DEPMW-14 (100-120')	1/4 1118		100 - 120		
	DEPMW-15 (25-45')	DEPMW-15 (25-45')	1/4 1240		25 - 45		
	DEPMW-16 (100-120')	DEPMW-16 (100-120')	1/4 0914		100 - 120		
	DEPMW-17 (25-45')	DEPMW-17 (25-45')	1/4 1013		25 - 45		
	DEPMW-18 (100-120')	DEPMW-18 (100-120')	1/4 1016		100 - 120		
	DEPMW-19 (25-45')	DEPMW-19 (25-45')	1/4 0926		25 - 45		
	DEPMW-20 (100-120')	DEPMW-20 (100-120')	1/4 1639		100 - 120		
	DEPMW-21 (25-45')	DEPMW-21 (25-45')	1/4 1557		25 - 45		
	DEPMW-22 (100-120')	DEPMW-22 (100-120')	1/3 1714		100 - 120		
	DEPMW-23 (25-45')	DEPMW-23 (25-45')	1/3 1657		25 - 45		

Table 1: Sampling Work Plan
Former Florida State Fire College

Rationale	Location ID	Sample ID	Date/Time	Matrix	Depth (ft BLS)	Sample Method	Comments
Monitoring Wells							
Delineation Sampling	VISAMW (M-200)	VISAMW (M-200)	1/5 0956	Ground Water	30-40	Submersible Pump	
	Irrigation Well (105-140')	Irrigation Well (105-140')	1/3 1541		105-140	Grab	
		Irrigation Well (105-140') DUP					
Laboratory Quality Assurance/Quality Control							
Assess potential sources of contamination from HA sampling equipment	Equipment Blanks (ratio of 1:10)	EQB-53		Water	N/A		Boring before: Boring after: Container #:
Assess potential sources of contamination from sonic MW installation equipment		EQB-54					Well before: Well after: Container #:
		EQB-55					Well before: Well after: Container #:
		EQB-56					Well before: Well after: Container #:
Assess potential sources of contamination from MW sampling equipment		EQB-57	1/5 0831				Sample before: DEPMW-4 Sample after: DEPMW-20 Container #: 001035
		EQB-58	1/5 0842				Sample before: VISAMW(M-200) Sample after: DEPMW-2 Container #: 001130
		EQB-59	1/5 1305				Sample before: DEPMW-9 Sample after: DEPMW-7 Container #: 001081
Evaluate potential impact of sample cross-contamination	Field Reagent Blanks	FRB-11		Water	Sonic Decontamination		
		FRB-12			Soil Sampling Decontamination		
		FRB-13	1/5 0835		Monitoring Well Decontamination		
		FRB-14			Extra		

Initials: _____

FIELD DRUM INVENTORY TRACKING LOG

Project No.: FR7522C/03 **Project Start Date:** 3/28/2022

Project: Former FSFC **Address:** 1501 West Silver Springs Blvd, Ocala, FL

Drum Number	Generation Date	Content % Full	Contents (soil, development water, purge water, etc.)	Source Location (Well #, Boring #, etc.)
1	3/28-3/29	100	Purge Water, Decon Water	SP-27, Decon Pit
2	3/28-3/29	100	Purge Water, Decon water	Site wide
3	3/29-3/30	100	Purge water, Decon water	Site wide
4	3/29-3/30	100	Purge water, Decon water	SP-28, Decon Pit
5	3/29-4/5	100	Purge water, Decon water	Site wide
6	3/28-4/7	50	Soil	Site wide
7	4/5-4/7	100	Purge water, Decon water	Site wide

FIELD DRUM INVENTORY TRACKING LOG

Project No.: FR7522D **Project Start Date:** 11/15/22

Project: Former FSFC **Address:** 1501 West Silver Springs Blvd, Ocala, FL

Drum Number	Generation Date	Content % Full	Contents (soil, development water, purge water, etc.)	Source Location (Well #, Boring #, etc.)
1	11/15/22	95	Soil cuttings	DEPMW-13 and DEPMW-12
2	"	100	Decon water	Decon pit
3	11/16/22	85	Soil cuttings	DEPMW-12
4	"	98	Development water	DEPMW-12 and DEPMW-13
5	"	95	"	DEPMW-13
6	11/17/22	90	Soil cuttings	DEPMW-20
7	"	95	"	"
8	11/18/22	95	Purged development water	DEPMW-20
9	"	95	"	"
10	"	85	"	"
11	11/28/22	95	Development water	DEPMW-21
12	11/29/22	100	Soil	DEPMW-22
13	11/29/22	95	Soil	"
14	11/30/22	100	Development water	DEPMW-23
15	"	100	"	DEPMW-22
16	"	100	"	DEPMW-22
17	12/1/22	100	Soil	DEPMW-16
18	"	95	"	"
19	12/1/22	100	~~Det~~ Development water	DEPMW-16
20	12/2/22	100	"	DEPMW-17
21	"	95	Decon water	Various = -22, -16, -23
22	"	95	Decon water	Various = -22, -16, -23
23	12/5/22	~~50~~ 95	Soil	DEPMW-19/-18

PICKUP Date

12/16

- Drums 1, 3-13 (12 drums) removed by Erwin on 11/30/22
- Drums 2, 14-

FIELD DRUM INVENTORY TRACKING LOG

Project No.: FR7522D **Project Start Date:** 11/15/22

Project: Former FSFC **Address:** 1501 West Silver Springs Blvd, Ocala, FL

Pickup Date	Drum Number	Generation Date	Content % Full	Contents (soil, development water, purge water, etc.)	Source Location (Well #, Boring #, etc.)
	24	12/5/22	100	Sonic returns	DEPMW-19
12/16	25	12/5/22	100	Decon water	various - DEPMW-16, -17, -19
	26	"	100%	"	DEPMW-19 *Drum drained/damaged in an act of vandalism*
	27	12/6/22	100	Soil	DEPMW-18
	28	12/6/22	100	"	DEPMW-18
	29	"	100%	Purge waters	DEPMW-18
	30	"	100%	Purge water	DEPMW-18, DEPMW-19
12/16	31	12/7/22	100%	Soil	DEPMW-15, DEPMW-14
"	32	12/7/22	100%	Decon water	Various, DEPMW-15, 14, 18, 19
"	33	12/8/22	100%	" , Drilling solution	DEPMW-14
"	34	"	"	" , drilling solution	DEPMW-14
"	35	"	"	" " "	"
"	36	"	100%	Soil	DEPMW-14,
	37	"		Soil	DEPMW-14,
12/16	38	"	100%	Development water	DEPMW-14, DEPMW-15
"	39	12/9/22	100%	Development water	DEPMW-15
	40	12/12/2022	100	decon water	DEPMW-15, DEPMW-11
	41	12/13/2022	100	soil	DEPMW-11
12/16	42	"	100	drilling mud/water	DEPMW-11
"	43	"	100	"	DEPMW-11
"	44	"	100	"	DEPMW-11
	45	"	100	soil	DEPMW-11, DEPMW-10
12/16	46	12/14/2022	100	development water	DEPMW-11

FIELD DRUM INVENTORY TRACKING LOG

Project No.: FR7522D **Project Start Date:** 11/15/2022

Project: Former FSFC **Address:** 1501 West Silver Springs Blvd, Ocala, FL

Drum Number	Generation Date	Content % Full	Contents (soil, development water, purge water, etc.)	Source Location (Well #, Boring #, etc.)
47	12/14/2022	100	decon water	DEPMW-11
48	12/15/2022	100	drilling mud	DEPMW-10
49	"	100	soil	DEPMW-10
50	"	100	drilling mud	DEPMW-10
51	12/16/2022	100	soil	DEPMW-10
52	12/20/22	100%	Soil	DEPMW-9
53	12/20/22	100%	Soil	DEPMW-9
54	12/20/22	100%	Development water, Decon water	DEPMW-10, DEPMW-9
55	12/20/22	100%	Decon water	DEPMW-10, DEPMW-9
56	12/20/22	100%	Drilling Mud	DEPMW-9
57	12/20/22	100%	Drilling Mud	"
58	12/20/22	70~~50~~%	Soil + & decon liner	"
59	12/21/22	100%	Development water	DEPMW-9

FIELD DRUM INVENTORY TRACKING LOG

Project No.: FR7522D **Project Start Date:**

Project: Former FSFC **Address:** 1501 West Silver Springs Blvd, Ocala, FL

Drum Number	Generation Date	Content % Full	Contents (soil, development water, purge water, etc.)	Source Location (Well #, Boring #, etc.)
(1)	1/3/23	50%	~~DEPMW~~ AC Purge Water	DEPMW- ,15,16,17,23,1,
2	1/4/24	100%	"	DEPMW-13,22,19,18
3	1/4/24	100%	"	DEPMW-12,21,20,14,2,9
4	1/5/24	100%	"	DEPMW-3,4,5,6, part of 11, visA, 8,7
5	1/5/24	100%	"	DEPMW-9, rest of 11; 10, 7, visA, 8
6	1/5/23	95%	Decon water	10 Buckets (5 gal) of decon water

State of Florida Department of Environmental Protection

Chain of Custody Record

Page 1 of 2

Project Name	Former Florida State Fire College (FFSFC)						Analyses								
Sampled by	Ethan Upton			Module#											
RQ#	RQ-2022-03-28-05	Site Name	FFSFC												
Field ID	Matrix	Date	Time ET ☒ CT ☐	Bottle Group	# BOTTLES	W-PFAS-MS	S-PFAS-MS2							Comments	
SP-27 (36-40')	GW	3/28/22	1445	A	2	X									
SP-27 (46-50')	GW	3/28/22	1505	A	2	X									
SP-27 (46-50') DUP	GW	3/28/22	1505	A	2	X									
SP-27 (66-70')	GW	3/28/22	1525	A	2	X									
SP-27 (74-78')	GW	3/28/22	1600	A	2	X									
SP-28 (41-45')	GW	3/29/22	0950	A	2	X									
SP-28 (46-50')	GW	3/29/22	1010	A	2	X									
FRB-8	GW	3/29/22	1020	C	2	X									
SP-28 (66-70')	GW	3/29/22	1030	A	2	X									
SP-28 (86-90')	GW	3/29/22	1055	A	2	X									
EQB-44	GW	3/29/22	1320	D	2	X									
SP-26 (36-40')	GW	3/29/22	1430	A	4	X								Lab QA/QC	

Relinquished by:	/Geosyntec	Date/Time	Method of Dispatch	Received by:	Date/Time
Luke Varner		3/30/22 0900	FedEx Express		
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time

Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Page 2 of 2

Project Name	Former Florida State Fire College (FFSFC)				# BOTTLES	Analyses								
Sampled by	Ethan Upton			Module#		W-PFAS-MS	S-PFAS-MS2							
RQ#	RQ-2022-03-28-05	Site Name	FFSFC											
Field ID		Matrix	Date	Time ET [X] CT [ ]	Bottle Group									Comments
SP-26 (46-50)		GW	3/29/22	1450	A	2	X							
~~SP-26 (62-66)~~		~~GW~~	~~3/29/22~~	~~1545~~	~~A~~	~~2~~	~~X~~							

Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
Luke Varner /Geosyntec	3/30/22 0900	FedEx Express		
Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
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Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Page 1 of 3

Project Name	Former Florida State Fire College (FFSFC)					# BOTTLES	Analyses									
Sampled by	Luke Varner			Module#			W-PFAS-MS	S-PFAS-MS2								
RQ#	RQ-2022-03-28-05	Site Name	FFSFC													
	Field ID	Matrix	Date	Time ET ☒ CT ☐	Bottle Group											Comments
✓	SW-1	Surface water	3/28/22	1100	A	2	X									
✓	SW-2	Surface Water	3/28/22	1135	A	2	X									
✓	SW-3	Surface Water	3/28/22	1150	A	2	X									
✓	Sed-1 (0-1')	Sediment	3/28/22	1111	B	1		X								
✓	Sed-2 (0-1')	Sediment	3/28/22	1140	B	1		X								
✓	Sed-3 (0-1')	Sediment	3/28/22	1155	B	1		X								
✓	SB-75 (0-0.5')	Soil	3/28/22	1230	B	1		X								
✓	SB-75 (0.5-2')	Soil	3/28/22	1235	B	1		X								
✓	SB-75 (2-4')	Soil	3/28/22	1240	B	1		X								
✓	SB-76 (0-0.5')	Soil	3/28/22	1315	B	1		X								
✓	SB-76 (0.5-2')	Soil	3/28/22	1317	B	1		X								
✓	SB-76 (2-4')	Soil	3/28/22	1320	B	1		X								

Relinquished by:	/Geosyntec	Date/Time	Method of Dispatch	Received by:	Date/Time
Luke Varner		3/30/22 0900	FedEx Express		
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time

Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Page 2 of 3

Project Name	Former Florida State Fire College (FFSFC)					# BOTTLES	Analyses									
Sampled by	Luke Varner			Module#			W-PFAS-MS	S-PFAS-MS2								
RQ#	RQ-2022-03-28-05	Site Name	FFSFC													
	Field ID	Matrix	Date	Time ET [X] CT [ ]	Bottle Group											Comments
✓	SB-77 (0-0.5')	Soil	3/28/22	1402	B	1		X								
✓	SB-77 (0.5-2')	Soil	3/28/22	1405	B	1		X								
✓	SB-77 (2-4')	Soil	3/28/22	1407	B	1		X								
✓	DEP MW-1 (100-120')	Groundwater	3/29/22	1127	A	2	X									
✓	DEP MW-2 (25-45')	GW	3/29/22	1100	A	2	X									
✓	DEP MW-3 (100-120')	GW	3/29/22	0805	A	2	X									
✓	DEP MW-4 (25-45')	GW	3/28/22	1745	A	2	X									
✓	DEP MW-5 (100-120')	GW	3/29/22	1503	A	2	X									
✓	DEP MW-6 (25-45')	GW	3/29/22	1440	A	4	X									Lab QA/QC included
✓	DEP MW-6 (25-45') DUP	GW	3/29/22	1440	A	2	X									
✓	DEP MW-7 (100-120')	GW	3/29/22	0918	A	2	X									
✓	DEP MW-8 (20-40')	GW	3/29/22	1557	A	2	X									

Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
Luke Varner /Geosyntec	3/30/22 0900	FedEx Express		
Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time

Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Project Name: Former Florida State Fire College (FFSFC)

Sampled by: Luke Varner

Module#:

RQ#: RQ-2022-03-28-05

Site Name: FFSFC

	Field ID	Matrix	Date	Time ET ☒ CT ☐	Bottle Group	# BOTTLES	Analyses: W-PFAS-MS	Analyses: S-PFAS-MS2	Comments
✓	VISAM W (M-200)	GW	3/29/22	1014	A	2	X		
✓	EQB-49	water	3/28/22	1345	D	2	X		
✓	EQB-50	water	3/28/22	1042	D	2	X		
✓	EQB-52	water	3/29/22	0836	D	2	X		
✓	FRB-9	water	3/29/22	0915	C	2	X		

Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
Luke Varner /Geosyntec	3/30/22 0900	FedEx Express		
Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time

Remarks:

Preservative Sticker 1 | Preservative Sticker 2 | Preservative Sticker 3 | Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Project Name	Former Florida State Fire College (FFSFC)						Analyses								
Sampled by	Ethan Upton			Module#	—	# BOTTLES	W-PFAS-MS	S-PFAS-MS2							
RQ#	RQ-2022-03-28-05	Site Name	FFSFC												
Field ID	Matrix	Date	Time ET [X] CT [ ]	Bottle Group											Comments
✓ SP-26 (66-70)	GW	3/29/22	1655	A		2	X								
✓ SP-26 (86-90')	GW	3/30/22	1025	A		2	X								
✓ SP-29 (36-40')	GW	3/30/22	1355	A		2	X								
✓ SP-29 (46-50')	GW	3/30/22	1410	A		2	X								
✓ SP-29 (66-70')	GW	3/30/22	1450	A		2	X								
✓ Irrigation Well (105-140')	GW	3/31/22	0910	A		2	X								
✓ SP-30 (41-45')	GW	3/31/22	1115	A		2	X								
✓ SP-30 (46-50')	GW	3/31/22	1135	A		2	X								
✓ SP-30 (66-70')	GW	3/31/22	1150	A		2	X								
✓ SP-30 (66-70') DUP	GW	3/31/22	1150	A		2	X								
✓ SP-30 (86-90')	GW	3/31/22	1215	A		4	X								Lab QA/QC
✓ EQB-45	DI water	3/31/22	1440	D		2	X								

Relinquished by:	/Geosyntec	Date/Time	Method of Dispatch	Received by:	Date/Time
James Mills		4/4/22 1400	FedEx Express		
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time
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Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Project Name	Former Florida State Fire College (FFSFC)				# BOTTLES	Analyses								
Sampled by	Ethan Upton			Module# –										
RQ#	RQ-2022-03-28-05	Site Name	FFSFC											
Field ID		Matrix	Date	Time ET [X] CT [ ]	Bottle Group		W-PFAS-MS	S-PFAS-MS2						Comments
✓	SP-31 (41-45)	GW	4/1/22	0925	A	2	X							
✓	SP-31 (46-50')	GW	4/1/22	0940	A	2	X							
✓	SP-31 (66-70')	GW	4/1/22	1010	A	2	X							
✓	SP-31 (82-86')	GW	4/1/22	1050	A	2	X							

Relinquished by:	/Geosyntec	Date/Time	Method of Dispatch	Received by:	Date/Time
[signature] Mills		4/4/22 1400	FedEx Express		
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time

Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Project Name	Former Florida State Fire College (FFSFC)					# BOTTLES	Analyses								
Sampled by	Ethan Upton			Module#			W-PFAS-MS	S-PFAS-MS2							
RQ#	RQ-2022-03-28-05	Site Name	FFSFC												
Field ID		Matrix	Date	Time ET ☒ CT ☐	Bottle Group										Comments
SP-32 (36-46)		GW	4/4/22	1035	A	2	X								
SP-32 (46-50')		GW	4/4/22	1055	A	2	X								
SP-32 (66-70)		GW	4/4/22	1115	A	2	X								
SP-32 (86-90)		GW	4/4/22	1135	A	2	X								
SP-33 (36-40)		GW	4/4/22	1530	A	4	X								Lab QA/QC
SP-33 (46-50')		GW	4/4/22	1605	A	2	X								
SP-33 (46-50') DUP		GW	4/4/22	1605	A	2	X								
SP-33 (66-70')		GW	4/4/22	1630	A	2	X								
SP-33 (86-90')		GW	4/4/22	1655	A	2	X								
EQB-46		DI water	4/5/22	0950	D	2	X								
SP-34 (36-40)		GW	4/5/22	1055	A	2	X								
SP-34 (46-50)		GW	4/5/22	1115	A	2	X								

Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time
Ethan Upton	/Geosyntec	4/11/22 ~0900	FedEx Express		
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time

Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Project Name: Former Florida State Fire College (FFSFC)

Sampled by: Ethan Upton

Module#:

RQ#: RQ-2022-03-28-05

Site Name: FFSFC

Field ID	Matrix	Date	Time ET☒ CT☐	Bottle Group	# BOTTLES	Analyses: W-PFAS-MS	Analyses: S-PFAS-MS2	Comments
SP-34 (66-76')	GW	4/5/22	1145	A	2	X		
SP-34 (86-90')	GW	4/5/22	1435	A	4	X		High turbidity

Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
Ethan Upton /Geosyntec	4/11/22 - 0900	FedEx Express		
Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time

Remarks:

Preservative Sticker 1 | Preservative Sticker 2 | Preservative Sticker 3 | Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Page 1 of 2

Project Name	Former Florida State Fire College (FFSFC)					# BOTTLES	Analyses								
Sampled by	Ethan Upton			Module#			W-PFAS-MS	S-PFAS-MS2							
RQ#	RQ-2022-03-28-05	Site Name	FFSFC												
Field ID		Matrix	Date	Time ET ☒ CT ☐	Bottle Group										Comments
SP-35 (36-40')		GW	4/6/22	1045	A	2	X								
SP-35 (46-50')		GW	4/6/22	1105	A	2	X								
SP-35 (66-70')		GW	4/6/22	1140	A	2	X								
SP-35 (78-82')		GW	4/6/22	1330	A	2	X								
SP-35 (78-82') DUP		GW	4/6/22	1330	A	2	X								
FRB-10		DI water	4/6/22	1425	C	2	X								
SP-36 (36-40')		GW	4/6/22	1555	A	4	X								Lab QA/QC
SP-36 (46-50')		GW	4/6/22	1640	A	2	X								
SP-36 (66-70')		GW	4/7/22	1105	A	2	X								
SP-36 (81-85')		GW	4/7/22	1150	A	2	X								
EQB-47		GW	4/7/22	1335	D	2	X								
SP-37 (36-40')		GW	4/7/22	1425	A	2	X								

Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time
Ethan Upton	/Geosyntec	4/11/22 - 0900	FedEx Express		
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time
Relinquished by:		Date/Time	Method of Dispatch	Received by:	Date/Time

Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Project Name	Former Florida State Fire College (FFSFC)				# BOTTLES	Analyses									
Sampled by	Ethan Upton			Module#											
RQ#	RQ-2022-03-28-05	Site Name	FFSFC												
Field ID	Matrix	Date	Time ET ☒ CT ☐	Bottle Group		W-PFAS-MS	S-PFAS-MS2								Comments
SP-37 (46-50')	GW	4/7/22	1440	A	2	X									
SP-37 (46-50') DUP	GW	4/7/22	1440	A	2	X									
SP-37 (66-70')	GW	4/7/22	1500	A	2	X									
~~SP-37~~ (EV)	~~GW~~	~~4/7/22~~		~~A~~	~~2~~	~~X~~									

Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
Ethan Upton /Geosyntec	4/11/22 - 0900	FedEx Express		
Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time

Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Project Name	Former Florida State Fire College (FFSFC)				# BOTTLES	Analyses								
Sampled by	Alex Lamore / Rik Mathias			Module#		W-PFAS-MS	S-PFAS-MS2							
RQ#	RQ-2022-11-14-12	Site Name	FFSFC											
Field ID	Matrix	Date	Time ET [X] CT [ ]	Bottle Group										Comments
DEPMW-1 (100-120')	water	1/4/23	1506	A	2	x								
DEPMW-2 (25-45')		1/4/23	1550	A	2	x								
DEPMW-3 (100-120')		1/5/23	1049	A	2	x								
DEPMW-4 (25-45')		1/5/23	1005	A	2	x								
DEPMW-5 (100-120')		1/5/23	1339	A	2	x								
DEPMW-6 (25-45')		1/5/23	1251	A	2	x								
DEPMW-6 (25-45') DUP		1/5/23	1251	A	2	x								
DEPMW-7 (100-120')		1/5/23	1208	A	2	x								
DEPMW-8 (20-40')		1/5/23	1123	A	2	x								
DEPMW-9 (150-170')		1/5/23	1411	A	2	x								
DEPMW-9 (150-170') DUP		1/5/23	1411	A	2	x								
DEPMW-10 (160'-180')	x	1/5/23	1618	A	2	x								

Relinquished by: Alex Lamore /Geosyntec	Date/Time 1/6/23 10:30	Method of Dispatch Pickup ~~FedEx Express~~	Received by: Jana Mills /Geosyntec	Date/Time 1/6/23 10:30
Relinquished by: Jana Mills /Geosyntec	Date/Time 1/9/23 13:00	Method of Dispatch FedEx Express	Received by:	Date/Time
Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time

Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Project Name	Former Florida State Fire College (FFSFC)				# BOTTLES	Analyses									
Sampled by	Alex Lamore / Rik Mathias			Module#		W-PFAS-MS	S-PFAS-MS2								
RQ#	RQ-2022-11-14-12	Site Name	FFSFC												
Field ID		Matrix	Date	Time ET ☒ CT ☐	Bottle Group										Comments
DEPMW-11 (165-185')		Water	1/5/23	1436	A	2	X								
DEPMW-12 (100-120')			1/4/23	1229		2	X								
DEPMW-13 (25'-45')			1/4/23	1137		2	X								
DEPMW-14 (100-120')			1/4/23	1118		2	X								
DEPMW-15 (25-45')			1/4/23	1240		2	X								
DEPMW-16 (100-120')			1/4/23	0919		2	X								
DEPMW-17 (25-45')			1/4/23	1013		2	X								
DEPMW-18 (100-120')			1/4/23	1016		2	X								
DEPMW-19 (25-45')			1/4/23	0926		2	X								
DEPMW-20 (100-120')			1/4/23	1639		2	X								
DEPMW-21 (25-45')			1/4/23	1557		2	X								
DEPMW-22 (100-120')		X	1/3/23	1714	A	2	X								

Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
Alex Lamore /Geosyntec	1/6/23 10:30	~~FedEx Express~~ Pickup	Jon Mills /Geosyntec	1/6/23 10:30
Jon Mills /Geosyntec	1/9/23 1300	FedEx Express		

Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4

State of Florida Department of Environmental Protection

Chain of Custody Record

Page 3 of 3

Project Name	Former Florida State Fire College (FFSFC)				# BOTTLES	Analyses: W-PFAS-MS								Comments
Sampled by	Alex Lamore / Rik Mathias	Module#												
RQ#	RQ-2022-11-14-12	Site Name	FFSFC											
Field ID	**Matrix**	**Date**	**Time (ET ☒ CT ☐)**	**Bottle Group**										
DEPMW-23 (25-45')	water	1/3/23	1657	A	2	X								
UFSAMW(M-200)	↓	1/5/23	0956	A	2	X								
Irrigation Well (105-140')	↓	1/3/23	1541	A	2	X								
Irrigation Well Dup (105-140')	X	1/3/23	1541	A	2	X								
EQB-57	water	1/5/23	0831	D	2	X								
EQB-58	↓	1/5/23	0842	D	2	X								
EQB-59	↓	1/5/23	1305	D	2	X								
FRB-13	X	1/5/23	0835	C	2	X								

Relinquished by:	Date/Time	Method of Dispatch	Received by:	Date/Time
[signature] / Geosyntec	1/6/23 / 10:30	~~Fedex Express~~ Pickup	[signature] / Geosyntec	1/6/23 / 10:30
[signature] / Geosyntec	1/9/23 / 1300	FedEx Express		

Remarks:

Preservative Sticker 1

Preservative Sticker 2

Preservative Sticker 3

Preservative Sticker 4

Sample Packaging/Shipping Checklist for FDEP SIS/SOL PFAS Projects

Objective: Ensure sample kits are received and samples are packaged and shipped properly.

Instructions: Please answer each question. For any question with a No answer, please provide details/justification below the question. A copy of this checklist should be saved to the project folder, accompany the sample kit, and be returned to the lab with the samples.

Project Name:
Project Number:
Cooler: # 1 of # 1
Associated COCs: #1 of #2 thru #2 of #2

Checked by: Luke Varner
Date: 3/30/22

Final Check/Date: Yes | 3/30/22
COC Checked: Yes
Photos Checked: Yes

Item		
Sample dates, times, IDs on field notes, COC, bottle labels (in Sharpie) Match and no blind duplicates on COC	(Yes)	No
RQ Number and Bottle Group on Samples consistent with FDEP Paperwork and Different RQs Packed in Different Coolers	(Yes)	No
If Liquid IDW Samples Collected, Trip Blank included in Cooler and on COC	Yes	(No)
No IDW sample collected		
Heavy-Duty Garbage Bag Place in Cooler and Ice in Bottom of Bag	(Yes)	No
Bagged Samples (including Temp Blank) Placed on Ice (Photo)	(Yes)	No
Additional Ice (Not Bagged) Placed on Samples (Photo)	(Yes)	No
Bag Sealed and COC, RQ, Checklist in Ziplock Bag Taped to Cooler Lid (Photo)	(Yes)	No
FDEP Notified of Shipping Date, Method, Expected Arrival	(Yes)	No

Sample Packaging/Shipping Checklist for FDEP SIS/SOL PFAS Projects

Objective: Ensure sample kits are received and samples are packaged and shipped properly.

Instructions: Please answer each question. For any question with a No answer, please provide details/justification below the question. A copy of this checklist should be saved to the project folder, accompany the sample kit, and be returned to the lab with the samples.

Project Name:
Project Number:
Cooler: # 1 of # 1
Associated COCs: # 1 of # 3 thru # 3 of # 3

Checked by: Luke Varner
Date: 3/30/22

Final Check/Date: Yes / 3/30/22
COC Checked: Yes
Photos Checked: Yes

Item		
Sample dates, times, IDs on field notes, COC, bottle labels (in Sharpie) Match and no blind duplicates on COC	(Yes)	No
RQ Number and Bottle Group on Samples consistent with FDEP Paperwork and Different RQs Packed in Different Coolers	(Yes)	No
If Liquid IDW Samples Collected, Trip Blank included in Cooler and on COC No IDW Samples Collected	Yes	(No)
Heavy-Duty Garbage Bag Place in Cooler and Ice in Bottom of Bag	(Yes)	No
Bagged Samples (including Temp Blank) Placed on Ice (Photo)	(Yes)	No
Additional Ice (Not Bagged) Placed on Samples (Photo)	(Yes)	No
Bag Sealed and COC, RQ, Checklist in Ziplock Bag Taped to Cooler Lid (Photo)	(Yes)	No
FDEP Notified of Shipping Date, Method, Expected Arrival	(Yes)	No

Sample Packaging/Shipping Checklist for FDEP SIS/SOL PFAS Projects

Objective: Ensure sample kits are received and samples are packaged and shipped properly.

Instructions: Please answer each question. For any question with a No answer, please provide details/justification below the question. A copy of this checklist should be saved to the project folder, accompany the sample kit, and be returned to the lab with the samples.

Project Name: FFSFC
Project Number: FR7522C/03/-/1232
Cooler: # 1 of # 1
Associated COCs: # 1 of # 1 ~~thru # of #~~

Checked by: James Mills
Date: 4/4/22

Final Check/Date: JCM / 4/4/22
COC Checked: JCM
Photos Checked: 4/4/22

Item			
Sample dates, times, IDs on field notes, COC, bottle labels (in Sharpie) Match and no blind duplicates on COC	(Yes)	No	
RQ Number and Bottle Group on Samples consistent with FDEP Paperwork and Different RQs Packed in Different Coolers	(Yes)	No	
If Liquid IDW Samples Collected, Trip Blank included in Cooler and on COC No IDW	Yes	No	(N/A)
Heavy-Duty Garbage Bag Place in Cooler and Ice in Bottom of Bag	(Yes)	No	
Bagged Samples (including Temp Blank) Placed on Ice (Photo)	(Yes)	No	
Additional Ice (Not Bagged) Placed on Samples (Photo)	(Yes)	No	
Bag Sealed and COC, RQ, Checklist in Ziplock Bag Taped to Cooler Lid (Photo)	(Yes)	No	
FDEP Notified of Shipping Date, Method, Expected Arrival	(Yes)	No	

Sample Packaging/Shipping Checklist for FDEP SIS/SOL PFAS Projects

Objective: Ensure sample kits are received and samples are packaged and shipped properly.

Instructions: Please answer each question. For any question with a No answer, please provide details/justification below the question. A copy of this checklist should be saved to the project folder, accompany the sample kit, and be returned to the lab with the samples.

Project Name: Former Florida State Five College
Project Number: FR7522C
Cooler: # 1 of # 2
Associated COCs: #- of #- thru #- of #-

Checked by: Ethan Upton
Date: 4/11/22

Final Check/Date: Ethan Upton / 4/11/22
COC Checked: ✓
Photos Checked: ✓

Item		
Sample dates, times, IDs on field notes, COC, bottle labels (in Sharpie) Match and no blind duplicates on COC	(Yes)	No
RQ Number and Bottle Group on Samples consistent with FDEP Paperwork and Different RQs Packed in Different Coolers	(Yes)	No
If Liquid IDW Samples Collected, Trip Blank included in Cooler and on COC NO IDW Samples	Yes	(No)
Heavy-Duty Garbage Bag Place in Cooler and Ice in Bottom of Bag	(Yes)	No
Bagged Samples (including Temp Blank) Placed on Ice (Photo)	(Yes)	No
Additional Ice (Not Bagged) Placed on Samples (Photo)	(Yes)	No
Bag Sealed and COC, RQ, Checklist in Ziplock Bag Taped to Cooler Lid (Photo)	(Yes)	No
FDEP Notified of Shipping Date, Method, Expected Arrival	(Yes)	No

Sample Packaging/Shipping Checklist for FDEP SIS/SOL PFAS Projects

Objective: Ensure sample kits are received and samples are packaged and shipped properly.

Instructions: Please answer each question. For any question with a No answer, please provide details/justification below the question. A copy of this checklist should be saved to the project folder, accompany the sample kit, and be returned to the lab with the samples.

Project Name: Former Florida State Five College
Project Number: FR7522C
Cooler: # 2 of # 2
Associated COCs: # – of # – thru # – of # –

Checked by: Ethan Upton
Date: 4/11/22
Final Check/Date: Ethan Upton / 4/11/22
COC Checked: ✓
Photos Checked: ✓

Item		
Sample dates, times, IDs on field notes, COC, bottle labels (in Sharpie) Match and no blind duplicates on COC	(Yes)	No
RQ Number and Bottle Group on Samples consistent with FDEP Paperwork and Different RQs Packed in Different Coolers	(Yes)	No
If Liquid IDW Samples Collected, Trip Blank included in Cooler and on COC NO IDW Samples	Yes	(No)
Heavy-Duty Garbage Bag Place in Cooler and Ice in Bottom of Bag	(Yes)	No
Bagged Samples (including Temp Blank) Placed on Ice (Photo)	(Yes)	No
Additional Ice (Not Bagged) Placed on Samples (Photo)	(Yes)	No
Bag Sealed and COC, RQ, Checklist in Ziplock Bag Taped to Cooler Lid (Photo)	(Yes)	No
FDEP Notified of Shipping Date, Method, Expected Arrival	(Yes)	No

Sample Packaging/Shipping Checklist for FDEP SIS/SOL PFAS Projects

Objective: Ensure sample kits are received and samples are packaged and shipped properly.

Instructions: Please answer each question. For any question with a No answer, please provide details/justification below the question. A copy of this checklist should be saved to the project folder, accompany the sample kit, and be returned to the lab with the samples.

Project Name: Former Florida State Fire College
Project Number: FR7522D
Cooler: # 2 of # 2
Associated COCs: ~~# of #~~ thru ~~# of #~~
1 to 3 1 to 3

Checked by: Alex Lamore
Date: 1/5/23

Final Check/Date: James Mills / 1/9/23
COC Checked: Yes
Photos Checked: Yes

Item		
Sample dates, times, IDs on field notes, COC, bottle labels (in Sharpie) Match and no blind duplicates on COC	(Yes)	No
RQ Number and Bottle Group on Samples consistent with FDEP Paperwork and Different RQs Packed in Different Coolers	(Yes)	No
If Liquid IDW Samples Collected, Trip Blank included in Cooler and on COC	Yes	No (N/A)
Heavy-Duty Garbage Bag Place in Cooler and Ice in Bottom of Bag	(Yes)	No
Bagged Samples (including Temp Blank) Placed on Ice (Photo)	(Yes)	No
Additional Ice (Not Bagged) Placed on Samples (Photo)	(Yes)	No
Bag Sealed and COC, RQ, Checklist in Ziplock Bag Taped to Cooler Lid (Photo)	(Yes)	No
FDEP Notified of Shipping Date, Method, Expected Arrival	(Yes)	No

Sample Packaging/Shipping Checklist for FDEP SIS/SOL PFAS Projects

Objective: Ensure sample kits are received and samples are packaged and shipped properly.

Instructions: Please answer each question. For any question with a No answer, please provide details/justification below the question. A copy of this checklist should be saved to the project folder, accompany the sample kit, and be returned to the lab with the samples.

Project Name: Former Florida State Fire College
Project Number: FR7522D
Cooler: # 1 of # 2
Associated COCs: ~~# of #~~ 1 to 3 thru ~~# of #~~ 1 to 3

Checked by: Alex Lamore
Date: 1/5/23

Final Check/Date: James Mills / 1/9/23
COC Checked: yes
Photos Checked: yes

Item		
Sample dates, times, IDs on field notes, COC, bottle labels (in Sharpie) Match and no blind duplicates on COC	(Yes)	No
RQ Number and Bottle Group on Samples consistent with FDEP Paperwork and Different RQs Packed in Different Coolers	(Yes)	No
If Liquid IDW Samples Collected, Trip Blank included in Cooler and on COC	Yes	No (NA)
Heavy-Duty Garbage Bag Place in Cooler and Ice in Bottom of Bag	(Yes)	No
Bagged Samples (including Temp Blank) Placed on Ice (Photo)	(Yes)	No
Additional Ice (Not Bagged) Placed on Samples (Photo)	(Yes)	No
Bag Sealed and COC, RQ, Checklist in Ziplock Bag Taped to Cooler Lid (Photo)	(Yes)	No
FDEP Notified of Shipping Date, Method, Expected Arrival	(Yes)	No

APPENDIX D
Laboratory Analytical Reports

Chemical Analysis Report

SIS-2022-03-31-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description:	**Former Florda State Fire College Site Wide Soil and GW Investigation**
Request ID:	**RQ-2022-03-28-05**
Customer:	**SIS**
Project ID:	**SIS-PFAS**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Road
Twin Towers Bldg. MS# 4515
Tallahassee, FL 32399
Attn: Robert Cilek

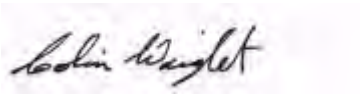
For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

This Report replaces the previous Report Serial Number: 0136939

Report Comment: No previous report was issued,.

Revision certified by: Colin Wright, Program Administrator

Date Certified: 27-APR-2022 12:50



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 14:45**

Field ID: SP-27 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315769	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	12		ng/L	P411795	
		Perfluorobutanoic acid (PFBA)**	6.7	I	ng/L	P411795	
		Perfluorodecanoic acid (PFDA)**	4.1	U	ng/L	P411795	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411795	
		Perfluoroheptanoic acid (PFHpA)**	9.4		ng/L	P411795	
		Perfluorohexanesulfonic acid (PFHxS)**	44		ng/L	P411795	
		Perfluorohexanoic acid (PFHxA)**	15		ng/L	P411795	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411795	
		Perfluorooctanoic acid (PFOA)**	8.6		ng/L	P411795	
		Perfluorooctanesulfonic acid (PFOS)**	70		ng/L	P411795	
		Perfluoropentanoic acid (PFPeA)**	20		ng/L	P411795	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411795	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411795	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411795	
		Perfluoropentanesulfonic acid (PFPeS)**	8.4		ng/L	P411795	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.92	I	ng/L	P411795	
		Perfluorononanesulfonic acid (PFNS)**	0.41	U	ng/L	P411795	
		Perfluorodecanesulfonic acid (PFDS)**	0.41	U	ng/L	P411795	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.41	U	ng/L	P411795	
		Perfluoro-1-butane sulfonamide (FBSA)**	7.4		ng/L	P411795	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	2.2	I	ng/L	P411795	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.41	U	ng/L	P411795	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411795	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411795	RPD
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411795	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.82	U	ng/L	P411795	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.82	U	ng/L	P411795	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.1	U	ng/L	P411795	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.1	U	ng/L	P411795	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.1	U	ng/L	P411795	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.1	U	ng/L	P411795	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.1	U	ng/L	P411795	

Field ID: SP-27 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315769	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.1	U	ng/L	P411795	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.2	U	ng/L	P411795	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample. The sample bottle contained a significant amount of solids. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 15:05**

Field ID: SP-27 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315770	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	11		ng/L	P411795	
		Perfluorobutanoic acid (PFBA)**	6.2	I	ng/L	P411795	
		Perfluorodecanoic acid (PFDA)**	4.4	U	ng/L	P411795	
		Perfluorododecanoic acid (PFDoA)**	2.2	U	ng/L	P411795	
		Perfluoroheptanoic acid (PFHpA)**	7.8	I	ng/L	P411795	
		Perfluorohexanesulfonic acid (PFHxS)**	61		ng/L	P411795	
		Perfluorohexanoic acid (PFHxA)**	14		ng/L	P411795	
		Perfluorononanoic acid (PFNA)**	2.2	U	ng/L	P411795	
		Perfluorooctanoic acid (PFOA)**	7.6	I	ng/L	P411795	
		Perfluorooctanesulfonic acid (PFOS)**	77		ng/L	P411795	
		Perfluoropentanoic acid (PFPeA)**	20		ng/L	P411795	
		Perfluorotetradecanoic acid (PFTeA)**	2.2	U	ng/L	P411795	
		Perfluorotridecanoic acid (PFTriA)**	2.2	U	ng/L	P411795	
		Perfluoroundecanoic acid (PFUnA)**	2.2	U	ng/L	P411795	
		Perfluoropentanesulfonic acid (PFPeS)**	9.7		ng/L	P411795	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.95	I	ng/L	P411795	
		Perfluorononanesulfonic acid (PFNS)**	0.44	U	ng/L	P411795	
		Perfluorodecanesulfonic acid (PFDS)**	0.44	U	ng/L	P411795	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.44	U	ng/L	P411795	
		Perfluoro-1-butane sulfonamide (FBSA)**	10		ng/L	P411795	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.88	U	ng/L	P411795	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.44	U	ng/L	P411795	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.2	U	ng/L	P411795	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.2	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.2	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	18	U	ng/L	P411795	RPD
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.2	U	ng/L	P411795	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.88	U	ng/L	P411795	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.88	U	ng/L	P411795	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.4	U	ng/L	P411795	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.4	U	ng/L	P411795	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.4	U	ng/L	P411795	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.4	U	ng/L	P411795	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.4	U	ng/L	P411795	

Field ID: SP-27 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315770	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.4	U	ng/L	P411795	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.8	U	ng/L	P411795	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample. The sample bottle contained a significant amount of solids. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 15:05**

Field ID: SP-27 (46-50)_Dup Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315771	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	11		ng/L	P411795	
		Perfluorobutanoic acid (PFBA)**	6.8	I	ng/L	P411795	
		Perfluorodecanoic acid (PFDA)**	4.4	U	ng/L	P411795	
		Perfluorododecanoic acid (PFDoA)**	2.2	U	ng/L	P411795	
		Perfluoroheptanoic acid (PFHpA)**	8.5	I	ng/L	P411795	
		Perfluorohexanesulfonic acid (PFHxS)**	53		ng/L	P411795	
		Perfluorohexanoic acid (PFHxA)**	16		ng/L	P411795	
		Perfluorononanoic acid (PFNA)**	2.2	U	ng/L	P411795	
		Perfluorooctanoic acid (PFOA)**	6.3	I	ng/L	P411795	
		Perfluorooctanesulfonic acid (PFOS)**	77		ng/L	P411795	
		Perfluoropentanoic acid (PFPeA)**	17		ng/L	P411795	
		Perfluorotetradecanoic acid (PFTeA)**	2.2	U	ng/L	P411795	
		Perfluorotridecanoic acid (PFTriA)**	2.2	U	ng/L	P411795	
		Perfluoroundecanoic acid (PFUnA)**	2.2	U	ng/L	P411795	
		Perfluoropentanesulfonic acid (PFPeS)**	9.7		ng/L	P411795	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.88	I	ng/L	P411795	
		Perfluorononanesulfonic acid (PFNS)**	0.44	U	ng/L	P411795	
		Perfluorodecanesulfonic acid (PFDS)**	0.44	U	ng/L	P411795	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.44	U	ng/L	P411795	
		Perfluoro-1-butane sulfonamide (FBSA)**	9.8		ng/L	P411795	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.88	U	ng/L	P411795	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.44	U	ng/L	P411795	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.2	U	ng/L	P411795	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.2	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.2	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	18	U	ng/L	P411795	RPD
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.2	U	ng/L	P411795	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.88	U	ng/L	P411795	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.88	U	ng/L	P411795	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.4	U	ng/L	P411795	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.4	U	ng/L	P411795	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.4	U	ng/L	P411795	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.4	U	ng/L	P411795	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.4	U	ng/L	P411795	

Field ID: SP-27 (46-50)_Dup Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315771	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.4	U	ng/L	P411795	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.8	U	ng/L	P411795	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample. The sample bottle contained a significant amount of solids. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 15:25**

Field ID: SP-27 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315772	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	10		ng/L	P411795	
		Perfluorobutanoic acid (PFBA)**	4.5	U	ng/L	P411795	
		Perfluorodecanoic acid (PFDA)**	4.5	U	ng/L	P411795	
		Perfluorododecanoic acid (PFDoA)**	2.2	U	ng/L	P411795	
		Perfluoroheptanoic acid (PFHpA)**	8.8	I	ng/L	P411795	
		Perfluorohexanesulfonic acid (PFHxS)**	50		ng/L	P411795	
		Perfluorohexanoic acid (PFHxA)**	11		ng/L	P411795	
		Perfluorononanoic acid (PFNA)**	2.2	U	ng/L	P411795	
		Perfluorooctanoic acid (PFOA)**	6.0	I	ng/L	P411795	
		Perfluorooctanesulfonic acid (PFOS)**	84		ng/L	P411795	
		Perfluoropentanoic acid (PFPeA)**	15		ng/L	P411795	
		Perfluorotetradecanoic acid (PFTeA)**	2.2	U	ng/L	P411795	
		Perfluorotridecanoic acid (PFTriA)**	2.2	U	ng/L	P411795	
		Perfluoroundecanoic acid (PFUnA)**	2.2	U	ng/L	P411795	
		Perfluoropentanesulfonic acid (PFPeS)**	8.8		ng/L	P411795	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.0	I	ng/L	P411795	
		Perfluorononanesulfonic acid (PFNS)**	0.45	U	ng/L	P411795	
		Perfluorodecanesulfonic acid (PFDS)**	0.45	U	ng/L	P411795	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.45	U	ng/L	P411795	
		Perfluoro-1-butane sulfonamide (FBSA)**	10		ng/L	P411795	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	6.1		ng/L	P411795	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.45	U	ng/L	P411795	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.2	U	ng/L	P411795	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.2	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.2	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	18	U	ng/L	P411795	RPD
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.2	U	ng/L	P411795	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.89	U	ng/L	P411795	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.89	U	ng/L	P411795	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.5	U	ng/L	P411795	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.5	U	ng/L	P411795	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.5	U	ng/L	P411795	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.5	U	ng/L	P411795	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.5	U	ng/L	P411795	

Field ID: SP-27 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315772	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.5	U	ng/L	P411795	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.9	U	ng/L	P411795	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample. The sample bottle contained a significant amount of solids. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 16:00**

Field ID: SP-27 (74-78) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315773	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	14		ng/L	P411795	
		Perfluorobutanoic acid (PFBA)**	8.8	I	ng/L	P411795	
		Perfluorodecanoic acid (PFDA)**	6.4	U	ng/L	P411795	
		Perfluorododecanoic acid (PFDoA)**	3.2	U	ng/L	P411795	
		Perfluoroheptanoic acid (PFHpA)**	7.6	I	ng/L	P411795	
		Perfluorohexanesulfonic acid (PFHxS)**	41		ng/L	P411795	
		Perfluorohexanoic acid (PFHxA)**	12	I	ng/L	P411795	
		Perfluorononanoic acid (PFNA)**	3.2	U	ng/L	P411795	
		Perfluorooctanoic acid (PFOA)**	5.4	I	ng/L	P411795	
		Perfluorooctanesulfonic acid (PFOS)**	72		ng/L	P411795	
		Perfluoropentanoic acid (PFPeA)**	16		ng/L	P411795	
		Perfluorotetradecanoic acid (PFTeA)**	3.2	U	ng/L	P411795	
		Perfluorotridecanoic acid (PFTriA)**	3.2	U	ng/L	P411795	
		Perfluoroundecanoic acid (PFUnA)**	3.2	U	ng/L	P411795	
		Perfluoropentanesulfonic acid (PFPeS)**	6.6		ng/L	P411795	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.3	U	ng/L	P411795	
		Perfluorononanesulfonic acid (PFNS)**	0.64	U	ng/L	P411795	
		Perfluorodecanesulfonic acid (PFDS)**	0.64	U	ng/L	P411795	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.64	U	ng/L	P411795	
		Perfluoro-1-butane sulfonamide (FBSA)**	6.2		ng/L	P411795	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	1.6	I	ng/L	P411795	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.64	U	ng/L	P411795	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	3.2	U	ng/L	P411795	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	3.2	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	3.2	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	26	U	ng/L	P411795	RPD
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	3.2	U	ng/L	P411795	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	1.3	U	ng/L	P411795	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	1.3	U	ng/L	P411795	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	6.4	U	ng/L	P411795	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	6.4	U	ng/L	P411795	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	6.4	U	ng/L	P411795	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	6.4	U	ng/L	P411795	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	6.4	U	ng/L	P411795	

Field ID: SP-27 (74-78) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315773	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	6.4	U	ng/L	P411795	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	13	U	ng/L	P411795	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample. The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 09:50**

Field ID: SP-28 (41-45) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315774	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	16		ng/L	P411795	
		Perfluorobutanoic acid (PFBA)**	9.5	I	ng/L	P411795	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411795	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411795	
		Perfluoroheptanoic acid (PFHpA)**	13		ng/L	P411795	
		Perfluorohexanesulfonic acid (PFHxS)**	76		ng/L	P411795	
		Perfluorohexanoic acid (PFHxA)**	24		ng/L	P411795	
		Perfluorononanoic acid (PFNA)**	3.2	I	ng/L	P411795	
		Perfluorooctanoic acid (PFOA)**	10		ng/L	P411795	
		Perfluorooctanesulfonic acid (PFOS)**	98		ng/L	P411795	
		Perfluoropentanoic acid (PFPeA)**	28		ng/L	P411795	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411795	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411795	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411795	
		Perfluoropentanesulfonic acid (PFPeS)**	13		ng/L	P411795	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.5	I	ng/L	P411795	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411795	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411795	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411795	
		Perfluoro-1-butane sulfonamide (FBSA)**	12		ng/L	P411795	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411795	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411795	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411795	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411795	RPD
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411795	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411795	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411795	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411795	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411795	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411795	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411795	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411795	

Field ID: SP-28 (41-45) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315774	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411795	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411795	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 10:10**

Field ID: SP-28 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315775	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	19		ng/L	P411795	
		Perfluorobutanoic acid (PFBA)**	8.8	I	ng/L	P411795	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411795	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411795	
		Perfluoroheptanoic acid (PFHpA)**	15		ng/L	P411795	
		Perfluorohexanesulfonic acid (PFHxS)**	84		ng/L	P411795	
		Perfluorohexanoic acid (PFHxA)**	23		ng/L	P411795	
		Perfluorononanoic acid (PFNA)**	2.7	I	ng/L	P411795	
		Perfluorooctanoic acid (PFOA)**	11		ng/L	P411795	
		Perfluorooctanesulfonic acid (PFOS)**	110		ng/L	P411795	
		Perfluoropentanoic acid (PFPeA)**	28		ng/L	P411795	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411795	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411795	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411795	
		Perfluoropentanesulfonic acid (PFPeS)**	15		ng/L	P411795	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.5	I	ng/L	P411795	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411795	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411795	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411795	
		Perfluoro-1-butane sulfonamide (FBSA)**	12		ng/L	P411795	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411795	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411795	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411795	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411795	RPD
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411795	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411795	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411795	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411795	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411795	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411795	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411795	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411795	

Field ID: SP-28 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315775	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411795	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411795	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 10:20**

Field ID: FRB-8 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315780	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.40	U	ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	0.80	U	ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	2.0	U	ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: FRB-8 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315780	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 10:30**

Field ID: SP-28 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315776	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	20		ng/L	P411795	
		Perfluorobutanoic acid (PFBA)**	8.8	I	ng/L	P411795	
		Perfluorodecanoic acid (PFDA)**	4.4	U	ng/L	P411795	
		Perfluorododecanoic acid (PFDoA)**	2.2	U	ng/L	P411795	
		Perfluoroheptanoic acid (PFHpA)**	14		ng/L	P411795	
		Perfluorohexanesulfonic acid (PFHxS)**	87		ng/L	P411795	
		Perfluorohexanoic acid (PFHxA)**	19		ng/L	P411795	
		Perfluorononanoic acid (PFNA)**	2.2	U	ng/L	P411795	
		Perfluorooctanoic acid (PFOA)**	9.7		ng/L	P411795	
		Perfluorooctanesulfonic acid (PFOS)**	120		ng/L	P411795	
		Perfluoropentanoic acid (PFPeA)**	29		ng/L	P411795	
		Perfluorotetradecanoic acid (PFTeA)**	2.2	U	ng/L	P411795	
		Perfluorotridecanoic acid (PFTriA)**	2.2	U	ng/L	P411795	
		Perfluoroundecanoic acid (PFUnA)**	2.2	U	ng/L	P411795	
		Perfluoropentanesulfonic acid (PFPeS)**	18		ng/L	P411795	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.6	I	ng/L	P411795	
		Perfluorononanesulfonic acid (PFNS)**	0.44	U	ng/L	P411795	
		Perfluorodecanesulfonic acid (PFDS)**	0.44	U	ng/L	P411795	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.44	U	ng/L	P411795	
		Perfluoro-1-butane sulfonamide (FBSA)**	17		ng/L	P411795	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.88	U	ng/L	P411795	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.44	U	ng/L	P411795	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.2	U	ng/L	P411795	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.2	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.2	U	ng/L	P411795	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	18	U	ng/L	P411795	RPD
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.2	U	ng/L	P411795	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	1.2	I	ng/L	P411795	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.95	I	ng/L	P411795	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.4	U	ng/L	P411795	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.4	U	ng/L	P411795	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.4	U	ng/L	P411795	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.4	U	ng/L	P411795	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.4	U	ng/L	P411795	

Field ID: SP-28 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315776	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.4	U	ng/L	P411795	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.8	U	ng/L	P411795	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample. The sample bottle contained a significant amount of solids. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 10:55**

Field ID: SP-28 (86-90) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315777	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	22		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	13	I	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.4	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.2	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	18		ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	130		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	27		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	4.9	I	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	8.7	I	ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	150		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	34		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.2	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.2	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.2	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	25		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	2.3	I	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.44	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.44	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.44	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	29		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.88	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.44	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.2	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.2	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.2	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	18	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.2	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.88	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.88	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.4	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.4	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.4	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.4	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.4	U	ng/L	P411877	

Field ID: SP-28 (86-90) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315777	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.4	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.8	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample. The sample bottle contained a significant amount of solids. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 13:20**

Field ID: EQB-44 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315781	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.40	U	ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	0.80	U	ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	2.0	U	ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: EQB-44 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315781	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 14:30**

Field ID: SP-26 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315778	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	26		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	37		ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.3	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	82		ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	340		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	110		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	18		ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	82		ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	1.4E+03		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	99		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	27		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	10		ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.43	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.43	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.43	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	34		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	340		ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	1.7	I	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	170		ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	120		ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.85	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.85	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.3	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.3	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.3	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.3	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.3	U	ng/L	P411877	

Field ID: SP-26 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315778	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	5.6	I	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.5	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample. The sample bottle contained a significant amount of solids. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 14:50**

Field ID: SP-26 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315779	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	31		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	55		ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	140		ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	520		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	140		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	26		ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	100		ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	1.6E+03		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	140		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	40		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	16		ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	45		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	370		ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	1.2	I	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	300		ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	120		ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: SP-26 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315779	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	6.5	I	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 11:00**

Field ID: SW-1 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315816	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	8.9		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	12	I	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	7.3	I	ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	39		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	13		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	4.4	I	ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	37		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	29		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	6.4		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	4.7		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: SW-1 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315816	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 11:35**

Field ID: SW-2 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315817	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.98	I	ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	20		ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	3.2		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	16		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	4.4	I	ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	4.8	I	ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	35		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: SW-2 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315817	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 11:50**

Field ID: SW-3 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315818	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.86	I	ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	8.8	I	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	1.4	I	ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	8.0		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	2.4	I	ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	3.4	I	ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	18		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.86	I	ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: SW-3 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315818	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 11:11**

Field ID: Sed-1 (0-1) Matrix: SEDIMENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315804	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.16	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.63	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.63	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.31	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.31	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.16	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.31	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.31	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	0.31	U	ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.31	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.31	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.31	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.31	U	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.31	U	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.16	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.16	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.16	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.37	I	ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.16	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.16	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.16	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.16	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.31	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.31	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.31	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	2.5	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.31	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.16	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.16	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.63	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.31	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.31	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.31	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.31	U	ug/Kg	P411876	

Field ID: Sed-1 (0-1) Matrix: SEDIMENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315804	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.31	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	1.3	U	ug/Kg	P411876	
2315836	SM 2540 G (20th)	% Solid	74.3	A	%	P412189	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 11:40**

Field ID: Sed-2 (0-1) Matrix: SEDIMENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315805	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.18	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.73	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.73	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.37	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.37	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.18	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.37	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.37	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	2.9		ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.37	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.37	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.37	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.53	I	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.37	U	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.18	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.18	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.18	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.85		ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.18	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.18	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.18	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.18	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.37	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.37	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.37	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	2.9	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.37	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.18	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.18	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.73	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.37	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.37	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.37	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.37	U	ug/Kg	P411876	

Field ID: Sed-2 (0-1) Matrix: SEDIMENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315805	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.37	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	1.5	U	ug/Kg	P411876	
2315837	SM 2540 G (20th)	% Solid	66.3		%	P412189	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 11:55**

Field ID: Sed-3 (0-1) Matrix: SEDIMENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315806	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.32	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	1.3	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	1.3	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.63	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.63	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.32	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.63	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.63	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	12		ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.63	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.63	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	1.9	I	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	2.4	I	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.63	U	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.32	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.32	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.32	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	2.0		ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.32	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.32	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.32	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.32	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.63	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.63	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.63	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	5.1	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.63	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.32	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.32	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	1.3	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.63	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.63	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.63	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.63	U	ug/Kg	P411876	

Field ID: Sed-3 (0-1) Matrix: SEDIMENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315806	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.63	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	2.5	U	ug/Kg	P411876	
2315838	SM 2540 G (20th)	% Solid	42.8		%	P412189	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 12:30**

Field ID: SB-75 (0-0.5) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315807	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.12	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.50	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.50	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.68	I	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.25	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.42	I	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.25	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.25	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	2.0		ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.25	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.41	I	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.25	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.32	I	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.67	I	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.12	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.12	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.12	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.12	U	ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.12	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.12	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.12	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.12	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.25	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.25	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.25	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	2.0	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.25	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.12	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.12	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.50	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.25	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.25	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.25	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.25	U	ug/Kg	P411876	

Field ID: SB-75 (0-0.5) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315807	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.25	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	1.0	U	ug/Kg	P411876	
2315839	SM 2540 G (20th)	% Solid	86.5		%	P412189	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 12:35**

Field ID: SB-75 (0.5-2) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315808	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.12	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.47	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.47	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.23	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.23	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.12	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.23	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.23	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	6.5		ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.23	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.23	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.23	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.23	U	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.23	U	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.12	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.12	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.12	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.12	U	ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.12	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.12	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.12	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.12	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.23	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.23	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.23	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	1.9	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.23	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.12	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.12	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.47	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.23	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.23	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.23	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.23	U	ug/Kg	P411876	

Field ID: SB-75 (0.5-2) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315808	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.23	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	0.93	U	ug/Kg	P411876	
2315840	SM 2540 G (20th)	% Solid	91.0		%	P412189	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 12:40**

Field ID: SB-75 (2-4) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315809	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.11	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.44	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.44	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.22	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.22	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.11	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.22	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.22	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	4.6		ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.22	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.22	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.22	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.11	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.11	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.11	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.11	U	ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.11	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.22	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	1.8	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.22	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.11	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.11	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.44	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.22	U	ug/Kg	P411876	

Field ID: SB-75 (2-4) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315809	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.22	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	0.88	U	ug/Kg	P411876	
2315841	SM 2540 G (20th)	% Solid	94.2		%	P412189	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 13:15**

Field ID: SB-76 (0-0.5) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315810	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.11	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.44	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.44	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.22	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.22	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.11	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.22	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.22	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	3.6		ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.22	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.22	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.22	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.32	I	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.11	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.11	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.11	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.11	U	ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.11	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.22	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	1.8	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.22	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.11	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.11	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.44	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.22	U	ug/Kg	P411876	

Field ID: SB-76 (0-0.5) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315810	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.22	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	0.89	U	ug/Kg	P411876	
2315842	SM 2540 G (20th)	% Solid	93.7		%	P412189	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 13:17**

Field ID: SB-76 (0.5-2) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315811	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.11	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.46	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.46	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.23	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.23	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.11	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.23	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.23	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	2.0		ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.23	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.23	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.23	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.23	U	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.23	U	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.11	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.11	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.11	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.11	U	ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.11	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.23	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.23	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.23	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	1.8	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.23	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.11	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.11	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.46	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.23	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.23	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.23	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.23	U	ug/Kg	P411876	

Field ID: SB-76 (0.5-2) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315811	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.23	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	0.91	U	ug/Kg	P411876	
2315843	SM 2540 G (20th)	% Solid	92.1		%	P412189	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 13:20**

Field ID: SB-76 (2-4) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315812	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.11	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.44	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.44	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.22	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.22	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.11	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.22	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.26	I	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	12		ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.22	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.22	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.22	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.11	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.11	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.11	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.11	U	ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.11	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.22	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	1.8	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.22	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.11	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.11	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.44	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.22	U	ug/Kg	P411876	

Field ID: SB-76 (2-4) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315812	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.22	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	0.88	U	ug/Kg	P411876	
2315844	SM 2540 G (20th)	% Solid	94.5		%	P412189	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 14:02**

Field ID: SB-77 (0-0.5) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315813	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.11	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.45	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.45	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.22	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.22	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.11	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.22	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.22	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	1.1		ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.22	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.22	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.22	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.11	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.11	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.11	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.11	U	ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.11	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.22	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	1.8	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.22	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.11	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.11	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.45	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.22	U	ug/Kg	P411876	

Field ID: SB-77 (0-0.5) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315813	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.22	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	0.90	U	ug/Kg	P411876	
2315845	SM 2540 G (20th)	% Solid	92.8		%	P412189	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 14:05**

Field ID: SB-77 (0.5-2) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315814	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.11	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.44	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.44	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.22	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.22	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.11	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.22	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.22	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	0.46	I	ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.22	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.22	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.22	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.11	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.11	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.11	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.11	U	ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.11	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.22	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	1.7	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.22	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.11	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.11	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.44	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.22	U	ug/Kg	P411876	

Field ID: SB-77 (0.5-2) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315814	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.22	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	0.87	U	ug/Kg	P411876	
2315846	SM 2540 G (20th)	% Solid	94.7	A	%	P412190	

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 14:07**

Field ID: SB-77 (2-4) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315815	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.11	U	ug/Kg	P411876	
		Perfluorobutanoic acid (PFBA)**	0.43	U	ug/Kg	P411876	
		Perfluorodecanoic acid (PFDA)**	0.43	U	ug/Kg	P411876	
		Perfluorododecanoic acid (PFDoA)**	0.22	U	ug/Kg	P411876	
		Perfluoroheptanoic acid (PFHpA)**	0.22	U	ug/Kg	P411876	
		Perfluorohexanesulfonic acid (PFHxS)**	0.11	U	ug/Kg	P411876	
		Perfluorohexanoic acid (PFHxA)**	0.22	U	ug/Kg	P411876	
		Perfluorononanoic acid (PFNA)**	0.22	U	ug/Kg	P411876	
		Perfluorooctanesulfonic acid (PFOS)**	0.22	U	ug/Kg	P411876	
		Perfluorooctanoic acid (PFOA)**	0.22	U	ug/Kg	P411876	
		Perfluorotetradecanoic acid (PFTeA)**	0.22	U	ug/Kg	P411876	
		Perfluorotridecanoic acid (PFTriA)**	0.22	U	ug/Kg	P411876	
		Perfluoroundecanoic acid (PFUnA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanoic acid (PFPeA)**	0.22	U	ug/Kg	P411876	
		Perfluoropentanesulfonic acid (PFPeS)**	0.11	U	ug/Kg	P411876	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.11	U	ug/Kg	P411876	
		Perfluorononanesulfonic acid (PFNS)**	0.11	U	ug/Kg	P411876	
		Perfluorodecanesulfonic acid (PFDS)**	0.11	U	ug/Kg	P411876	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.11	U	ug/Kg	P411876	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.11	U	ug/Kg	P411876	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	0.22	U	ug/Kg	P411876	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	0.22	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	1.7	U	ug/Kg	P411876	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	0.22	U	ug/Kg	P411876	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.11	U	ug/Kg	P411876	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.11	U	ug/Kg	P411876	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	0.43	U	ug/Kg	P411876	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	0.22	U	ug/Kg	P411876	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	0.22	U	ug/Kg	P411876	

Field ID: SB-77 (2-4) Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315815	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	0.22	U	ug/Kg	P411876	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	0.86	U	ug/Kg	P411876	
2315847	SM 2540 G (20th)	% Solid	95.8		%	P412190	

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 11:27**

Field ID: DEPMW-1 (100-120) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315819	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	14		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	11	I	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	19		ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	79		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	18		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	11		ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	120		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	26		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	13		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.3	I	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	11		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: DEPMW-1 (100-120) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315819	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 11:00**

Field ID: DEPMW-2 (25-45) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315820	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	17		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	4.8	I	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	7.1	I	ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	77		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	11		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.6	I	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	6.8	I	ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	96		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	12		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	15		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.1	I	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	7.5		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: DEPMW-2 (25-45) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315820	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 08:05**

Field ID: DEPMW-3 (100-120) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315821	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	8.5		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	17		ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	23		ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	73		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	26		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	18		ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	140		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	46		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	13		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.9	I	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	5.8		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	46	I	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: DEPMW-3 (100-120) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315821	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 17:45**

Field ID: DEPMW-4 (25-45) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315822	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	1.1	I	ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	12	I	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	1.7	I	ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	6.0	I	ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: DEPMW-4 (25-45) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315822	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 15:03**

Field ID: DEPMW-5 (100-120) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315823	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	21		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	16		ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	29		ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	160		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	35		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	4.2	I	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	20		ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	320		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	48		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	22		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	3.2	I	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	20		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	7.1		ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: DEPMW-5 (100-120) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315823	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.2	I	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 14:40**

Field ID: DEPMW-6 (25-45) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315824	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	20		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	7.0	I	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	9.7		ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	210		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	21		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	12		ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	450		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	18		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	14		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	3.7		ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	14		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	62		ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: DEPMW-6 (25-45) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315824	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 14:40**

Field ID: DEPMW-6 (25-45)_Dup Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315825	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	19		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	7.8	I	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	9.7		ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	200		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	25		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	12		ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	430		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	18		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	14		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	3.4		ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	15		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	60		ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: DEPMW-6 (25-45)_Dup Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315825	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 09:18**

Field ID: DEPMW-7 (100-120) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315826	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	15		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	11	I	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	16		ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	76		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	20		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.9	I	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	12		ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	100		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	28		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	14		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.2	I	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	9.3		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: DEPMW-7 (100-120) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315826	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 15:57**

Field ID: DEPMW-8 (20-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315827	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	25		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	24		ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.1	I	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	24		ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	440		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	57		ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	8.1		ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	25		ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	3.9E+03		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	37		ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	37		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	14		ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	44		ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	600		ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	5.2		ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: DEPMW-8 (20-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315827	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 10:14**

Field ID: VISAMW (M-200) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315828	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	11		ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	4.1	I	ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	52		ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	7.2	I	ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	2.4	I	ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	98		ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	8.0	I	ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	7.9		ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.0	I	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	1.7	I	ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: VISAMW (M-200) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315828	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 13:45**

Field ID: EQB-49 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315830	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.40	U	ng/L	P411878	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411878	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411878	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411878	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411878	
		Perfluorohexanesulfonic acid (PFHxS)**	0.80	U	ng/L	P411878	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411878	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411878	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P411878	
		Perfluorooctanesulfonic acid (PFOS)**	2.0	U	ng/L	P411878	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411878	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411878	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411878	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411878	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P411878	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411878	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411878	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411878	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411878	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411878	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411878	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411878	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411878	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411878	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411878	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411878	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411878	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411878	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411878	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411878	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411878	

Field ID: EQB-49 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315830	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411878	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411878	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/28/2022 10:42**

Field ID: EQB-50 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315831	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.40	U	ng/L	P411878	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411878	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411878	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411878	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411878	
		Perfluorohexanesulfonic acid (PFHxS)**	0.80	U	ng/L	P411878	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411878	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411878	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P411878	
		Perfluorooctanesulfonic acid (PFOS)**	2.0	U	ng/L	P411878	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411878	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411878	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411878	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411878	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P411878	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411878	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411878	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411878	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411878	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411878	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411878	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411878	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411878	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411878	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411878	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411878	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411878	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411878	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411878	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411878	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411878	

Field ID: EQB-50 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315831	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411878	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411878	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 08:36**

Field ID: EQB-52 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315832	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.40	U	ng/L	P411878	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411878	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411878	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411878	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411878	
		Perfluorohexanesulfonic acid (PFHxS)**	0.80	U	ng/L	P411878	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411878	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411878	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P411878	
		Perfluorooctanesulfonic acid (PFOS)**	2.0	U	ng/L	P411878	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411878	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411878	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411878	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411878	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P411878	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411878	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411878	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411878	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411878	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411878	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411878	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411878	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411878	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411878	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411878	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411878	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411878	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411878	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411878	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411878	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411878	

Field ID: EQB-52 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315832	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411878	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411878	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 03/29/2022 09:15**

Field ID: FRB-9 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315829	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.40	U	ng/L	P411877	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411877	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411877	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411877	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411877	
		Perfluorohexanesulfonic acid (PFHxS)**	0.80	U	ng/L	P411877	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411877	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411877	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P411877	
		Perfluorooctanesulfonic acid (PFOS)**	2.0	U	ng/L	P411877	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411877	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411877	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411877	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411877	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P411877	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411877	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411877	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411877	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411877	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411877	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411877	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411877	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411877	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411877	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411877	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411877	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411877	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411877	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411877	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411877	

Field ID: FRB-9 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315829	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411877	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411877	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P411795

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.0	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	4.0	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.0	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.0	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Reference Method: DEP SOP: LC-001-3
Batch ID: P411876

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.20	U	ug/Kg
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.20	U	ug/Kg
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.20	U	ug/Kg
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.6	U	ug/Kg
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.10	U	ug/Kg
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.20	U	ug/Kg
Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.40	U	ug/Kg
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.10	U	ug/Kg
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.10	U	ug/Kg
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.80	U	ug/Kg
Perfluoro-1-butane sulfonamide (FBSA)	0.10	U	ug/Kg

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P411876

Component	Result	Code	Units
Perfluoro-1-hexane sulfonamide (FHxSA)	0.10	U	ug/Kg
Perfluoro-1-octane sulfonamide (FOSA)	0.10	U	ug/Kg
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.20	U	ug/Kg
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.20	U	ug/Kg
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.20	U	ug/Kg
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.20	U	ug/Kg
Perfluorobutanesulfonic acid (PFBS)	0.10	U	ug/Kg
Perfluorobutanoic acid (PFBA)	0.40	U	ug/Kg
Perfluorodecanesulfonic acid (PFDS)	0.10	U	ug/Kg
Perfluorodecanoic acid (PFDA)	0.40	U	ug/Kg
Perfluorododecanoic acid (PFDoA)	0.20	U	ug/Kg
Perfluoroheptanesulfonic acid (PFHpS)	0.10	U	ug/Kg
Perfluoroheptanoic acid (PFHpA)	0.20	U	ug/Kg
Perfluorohexanesulfonic acid (PFHxS)	0.10	U	ug/Kg
Perfluorohexanoic acid (PFHxA)	0.20	U	ug/Kg
Perfluorononanesulfonic acid (PFNS)	0.10	U	ug/Kg
Perfluorononanoic acid (PFNA)	0.20	U	ug/Kg
Perfluorooctanesulfonic acid (PFOS)	0.20	U	ug/Kg
Perfluorooctanoic acid (PFOA)	0.20	U	ug/Kg
Perfluoropentanesulfonic acid (PFPeS)	0.10	U	ug/Kg
Perfluoropentanoic acid (PFPeA)	0.20	U	ug/Kg
Perfluoropropanesulfonic acid (PFPrS)	0.20	U	ug/Kg
Perfluorotetradecanoic acid (PFTeA)	0.20	U	ug/Kg
Perfluorotridecanoic acid (PFTriA)	0.20	U	ug/Kg
Perfluoroundecanoic acid (PFUnA)	0.20	U	ug/Kg

Reference Method: DEP SOP: LC-001-3
Batch ID: P411877

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.0	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	4.0	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.0	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.0	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P411877

Component	Result	Code	Units
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.0	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	4.0	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.0	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.0	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Component	Result	Code	Units
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411795

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	93.9		P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	90.8		P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	102		P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	92.5		P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	153		P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	104		P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	107		P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	111		P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	84.2		P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	113		P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	152		P	30 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	157		P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	99.5		P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	105		P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	82.2		P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	101		P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	118		P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	104		P	30 - 160
Perfluorobutanoic acid (PFBA)	93.5		P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	92.2		P	30 - 160
Perfluorodecanoic acid (PFDA)	97.8		P	30 - 160
Perfluorododecanoic acid (PFDoA)	132		P	30 - 160
Perfluoroheptanesulfonic acid (PFHpS)	71.9		P	30 - 160
Perfluoroheptanoic acid (PFHpA)	81.2		P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	91.7		P	30 - 160
Perfluorohexanoic acid (PFHxA)	93.7		P	30 - 160
Perfluorononanesulfonic acid (PFNS)	92.9		P	30 - 160
Perfluorononanoic acid (PFNA)	115		P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	112		P	30 - 160
Perfluorooctanoic acid (PFOA)	138		P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	113		P	30 - 160
Perfluoropentanoic acid (PFPeA)	100		P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	103		P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	152		P	30 - 160
Perfluorotridecanoic acid (PFTriA)	119		P	30 - 160
Perfluoroundecanoic acid (PFUnA)	98.2		P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P411876

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	142		P	40 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	127		P	40 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	102		P	40 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	132		P	40 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	99.6		P	40 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	133		P	40 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	139		P	40 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	81.7		P	40 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	93.3		P	40 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	145		P	40 - 160
Perfluoro-1-butane sulfonamide (FBSA)	110		P	40 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411876

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Perfluoro-1-hexane sulfonamide (FHxSA)	99.1		P	40 - 160
Perfluoro-1-octane sulfonamide (FOSA)	110		P	40 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	112		P	40 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	112		P	40 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	98.8		P	40 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	110		P	40 - 160
Perfluorobutanesulfonic acid (PFBS)	109		P	40 - 160
Perfluorobutanoic acid (PFBA)	128		P	40 - 160
Perfluorodecanesulfonic acid (PFDS)	119		P	40 - 160
Perfluorodecanoic acid (PFDA)	133		P	40 - 160
Perfluorododecanoic acid (PFDoA)	126		P	40 - 160
Perfluoroheptanesulfonic acid (PFHpS)	123		P	40 - 160
Perfluoroheptanoic acid (PFHpA)	127		P	40 - 160
Perfluorohexanesulfonic acid (PFHxS)	104		P	40 - 160
Perfluorohexanoic acid (PFHxA)	125		P	40 - 160
Perfluorononanesulfonic acid (PFNS)	113		P	40 - 160
Perfluorononanoic acid (PFNA)	103		P	40 - 160
Perfluorooctanesulfonic acid (PFOS)	129		P	40 - 160
Perfluorooctanoic acid (PFOA)	117		P	40 - 160
Perfluoropentanesulfonic acid (PFPeS)	120		P	40 - 160
Perfluoropentanoic acid (PFPeA)	95.6		P	40 - 160
Perfluoropropanesulfonic acid (PFPrS)	112		P	40 - 160
Perfluorotetradecanoic acid (PFTeA)	114		P	40 - 160
Perfluorotridecanoic acid (PFTriA)	115		P	40 - 160
Perfluoroundecanoic acid (PFUnA)	85.4		P	40 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P411877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	93.1		P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	116		P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	75.2		P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	95.9		P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	107		P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	116		P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	91.7		P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	119		P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101		P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	148		P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	121		P	30 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	112		P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	94.0		P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	97.6		P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	75.2		P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	108		P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	122		P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	98.8		P	30 - 160
Perfluorobutanoic acid (PFBA)	92.0		P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	94.8		P	30 - 160
Perfluorodecanoic acid (PFDA)	114		P	30 - 160
Perfluorododecanoic acid (PFDoA)	119		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Perfluoroheptanesulfonic acid (PFHpS)	71.3		P	30 - 160
Perfluoroheptanoic acid (PFHpA)	121		P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	92.3		P	30 - 160
Perfluorohexanoic acid (PFHxA)	82.9		P	30 - 160
Perfluorononanesulfonic acid (PFNS)	90.1		P	30 - 160
Perfluorononanoic acid (PFNA)	96.8		P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	124		P	30 - 160
Perfluorooctanoic acid (PFOA)	122		P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	117		P	30 - 160
Perfluoropentanoic acid (PFPeA)	107		P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	98.0		P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	153		P	30 - 160
Perfluorotridecanoic acid (PFTriA)	158		P	30 - 160
Perfluoroundecanoic acid (PFUnA)	135		P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	104		P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	103		P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	91.4		P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	106		P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	140		P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	114		P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	84.2		P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	92.6		P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	117		P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	84.1		P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	154		P	30 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	142		P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	88.1		P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	99.2		P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	76.6		P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	109		P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	115		P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	94.5		P	30 - 160
Perfluorobutanoic acid (PFBA)	109		P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	101		P	30 - 160
Perfluorodecanoic acid (PFDA)	116		P	30 - 160
Perfluorododecanoic acid (PFDoA)	106		P	30 - 160
Perfluoroheptanesulfonic acid (PFHpS)	68.7		P	30 - 160
Perfluoroheptanoic acid (PFHpA)	114		P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	88.1		P	30 - 160
Perfluorohexanoic acid (PFHxA)	67.1		P	30 - 160
Perfluorononanesulfonic acid (PFNS)	91.7		P	30 - 160
Perfluorononanoic acid (PFNA)	133		P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	115		P	30 - 160
Perfluorooctanoic acid (PFOA)	70.8		P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	115		P	30 - 160
Perfluoropentanoic acid (PFPeA)	97.1		P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	96.1		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Perfluorotetradecanoic acid (PFTeA)	111		P	30 - 160
Perfluorotridecanoic acid (PFTriA)	147		P	30 - 160
Perfluoroundecanoic acid (PFUnA)	103		P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411795

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314778	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	97.2	73.3	P/P	30 - 160
2314778	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	109	99.6	P/P	30 - 160
2314778	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	95.4	95.6	P/P	30 - 160
2314778	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	130	87.8	P/P	30 - 160
2314778	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	152	151	P/P	30 - 160
2314778	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	120	108	P/P	30 - 160
2314778	Hexafluoropropylene oxide dimer acid (HFPO-DA)	85.4	81.4	P/P	30 - 160
2314778	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	128	107	P/P	30 - 160
2314778	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	98.4	114	P/P	30 - 160
2314778	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	135	134	P/P	30 - 160
2314778	Perfluoro-1-butane sulfonamide (FBSA)	127	124	P/P	30 - 160
2314778	Perfluoro-1-hexane sulfonamide (FHxSA)	138	136	P/P	30 - 160
2314778	Perfluoro-1-octane sulfonamide (FOSA)	112	94.7	P/P	30 - 160
2314778	Perfluoro-3-methoxypropanoic acid (PFMPA)	123	106	P/P	30 - 160
2314778	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	91.2	72.8	P/P	30 - 160
2314778	Perfluoro-4-methoxybutanoic acid (PFMBA)	111	106	P/P	30 - 160
2314778	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	135	106	P/P	30 - 160
2314778	Perfluorobutanesulfonic acid (PFBS)	136	89.8	P/P	30 - 160
2314778	Perfluorobutanoic acid (PFBA)	122	85.6	P/P	30 - 160
2314778	Perfluorodecanesulfonic acid (PFDS)	84.6	66.9	P/P	30 - 160
2314778	Perfluorodecanoic acid (PFDA)	134	122	P/P	30 - 160
2314778	Perfluorododecanoic acid (PFDoA)	122	123	P/P	30 - 160
2314778	Perfluoroheptanesulfonic acid (PFHpS)	83.2	62.7	P/P	30 - 160
2314778	Perfluoroheptanoic acid (PFHpA)	114	116	P/P	30 - 160
2314778	Perfluorohexanesulfonic acid (PFHxS)	124	88.5	P/P	30 - 160
2314778	Perfluorohexanoic acid (PFHxA)	136	113	P/P	30 - 160
2314778	Perfluorononanesulfonic acid (PFNS)	95.1	74.3	P/P	30 - 160
2314778	Perfluorononanoic acid (PFNA)	98.2	99.0	P/P	30 - 160
2314778	Perfluorooctanoic acid (PFOA)	146	102	P/P	30 - 160
2314778	Perfluoropentanesulfonic acid (PFPeS)	124	107	P/P	30 - 160
2314778	Perfluoropentanoic acid (PFPeA)	111	125	P/P	30 - 160
2314778	Perfluoropropanesulfonic acid (PFPrS)	90.7	103	P/P	30 - 160
2314778	Perfluorotetradecanoic acid (PFTeA)	132	124	P/P	30 - 160
2314778	Perfluorotridecanoic acid (PFTriA)	139	146	P/P	30 - 160
2314778	Perfluoroundecanoic acid (PFUnA)	151	155	P/P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P411876

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315804	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	126	123	P/P	40 - 160
2315804	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	120	99.1	P/P	40 - 160
2315804	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	81.3	92.6	P/P	40 - 160
2315804	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	97.8	97.6	P/P	40 - 160
2315804	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	139	143	P/P	40 - 160
2315804	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	125	118	P/P	40 - 160
2315804	Hexafluoropropylene oxide dimer acid (HFPO-DA)	138	129	P/P	40 - 160
2315804	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	123	135	P/P	40 - 160
2315804	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	86.4	92.3	P/P	40 - 160
2315804	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	135	145	P/P	40 - 160
2315804	Perfluoro-1-butane sulfonamide (FBSA)	116	121	P/P	40 - 160
2315804	Perfluoro-1-hexane sulfonamide (FHxSA)	88.1	101	P/P	40 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411876

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315804	Perfluoro-1-octane sulfonamide (FOSA)	113	108	P/P	40 - 160
2315804	Perfluoro-3-methoxypropanoic acid (PFMPA)	114	111	P/P	40 - 160
2315804	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	107	111	P/P	40 - 160
2315804	Perfluoro-4-methoxybutanoic acid (PFMBA)	83.5	92.8	P/P	40 - 160
2315804	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	110	99.2	P/P	40 - 160
2315804	Perfluorobutanesulfonic acid (PFBS)	101	96.6	P/P	40 - 160
2315804	Perfluorobutanoic acid (PFBA)	116	124	P/P	40 - 160
2315804	Perfluorodecanesulfonic acid (PFDS)	125	115	P/P	40 - 160
2315804	Perfluorodecanoic acid (PFDA)	114	125	P/P	40 - 160
2315804	Perfluorododecanoic acid (PFDoA)	151	154	P/P	40 - 160
2315804	Perfluoroheptanesulfonic acid (PFHpS)	124	126	P/P	40 - 160
2315804	Perfluoroheptanoic acid (PFHpA)	92.4	122	P/P	40 - 160
2315804	Perfluorohexanesulfonic acid (PFHxS)	108	113	P/P	40 - 160
2315804	Perfluorohexanoic acid (PFHxA)	105	105	P/P	40 - 160
2315804	Perfluorononanesulfonic acid (PFNS)	113	111	P/P	40 - 160
2315804	Perfluorononanoic acid (PFNA)	133	139	P/P	40 - 160
2315804	Perfluorooctanesulfonic acid (PFOS)	125	125	P/P	40 - 160
2315804	Perfluorooctanoic acid (PFOA)	127	117	P/P	40 - 160
2315804	Perfluoropentanesulfonic acid (PFPeS)	103	102	P/P	40 - 160
2315804	Perfluoropentanoic acid (PFPeA)	127	123	P/P	40 - 160
2315804	Perfluoropropanesulfonic acid (PFPrS)	107	108	P/P	40 - 160
2315804	Perfluorotetradecanoic acid (PFTeA)	121	119	P/P	40 - 160
2315804	Perfluorotridecanoic acid (PFTriA)	149	123	P/P	40 - 160
2315804	Perfluoroundecanoic acid (PFUnA)	102	117	P/P	40 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P411877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2316240	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	68.3	61.4	P/P	30 - 160
2316240	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	110	104	P/P	30 - 160
2316240	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	105	89.3	P/P	30 - 160
2316240	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	123	136	P/P	30 - 160
2316240	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	110	104	P/P	30 - 160
2316240	Hexafluoropropylene oxide dimer acid (HFPO-DA)	80.8	69.7	P/P	30 - 160
2316240	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	102	129	P/P	30 - 160
2316240	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	111	114	P/P	30 - 160
2316240	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	127	119	P/P	30 - 160
2316240	Perfluoro-1-butane sulfonamide (FBSA)	156	149	P/P	30 - 160
2316240	Perfluoro-1-hexane sulfonamide (FHxSA)	135	109	P/P	30 - 160
2316240	Perfluoro-1-octane sulfonamide (FOSA)	99.8	93.2	P/P	30 - 160
2316240	Perfluoro-3-methoxypropanoic acid (PFMPA)	111	91.4	P/P	30 - 160
2316240	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	93.6	79.0	P/P	30 - 160
2316240	Perfluoro-4-methoxybutanoic acid (PFMBA)	110	122	P/P	30 - 160
2316240	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113	106	P/P	30 - 160
2316240	Perfluorobutanesulfonic acid (PFBS)	108	90.5	P/P	30 - 160
2316240	Perfluorobutanoic acid (PFBA)	122	96.8	P/P	30 - 160
2316240	Perfluorodecanesulfonic acid (PFDS)	81.6	72.5	P/P	30 - 160
2316240	Perfluorodecanoic acid (PFDA)	115	103	P/P	30 - 160
2316240	Perfluorododecanoic acid (PFDoA)	136	111	P/P	30 - 160
2316240	Perfluoroheptanesulfonic acid (PFHpS)	85.1	66.0	P/P	30 - 160
2316240	Perfluoroheptanoic acid (PFHpA)	113	90.8	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2316240	Perfluorohexanesulfonic acid (PFHxS)	117	66.4	P/P	30 - 160
2316240	Perfluorohexanoic acid (PFHxA)	136	118	P/P	30 - 160
2316240	Perfluorononanesulfonic acid (PFNS)	94.7	84.8	P/P	30 - 160
2316240	Perfluorononanoic acid (PFNA)	99.3	78.4	P/P	30 - 160
2316240	Perfluorooctanoic acid (PFOA)	135	107	P/P	30 - 160
2316240	Perfluoropentanesulfonic acid (PFPeS)	97.8	95.2	P/P	30 - 160
2316240	Perfluoropropanesulfonic acid (PFPrS)	85.4	95.4	P/P	30 - 160
2316240	Perfluorotetradecanoic acid (PFTeA)	139	133	P/P	30 - 160
2316240	Perfluorotridecanoic acid (PFTriA)	140	155	P/P	30 - 160
2316240	Perfluoroundecanoic acid (PFUnA)	126	113	P/P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2316214	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	61.9	66.3	P/P	30 - 160
2316214	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	81.7	109	P/P	30 - 160
2316214	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	92.3	113	P/P	30 - 160
2316214	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	107	118	P/P	30 - 160
2316214	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	133	144	P/P	30 - 160
2316214	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	111	118	P/P	30 - 160
2316214	Hexafluoropropylene oxide dimer acid (HFPO-DA)	82.2	76.5	P/P	30 - 160
2316214	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	85.4	101	P/P	30 - 160
2316214	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	118	113	P/P	30 - 160
2316214	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	81.1	97.9	P/P	30 - 160
2316214	Perfluoro-1-butane sulfonamide (FBSA)	130	134	P/P	30 - 160
2316214	Perfluoro-1-hexane sulfonamide (FHxSA)	130	146	P/P	30 - 160
2316214	Perfluoro-1-octane sulfonamide (FOSA)	97.9	103	P/P	30 - 160
2316214	Perfluoro-3-methoxypropanoic acid (PFMPA)	110	116	P/P	30 - 160
2316214	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	74.0	82.2	P/P	30 - 160
2316214	Perfluoro-4-methoxybutanoic acid (PFMBA)	99.0	107	P/P	30 - 160
2316214	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	118	118	P/P	30 - 160
2316214	Perfluorobutanesulfonic acid (PFBS)	96.6	90.0	P/P	30 - 160
2316214	Perfluorobutanoic acid (PFBA)	119	122	P/P	30 - 160
2316214	Perfluorodecanesulfonic acid (PFDS)	62.4	66.2	P/P	30 - 160
2316214	Perfluorodecanoic acid (PFDA)	114	114	P/P	30 - 160
2316214	Perfluorododecanoic acid (PFDoA)	109	95.3	P/P	30 - 160
2316214	Perfluoroheptanesulfonic acid (PFHpS)	66.8	77.0	P/P	30 - 160
2316214	Perfluoroheptanoic acid (PFHpA)	109	118	P/P	30 - 160
2316214	Perfluorohexanesulfonic acid (PFHxS)	85.2	93.8	P/P	30 - 160
2316214	Perfluorohexanoic acid (PFHxA)	72.4	73.4	P/P	30 - 160
2316214	Perfluorononanesulfonic acid (PFNS)	82.0	83.3	P/P	30 - 160
2316214	Perfluorononanoic acid (PFNA)	102	121	P/P	30 - 160
2316214	Perfluorooctanoic acid (PFOA)	114	125	P/P	30 - 160
2316214	Perfluoropentanesulfonic acid (PFPeS)	116	119	P/P	30 - 160
2316214	Perfluoropentanoic acid (PFPeA)	121	117	P/P	30 - 160
2316214	Perfluoropropanesulfonic acid (PFPrS)	90.5	92.4	P/P	30 - 160
2316214	Perfluorotetradecanoic acid (PFTeA)	127	122	P/P	30 - 160
2316214	Perfluorotridecanoic acid (PFTriA)	147	139	P/P	30 - 160
2316214	Perfluoroundecanoic acid (PFUnA)	96.5	94.6	P/P	30 - 160

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P411795

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314778	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	28.0	Spike	P	0 - 30
2314778	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	8.83	Spike	P	0 - 30
2314778	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.209	Spike	P	0 - 30
2314778	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	39.0	Spike	F	0 - 30
2314778	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.396	Spike	P	0 - 30
2314778	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	10.1	Spike	P	0 - 30
2314778	Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.80	Spike	P	0 - 30
2314778	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	18.1	Spike	P	0 - 30
2314778	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	14.4	Spike	P	0 - 30
2314778	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.446	Spike	P	0 - 30
2314778	Perfluoro-1-butane sulfonamide (FBSA)	1.50	Spike	P	0 - 30
2314778	Perfluoro-1-hexane sulfonamide (FHxSA)	1.53	Spike	P	0 - 30
2314778	Perfluoro-1-octane sulfonamide (FOSA)	16.8	Spike	P	0 - 30
2314778	Perfluoro-3-methoxypropanoic acid (PFMPA)	14.3	Spike	P	0 - 30
2314778	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	22.4	Spike	P	0 - 30
2314778	Perfluoro-4-methoxybutanoic acid (PFMBA)	4.33	Spike	P	0 - 30
2314778	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	24.6	Spike	P	0 - 30
2314778	Perfluorobutanesulfonic acid (PFBS)	20.3	Spike	P	0 - 30
2314778	Perfluorobutanoic acid (PFBA)	20.4	Spike	P	0 - 30
2314778	Perfluorodecanesulfonic acid (PFDS)	23.4	Spike	P	0 - 30
2314778	Perfluorodecanoic acid (PFDA)	9.29	Spike	P	0 - 30
2314778	Perfluorododecanoic acid (PFDoA)	1.15	Spike	P	0 - 30
2314778	Perfluoroheptanesulfonic acid (PFHpS)	28.1	Spike	P	0 - 30
2314778	Perfluoroheptanoic acid (PFHpA)	1.51	Spike	P	0 - 30
2314778	Perfluorohexanesulfonic acid (PFHxS)	22.4	Spike	P	0 - 30
2314778	Perfluorohexanoic acid (PFHxA)	15.7	Spike	P	0 - 30
2314778	Perfluorononanesulfonic acid (PFNS)	24.6	Spike	P	0 - 30
2314778	Perfluorononanoic acid (PFNA)	0.811	Spike	P	0 - 30
2314778	Perfluorooctanesulfonic acid (PFOS)	13.7	Spike	P	0 - 30
2314778	Perfluorooctanoic acid (PFOA)	26.4	Spike	P	0 - 30
2314778	Perfluoropentanesulfonic acid (PFPeS)	13.7	Spike	P	0 - 30
2314778	Perfluoropentanoic acid (PFPeA)	8.49	Spike	P	0 - 30
2314778	Perfluoropropanesulfonic acid (PFPrS)	13.0	Spike	P	0 - 30
2314778	Perfluorotetradecanoic acid (PFTeA)	6.07	Spike	P	0 - 30
2314778	Perfluorotridecanoic acid (PFTriA)	4.49	Spike	P	0 - 30
2314778	Perfluoroundecanoic acid (PFUnA)	2.55	Spike	P	0 - 30

Reference Method: DEP SOP: LC-001-3
Batch ID: P411876

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315804	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.15	Spike	P	0 - 35
2315804	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	19.3	Spike	P	0 - 35
2315804	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	13.0	Spike	P	0 - 35
2315804	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	0.217	Spike	P	0 - 35
2315804	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.48	Spike	P	0 - 35
2315804	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	5.76	Spike	P	0 - 35
2315804	Hexafluoropropylene oxide dimer acid (HFPO-DA)	6.50	Spike	P	0 - 35
2315804	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.30	Spike	P	0 - 35
2315804	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	6.55	Spike	P	0 - 35

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P411876

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315804	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	7.41	Spike	P	0 - 35
2315804	Perfluoro-1-butane sulfonamide (FBSA)	4.49	Spike	P	0 - 35
2315804	Perfluoro-1-hexane sulfonamide (FHxSA)	13.3	Spike	P	0 - 35
2315804	Perfluoro-1-octane sulfonamide (FOSA)	3.66	Spike	P	0 - 35
2315804	Perfluoro-3-methoxypropanoic acid (PFMPA)	3.23	Spike	P	0 - 35
2315804	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	3.09	Spike	P	0 - 35
2315804	Perfluoro-4-methoxybutanoic acid (PFMBA)	10.6	Spike	P	0 - 35
2315804	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	10.1	Spike	P	0 - 35
2315804	Perfluorobutanesulfonic acid (PFBS)	4.13	Spike	P	0 - 35
2315804	Perfluorobutanoic acid (PFBA)	6.92	Spike	P	0 - 35
2315804	Perfluorodecanesulfonic acid (PFDS)	8.03	Spike	P	0 - 35
2315804	Perfluorodecanoic acid (PFDA)	9.41	Spike	P	0 - 35
2315804	Perfluorododecanoic acid (PFDoA)	1.88	Spike	P	0 - 35
2315804	Perfluoroheptanesulfonic acid (PFHpS)	1.87	Spike	P	0 - 35
2315804	Perfluoroheptanoic acid (PFHpA)	27.3	Spike	P	0 - 35
2315804	Perfluorohexanesulfonic acid (PFHxS)	4.44	Spike	P	0 - 35
2315804	Perfluorohexanoic acid (PFHxA)	0.0200	Spike	P	0 - 35
2315804	Perfluorononanesulfonic acid (PFNS)	2.32	Spike	P	0 - 35
2315804	Perfluorononanoic acid (PFNA)	5.01	Spike	P	0 - 35
2315804	Perfluorooctanesulfonic acid (PFOS)	0.0288	Spike	P	0 - 35
2315804	Perfluorooctanoic acid (PFOA)	7.65	Spike	P	0 - 35
2315804	Perfluoropentanesulfonic acid (PFPeS)	0.506	Spike	P	0 - 35
2315804	Perfluoropentanoic acid (PFPeA)	3.41	Spike	P	0 - 35
2315804	Perfluoropropanesulfonic acid (PFPrS)	0.977	Spike	P	0 - 35
2315804	Perfluorotetradecanoic acid (PFTeA)	1.60	Spike	P	0 - 35
2315804	Perfluorotridecanoic acid (PFTriA)	19.6	Spike	P	0 - 35
2315804	Perfluoroundecanoic acid (PFUnA)	13.4	Spike	P	0 - 35

Reference Method: DEP SOP: LC-001-3
Batch ID: P411877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2316240	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	10.5	Spike	P	0 - 30
2316240	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	5.94	Spike	P	0 - 30
2316240	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	15.8	Spike	P	0 - 30
2316240	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	5.29	Spike	P	0 - 30
2316240	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.80	Spike	P	0 - 30
2316240	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	5.34	Spike	P	0 - 30
2316240	Hexafluoropropylene oxide dimer acid (HFPO-DA)	14.8	Spike	P	0 - 30
2316240	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	23.4	Spike	P	0 - 30
2316240	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.44	Spike	P	0 - 30
2316240	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	6.05	Spike	P	0 - 30
2316240	Perfluoro-1-butane sulfonamide (FBSA)	4.12	Spike	P	0 - 30
2316240	Perfluoro-1-hexane sulfonamide (FHxSA)	13.7	Spike	P	0 - 30
2316240	Perfluoro-1-octane sulfonamide (FOSA)	6.88	Spike	P	0 - 30
2316240	Perfluoro-3-methoxypropanoic acid (PFMPA)	19.5	Spike	P	0 - 30
2316240	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	16.8	Spike	P	0 - 30
2316240	Perfluoro-4-methoxybutanoic acid (PFMBA)	10.4	Spike	P	0 - 30
2316240	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	6.68	Spike	P	0 - 30
2316240	Perfluorobutanesulfonic acid (PFBS)	10.4	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P411877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2316240	Perfluorobutanoic acid (PFBA)	11.5	Spike	P	0 - 30
2316240	Perfluorodecanesulfonic acid (PFDS)	11.8	Spike	P	0 - 30
2316240	Perfluorodecanoic acid (PFDA)	11.1	Spike	P	0 - 30
2316240	Perfluorododecanoic acid (PFDoA)	20.3	Spike	P	0 - 30
2316240	Perfluoroheptanesulfonic acid (PFHpS)	25.3	Spike	P	0 - 30
2316240	Perfluoroheptanoic acid (PFHpA)	9.91	Spike	P	0 - 30
2316240	Perfluorohexanesulfonic acid (PFHxS)	21.7	Spike	P	0 - 30
2316240	Perfluorohexanoic acid (PFHxA)	5.45	Spike	P	0 - 30
2316240	Perfluorononanesulfonic acid (PFNS)	11.0	Spike	P	0 - 30
2316240	Perfluorononanoic acid (PFNA)	18.2	Spike	P	0 - 30
2316240	Perfluorooctanesulfonic acid (PFOS)	14.8	Spike	P	0 - 30
2316240	Perfluorooctanoic acid (PFOA)	13.5	Spike	P	0 - 30
2316240	Perfluoropentanesulfonic acid (PFPeS)	2.34	Spike	P	0 - 30
2316240	Perfluoropentanoic acid (PFPeA)	4.69	Spike	P	0 - 30
2316240	Perfluoropropanesulfonic acid (PFPrS)	11.0	Spike	P	0 - 30
2316240	Perfluorotetradecanoic acid (PFTeA)	3.88	Spike	P	0 - 30
2316240	Perfluorotridecanoic acid (PFTriA)	10.3	Spike	P	0 - 30
2316240	Perfluoroundecanoic acid (PFUnA)	11.2	Spike	P	0 - 30

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2316214	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	6.92	Spike	P	0 - 30
2316214	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	28.3	Spike	P	0 - 30
2316214	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	20.6	Spike	P	0 - 30
2316214	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	9.09	Spike	P	0 - 30
2316214	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.12	Spike	P	0 - 30
2316214	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	5.59	Spike	P	0 - 30
2316214	Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.12	Spike	P	0 - 30
2316214	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	16.8	Spike	P	0 - 30
2316214	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	3.65	Spike	P	0 - 30
2316214	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	18.8	Spike	P	0 - 30
2316214	Perfluoro-1-butane sulfonamide (FBSA)	3.30	Spike	P	0 - 30
2316214	Perfluoro-1-hexane sulfonamide (FHxSA)	12.0	Spike	P	0 - 30
2316214	Perfluoro-1-octane sulfonamide (FOSA)	4.90	Spike	P	0 - 30
2316214	Perfluoro-3-methoxypropanoic acid (PFMPA)	6.11	Spike	P	0 - 30
2316214	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	10.5	Spike	P	0 - 30
2316214	Perfluoro-4-methoxybutanoic acid (PFMBA)	8.26	Spike	P	0 - 30
2316214	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.103	Spike	P	0 - 30
2316214	Perfluorobutanesulfonic acid (PFBS)	3.90	Spike	P	0 - 30
2316214	Perfluorobutanoic acid (PFBA)	2.08	Spike	P	0 - 30
2316214	Perfluorodecanesulfonic acid (PFDS)	5.88	Spike	P	0 - 30
2316214	Perfluorodecanoic acid (PFDA)	0.644	Spike	P	0 - 30
2316214	Perfluorododecanoic acid (PFDoA)	13.7	Spike	P	0 - 30
2316214	Perfluoroheptanesulfonic acid (PFHpS)	14.2	Spike	P	0 - 30
2316214	Perfluoroheptanoic acid (PFHpA)	8.58	Spike	P	0 - 30
2316214	Perfluorohexanesulfonic acid (PFHxS)	6.74	Spike	P	0 - 30
2316214	Perfluorohexanoic acid (PFHxA)	1.36	Spike	P	0 - 30
2316214	Perfluorononanesulfonic acid (PFNS)	1.54	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2316214	Perfluorononanoic acid (PFNA)	17.0	Spike	P	0 - 30
2316214	Perfluorooctanesulfonic acid (PFOS)	12.1	Spike	P	0 - 30
2316214	Perfluorooctanoic acid (PFOA)	7.09	Spike	P	0 - 30
2316214	Perfluoropentanesulfonic acid (PFPeS)	2.44	Spike	P	0 - 30
2316214	Perfluoropentanoic acid (PFPeA)	3.38	Spike	P	0 - 30
2316214	Perfluoropropanesulfonic acid (PFPrS)	2.05	Spike	P	0 - 30
2316214	Perfluorotetradecanoic acid (PFTeA)	3.71	Spike	P	0 - 30
2316214	Perfluorotridecanoic acid (PFTriA)	5.25	Spike	P	0 - 30
2316214	Perfluoroundecanoic acid (PFUnA)	2.02	Spike	P	0 - 30

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report
Surrogates

Lab Sample ID: 2315769
Field Sample ID: SP-27 (36-40)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	75.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	116	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	97.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	87.8	P	30 - 160

Lab Sample ID: 2315770
Field Sample ID: SP-27 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	95.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	124	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	141	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	89.2	P	30 - 160

Lab Sample ID: 2315771
Field Sample ID: SP-27 (46-50)_Dup

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	80.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	114	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	97.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	110	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	83.8	P	30 - 160

Lab Sample ID: 2315772
Field Sample ID: SP-27 (66-70)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	91.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	136	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	99.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	136	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	106	P	30 - 160

Lab Sample ID: 2315773
Field Sample ID: SP-27 (74-78)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	75.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	129	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	125	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	124	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	91.3	P	30 - 160

Lab Sample ID: 2315774
Field Sample ID: SP-28 (41-45)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	85.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	138	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2315774
Field Sample ID: SP-28 (41-45)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	121	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	85.4	P	30 - 160

Lab Sample ID: 2315775
Field Sample ID: SP-28 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	95.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	119	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	128	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	96.5	P	30 - 160

Lab Sample ID: 2315776
Field Sample ID: SP-28 (66-70)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	74.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	113	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	128	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	123	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	111	P	30 - 160

Lab Sample ID: 2315777
Field Sample ID: SP-28 (86-90)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	79.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	98.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	89.1	P	30 - 160

Lab Sample ID: 2315778
Field Sample ID: SP-26 (36-40)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	78.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	115	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	116	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	117	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	88.5	P	30 - 160

Lab Sample ID: 2315779
Field Sample ID: SP-26 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	82.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	116	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	116	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2315779
Field Sample ID: SP-26 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	97.7	P	30 - 160

Lab Sample ID: 2315780
Field Sample ID: FRB-8

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	77.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	94.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	97.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	123	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	84.2	P	30 - 160

Lab Sample ID: 2315781
Field Sample ID: EQB-44

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	74.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	93.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	92.7	P	30 - 160

Lab Sample ID: 2315804
Field Sample ID: Sed-1 (0-1)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	71.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	113	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	100	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	97.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	122	P	30 - 160

Lab Sample ID: 2315805
Field Sample ID: Sed-2 (0-1)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	91.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	115	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	86.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	113	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	117	P	30 - 160

Lab Sample ID: 2315806
Field Sample ID: Sed-3 (0-1)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	113	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	74.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	107	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	113	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2315807
Field Sample ID: SB-75 (0-0.5)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	78.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	68.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	102	P	30 - 160

Lab Sample ID: 2315808
Field Sample ID: SB-75 (0.5-2)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	101	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	117	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	143	P	30 - 160

Lab Sample ID: 2315809
Field Sample ID: SB-75 (2-4)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	119	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	137	P	30 - 160

Lab Sample ID: 2315810
Field Sample ID: SB-76 (0-0.5)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	95.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	91.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	95.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	98.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	86.1	P	30 - 160

Lab Sample ID: 2315811
Field Sample ID: SB-76 (0.5-2)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	124	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	95.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	97.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	94.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	118	P	30 - 160

Lab Sample ID: 2315812
Field Sample ID: SB-76 (2-4)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	82.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	101	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2315812
Field Sample ID: SB-76 (2-4)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	111	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	95.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	115	P	30 - 160

Lab Sample ID: 2315813
Field Sample ID: SB-77 (0-0.5)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	83.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	115	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	106	P	30 - 160

Lab Sample ID: 2315814
Field Sample ID: SB-77 (0.5-2)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	99.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	137	P	30 - 160

Lab Sample ID: 2315815
Field Sample ID: SB-77 (2-4)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	84.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	87.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	113	P	30 - 160

Lab Sample ID: 2315816
Field Sample ID: SW-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	89.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	131	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	117	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	89.9	P	30 - 160

Lab Sample ID: 2315817
Field Sample ID: SW-2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	82.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	102	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	111	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2315817
Field Sample ID: SW-2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	93.1	P	30 - 160

Lab Sample ID: 2315818
Field Sample ID: SW-3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	66.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	102	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	81.8	P	30 - 160

Lab Sample ID: 2315819
Field Sample ID: DEPMW-1 (100-120)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	76.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	155	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	125	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	89.7	P	30 - 160

Lab Sample ID: 2315820
Field Sample ID: DEPMW-2 (25-45)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	67.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	107	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	114	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	107	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	76.0	P	30 - 160

Lab Sample ID: 2315821
Field Sample ID: DEPMW-3 (100-120)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	87.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	110	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	110	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	139	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	89.5	P	30 - 160

Lab Sample ID: 2315822
Field Sample ID: DEPMW-4 (25-45)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	91.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	111	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	127	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	130	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	92.4	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2315823
Field Sample ID: DEPMW-5 (100-120)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	79.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	114	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	116	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	92.6	P	30 - 160

Lab Sample ID: 2315824
Field Sample ID: DEPMW-6 (25-45)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	87.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	145	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	137	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	122	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	91.2	P	30 - 160

Lab Sample ID: 2315825
Field Sample ID: DEPMW-6 (25-45)_Dup

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	83.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	130	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	117	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	77.9	P	30 - 160

Lab Sample ID: 2315826
Field Sample ID: DEPMW-7 (100-120)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	91.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	140	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	91.6	P	30 - 160

Lab Sample ID: 2315827
Field Sample ID: DEPMW-8 (20-40)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	70.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	113	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	84.5	P	30 - 160

Lab Sample ID: 2315828
Field Sample ID: VISAMW (M-200)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	63.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	97.2	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2315828
Field Sample ID: VISAMW (M-200)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	72.2	P	30 - 160

Lab Sample ID: 2315829
Field Sample ID: FRB-9

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	86.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	98.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	85.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	110	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	87.5	P	30 - 160

Lab Sample ID: 2315830
Field Sample ID: EQB-49

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	83.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	97.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	117	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	119	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	98.1	P	30 - 160

Lab Sample ID: 2315831
Field Sample ID: EQB-50

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	81.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	93.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	123	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	92.6	P	30 - 160

Lab Sample ID: 2315832
Field Sample ID: EQB-52

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	72.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	99.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	117	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	82.1	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111352
Included Lab Sample IDs: 2315769, 2315770, 2315771, 2315772, 2315773, 2315774, 2315775, 2315776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	110	102	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	136	106	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	112	103	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	95.6	89.9	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	102	95.9	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	72.7	86.3	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	85.4	115	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	96.6	103	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	154	148	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	158	148	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	123	121	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	126	112	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	77.4	77.5	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	92.0	103	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	106	96.5	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	128	140	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	104	89.3	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	114	94.6	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	121	139	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	149	153	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	132	142	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	150	143	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	107	110	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	112	119	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	103	102	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	95.5	89.8	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	103	103	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	111	102	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	68.4	78.8	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	85.8	81.9	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	103	102	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.5	101	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	110	116	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	117	113	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	107	103	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	99.7	96.9	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	101	96.9	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	107	108	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	102	110	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	105	100	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	106	111	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	111	88.9	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	104	106	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	114	141	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	61.0	70.6	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	69.3	69.0	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	102	92.2	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	129	122	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	109	97.4	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	91.1	102	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	108	103	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111352
Included Lab Sample IDs: 2315769, 2315770, 2315771, 2315772, 2315773, 2315774, 2315775, 2315776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluorohexanoic acid (PFHxA)	90.1	90.9	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	102	95.3	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	103	96.5	P/P	60 - 160
Perfluorononanoic acid (PFNA)	104	88.1	P/P	60 - 160
Perfluorononanoic acid (PFNA)	78.1	94.2	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	115	108	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	117	102	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	125	113	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	133	100	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	102	108	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	112	108	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	117	123	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	98.0	109	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	127	95.4	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	92.7	97.8	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	117	116	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	128	121	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	140	147	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	140	119	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	103	84.1	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	141	94.9	P/P	60 - 160

Reference Method: DEP SOP: LC-001-3
Run ID: A111400
Included Lab Sample IDs: 2315777, 2315778, 2315779, 2315780, 2315781, 2315816, 2315817, 2315818, 2315819, 2315820, 2315821, 2315822, 2315823, 2315824, 2315825, 2315826, 2315827, 2315828, 2315829

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	112	124	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	124	121	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	142	112	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	106	103	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	84.3	106	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	95.7	84.3	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	104	112	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	112	111	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	86.9	104	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	104	96.5	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	113	108	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	96.5	113	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	116	126	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	126	129	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	129	118	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	105	125	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	125	119	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	143	105	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	79.6	90.1	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	87.8	75.5	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	90.1	87.8	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	120	141	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	141	93.4	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3

Run ID: A111400

Included Lab Sample IDs: 2315777, 2315778, 2315779, 2315780, 2315781, 2315816, 2315817, 2315818, 2315819, 2315820, 2315821, 2315822, 2315823, 2315824, 2315825, 2315826, 2315827, 2315828, 2315829

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	93.4	126	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	121	137	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	121	121	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	137	102	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	127	150	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	150	158	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	158	121	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	116	153	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	153	154	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	154	135	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	110	127	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	127	128	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	128	126	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	97.5	99.7	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	99.2	92.0	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	99.7	99.2	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	104	111	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	112	104	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	143	112	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	84.5	90.3	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	87.3	84.5	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	90.3	90.3	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	120	108	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	120	120	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	61.5	120	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	109	122	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	119	109	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	84.0	119	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	92.4	95.0	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	94.2	99.1	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	95.0	94.2	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	126	97.2	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	97.2	98.4	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	98.4	94.7	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	111	107	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	116	97.3	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	97.3	111	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	114	116	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	114	143	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	143	114	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	127	131	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	131	133	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	137	127	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	72.4	81.4	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	74.7	77.6	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	81.4	74.7	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	103	98.1	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	139	122	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	98.1	139	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	100	113	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111400
Included Lab Sample IDs: 2315777, 2315778, 2315779, 2315780, 2315781, 2315816, 2315817, 2315818, 2315819, 2315820, 2315821, 2315822, 2315823, 2315824, 2315825, 2315826, 2315827, 2315828, 2315829

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluorohexanesulfonic acid (PFHxS)	105	111	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	113	105	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	105	88.7	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	71.6	95.3	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	95.3	105	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	102	95.2	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	126	90.6	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	90.6	102	P/P	60 - 160
Perfluorononanoic acid (PFNA)	112	101	P/P	60 - 160
Perfluorononanoic acid (PFNA)	86.7	98.0	P/P	60 - 160
Perfluorononanoic acid (PFNA)	98.0	112	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	109	117	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	115	102	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	117	115	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	134	109	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	112	113	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	113	120	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	117	112	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	113	118	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	118	119	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	83.0	113	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	104	111	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	110	109	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	111	110	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	101	67.4	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	158	101	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	67.4	77.8	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	118	146	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	146	145	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	146	118	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	133	138	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	144	133	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	159	144	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	103	138	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	133	144	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	138	133	P/P	60 - 160

Reference Method: DEP SOP: LC-001-3
Run ID: A111403
Included Lab Sample IDs: 2315827, 2315830, 2315831, 2315832

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	113	117	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	95.4	85.4	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	87.8	90.0	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	116	101	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	143	148	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	115	115	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	79.5	103	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	131	115	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111403
Included Lab Sample IDs: 2315827, 2315830, 2315831, 2315832

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	93.8	114	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	127	115	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	131	145	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	118	127	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	127	133	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	96.8	95.6	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	90.9	104	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	80.9	81.2	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	66.8	107	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	115	105	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	104	94.3	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	94.6	99.3	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	117	116	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	132	71.8	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	90.1	152	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	72.3	72.2	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	104	80.3	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	107	109	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	109	103	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	87.4	92.3	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	111	101	P/P	60 - 160
Perfluorononanoic acid (PFNA)	101	100	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	125	125	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	125	121	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	134	114	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	120	111	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	61.6	104	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	133	93.9	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	106	137	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	132	160	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	91.0	117	P/P	60 - 160

Reference Method: DEP SOP: LC-001-3
Run ID: A111667
Included Lab Sample IDs: 2315804, 2315805, 2315806, 2315807, 2315808, 2315809, 2315810, 2315811, 2315812, 2315813, 2315814, 2315815

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	126	130	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	130	126	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	111	74.9	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	74.9	158	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	126	82.6	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	79.5	126	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	111	120	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	120	102	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	120	139	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	136	120	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	115	117	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	117	112	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	143	103	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	85.5	143	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111667
Included Lab Sample IDs: 2315804, 2315805, 2315806, 2315807, 2315808, 2315809, 2315810, 2315811, 2315812, 2315813, 2315814, 2315815

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	109	82.5	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	119	109	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101	84.8	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	84.8	90.7	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	100	150	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	150	121	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	111	96.5	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	96.5	100	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	110	84.1	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	84.1	82.0	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	115	95.9	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	95.9	107	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	123	110	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	91.2	123	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	101	113	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	97.1	101	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	113	104	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	94.3	113	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	102	103	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	103	100	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	101	94.6	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	103	101	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	110	110	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	112	110	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	119	123	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	123	114	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	142	95.5	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	95.5	68.1	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	100	109	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	109	117	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	102	116	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	116	115	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	114	109	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	143	114	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	103	109	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	97.9	103	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	73.3	99.0	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	82.8	73.3	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	102	115	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	115	115	P/P	60 - 160
Perfluorononanoic acid (PFNA)	130	93.6	P/P	60 - 160
Perfluorononanoic acid (PFNA)	93.6	105	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	105	112	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	112	102	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	106	135	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	93.3	106	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	104	107	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	107	101	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	118	122	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	122	93.3	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	71.5	73.1	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111667
Included Lab Sample IDs: 2315804, 2315805, 2315806, 2315807, 2315808, 2315809, 2315810, 2315811, 2315812, 2315813, 2315814, 2315815

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluoropropanesulfonic acid (PFPrS)	73.1	101	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	103	94.0	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	103	103	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	109	109	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	91.0	109	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	102	95.6	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	95.6	94.8	P/P	60 - 160

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	93.9	97.2	73.3			28.0
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	142	126	123			2.15
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	93.1	68.3	61.4			10.5
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	104	61.9	66.3			6.92
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	90.8	109	99.6			8.83
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	127	120	99.1			19.3
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	116	110	104			5.94
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	103	81.7	109			28.3
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	102	95.4	95.6			0.209
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	102	81.3	92.6			13.0
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	75.2	105	89.3			15.8
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	91.4	92.3	113			20.6
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	92.5	130	87.8			39.0
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	132	97.8	97.6			0.217
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	95.9					5.29
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	106	107	118			9.09
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	153	152	151			0.396
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	99.6	139	143			2.48
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	107	123	136			9.80
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	140	133	144			8.12
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	104	120	108			10.1
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	133	125	118			5.76
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	116	110	104			5.34
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	114	111	118			5.59
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	107	85.4	81.4			4.80
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	139	138	129			6.50
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	91.7	80.8	69.7			14.8
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	84.2	82.2	76.5			7.12
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	111	128	107			18.1

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	81.7	123	135			9.30
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	119	102	129			23.4
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	92.6	85.4	101			16.8
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	84.2	98.4	114			14.4
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	93.3	86.4	92.3			6.55
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101	111	114			2.44
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	117	118	113			3.65
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	113	135	134			0.446
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	145	135	145			7.41
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	148	127	119			6.05
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	84.1	81.1	97.9			18.8
	Perfluoro-1-butane sulfonamide (FBSA)	152	127	124			1.50
	Perfluoro-1-butane sulfonamide (FBSA)	110	116	121			4.49
	Perfluoro-1-butane sulfonamide (FBSA)	121	156	149			4.12
	Perfluoro-1-butane sulfonamide (FBSA)	154	130	134			3.30
	Perfluoro-1-hexane sulfonamide (FHxSA)	157	138	136			1.53
	Perfluoro-1-hexane sulfonamide (FHxSA)	99.1	88.1	101			13.3
	Perfluoro-1-hexane sulfonamide (FHxSA)	112	135	109			13.7
	Perfluoro-1-hexane sulfonamide (FHxSA)	142	130	146			12.0
	Perfluoro-1-octane sulfonamide (FOSA)	99.5	112	94.7			16.8
	Perfluoro-1-octane sulfonamide (FOSA)	110	113	108			3.66
	Perfluoro-1-octane sulfonamide (FOSA)	94.0	99.8	93.2			6.88
	Perfluoro-1-octane sulfonamide (FOSA)	88.1	97.9	103			4.90
	Perfluoro-3-methoxypropanoic acid (PFMPA)	105	123	106			14.3
	Perfluoro-3-methoxypropanoic acid (PFMPA)	112	114	111			3.23
	Perfluoro-3-methoxypropanoic acid (PFMPA)	97.6	111	91.4			19.5
	Perfluoro-3-methoxypropanoic acid (PFMPA)	99.2	110	116			6.11

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	82.2	91.2	72.8			22.4
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	112	107	111			3.09
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	75.2	93.6	79.0			16.8
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	76.6	74.0	82.2			10.5
	Perfluoro-4-methoxybutanoic acid (PFMBA)	101	111	106			4.33
	Perfluoro-4-methoxybutanoic acid (PFMBA)	98.8	83.5	92.8			10.6
	Perfluoro-4-methoxybutanoic acid (PFMBA)	108	110	122			10.4
	Perfluoro-4-methoxybutanoic acid (PFMBA)	109	99.0	107			8.26
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	118	135	106			24.6
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	110	110	99.2			10.1
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	122	113	106			6.68
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	115	118	118			0.103
	Perfluorobutanesulfonic acid (PFBS)	104	136	89.8			20.3
	Perfluorobutanesulfonic acid (PFBS)	109	101	96.6			4.13
	Perfluorobutanesulfonic acid (PFBS)	98.8	108	90.5			10.4
	Perfluorobutanesulfonic acid (PFBS)	94.5	96.6	90.0			3.90
	Perfluorobutanoic acid (PFBA)	93.5	122	85.6			20.4
	Perfluorobutanoic acid (PFBA)	128	116	124			6.92
	Perfluorobutanoic acid (PFBA)	92.0	122	96.8			11.5
	Perfluorobutanoic acid (PFBA)	109	119	122			2.08
	Perfluorodecanesulfonic acid (PFDS)	92.2	84.6	66.9			23.4
	Perfluorodecanesulfonic acid (PFDS)	119	125	115			8.03
	Perfluorodecanesulfonic acid (PFDS)	94.8	81.6	72.5			11.8
	Perfluorodecanesulfonic acid (PFDS)	101	62.4	66.2			5.88
	Perfluorodecanoic acid (PFDA)	97.8	134	122			9.29
	Perfluorodecanoic acid (PFDA)	133	114	125			9.41
	Perfluorodecanoic acid (PFDA)	114	115	103			11.1
	Perfluorodecanoic acid (PFDA)	116	114	114			0.644
	Perfluorododecanoic acid (PFDoA)	132	122	123			1.15
	Perfluorododecanoic acid (PFDoA)	126	151	154			1.88
	Perfluorododecanoic acid (PFDoA)	119	136	111			20.3
	Perfluorododecanoic acid (PFDoA)	106	109	95.3			13.7
	Perfluoroheptanesulfonic acid (PFHpS)	71.9	83.2	62.7			28.1
	Perfluoroheptanesulfonic acid (PFHpS)	123	124	126			1.87
	Perfluoroheptanesulfonic acid (PFHpS)	71.3	85.1	66.0			25.3

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	Perfluoroheptanesulfonic acid (PFHpS)	68.7	66.8	77.0			14.2
	Perfluoroheptanoic acid (PFHpA)	81.2	114	116			1.51
	Perfluoroheptanoic acid (PFHpA)	127	92.4	122			27.3
	Perfluoroheptanoic acid (PFHpA)	121	113	90.8			9.91
	Perfluoroheptanoic acid (PFHpA)	114	109	118			8.58
	Perfluorohexanesulfonic acid (PFHxS)	91.7	124	88.5			22.4
	Perfluorohexanesulfonic acid (PFHxS)	104	108	113			4.44
	Perfluorohexanesulfonic acid (PFHxS)	92.3	117	66.4			21.7
	Perfluorohexanesulfonic acid (PFHxS)	88.1	85.2	93.8			6.74
	Perfluorohexanoic acid (PFHxA)	93.7	136	113			15.7
	Perfluorohexanoic acid (PFHxA)	125	105	105			0.0200
	Perfluorohexanoic acid (PFHxA)	82.9	136	118			5.45
	Perfluorohexanoic acid (PFHxA)	67.1	72.4	73.4			1.36
	Perfluorononanesulfonic acid (PFNS)	92.9	95.1	74.3			24.6
	Perfluorononanesulfonic acid (PFNS)	113	113	111			2.32
	Perfluorononanesulfonic acid (PFNS)	90.1	94.7	84.8			11.0
	Perfluorononanesulfonic acid (PFNS)	91.7	82.0	83.3			1.54
	Perfluorononanoic acid (PFNA)	115	98.2	99.0			0.811
	Perfluorononanoic acid (PFNA)	103	133	139			5.01
	Perfluorononanoic acid (PFNA)	96.8	99.3	78.4			18.2
	Perfluorononanoic acid (PFNA)	133	102	121			17.0
	Perfluorooctanesulfonic acid (PFOS)	112					13.7
	Perfluorooctanesulfonic acid (PFOS)	129	125	125			0.0288
	Perfluorooctanesulfonic acid (PFOS)	124					14.8
	Perfluorooctanesulfonic acid (PFOS)	115					12.1
	Perfluorooctanoic acid (PFOA)	138	146	102			26.4
	Perfluorooctanoic acid (PFOA)	117	127	117			7.65
	Perfluorooctanoic acid (PFOA)	122	135	107			13.5
	Perfluorooctanoic acid (PFOA)	70.8	114	125			7.09
	Perfluoropentanesulfonic acid (PFPeS)	113	124	107			13.7
	Perfluoropentanesulfonic acid (PFPeS)	120	103	102			0.506
	Perfluoropentanesulfonic acid (PFPeS)	117	97.8	95.2			2.34
	Perfluoropentanesulfonic acid (PFPeS)	115	116	119			2.44
	Perfluoropentanoic acid (PFPeA)	100	111	125			8.49
	Perfluoropentanoic acid (PFPeA)	95.6	127	123			3.41
	Perfluoropentanoic acid (PFPeA)	107					4.69
	Perfluoropentanoic acid (PFPeA)	97.1	121	117			3.38
	Perfluoropropanesulfonic acid (PFPrS)	103	90.7	103			13.0
	Perfluoropropanesulfonic acid (PFPrS)	112	107	108			0.977

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)	98.0	85.4	95.4			11.0
	Perfluoropropanesulfonic acid (PFPrS)	96.1	90.5	92.4			2.05
	Perfluorotetradecanoic acid (PFTeA)	152	132	124			6.07
	Perfluorotetradecanoic acid (PFTeA)	114	121	119			1.60
	Perfluorotetradecanoic acid (PFTeA)	153	139	133			3.88
	Perfluorotetradecanoic acid (PFTeA)	111	127	122			3.71
	Perfluorotridecanoic acid (PFTriA)	119	139	146			4.49
	Perfluorotridecanoic acid (PFTriA)	115	149	123			19.6
	Perfluorotridecanoic acid (PFTriA)	158	140	155			10.3
	Perfluorotridecanoic acid (PFTriA)	147	147	139			5.25
	Perfluoroundecanoic acid (PFUnA)	98.2	151	155			2.55
	Perfluoroundecanoic acid (PFUnA)	85.4	102	117			13.4
	Perfluoroundecanoic acid (PFUnA)	135	126	113			11.2
	Perfluoroundecanoic acid (PFUnA)	103	96.5	94.6			2.02

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: LC-001-3	Perfluorinated alkyl substances in sediment/solid matrices by HPLC/MS/MS	2315804, 2315805, 2315806, 2315807, 2315808, 2315809, 2315810, 2315811, 2315812, 2315813, 2315814, 2315815
DEP SOP: LC-001-3	Perfluorinated alkyl substances in water matrices by HPLC/MS/MS	2315769, 2315770, 2315771, 2315772, 2315773, 2315774, 2315775, 2315776, 2315777, 2315778, 2315779, 2315780, 2315781, 2315816, 2315817, 2315818, 2315819, 2315820, 2315821, 2315822, 2315823, 2315824, 2315825, 2315826, 2315827, 2315828, 2315829, 2315830, 2315831, 2315832
SM 2540 G (20th)	Percent solid determination before the other sample preparations.	2315836, 2315837, 2315838, 2315839, 2315840, 2315841, 2315842, 2315843, 2315844, 2315845, 2315846, 2315847

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: LC-001-3	03/31/2022	04/05/2022 09:00	Hoor Shaik	04/06/2022 09:18	Mohammad Ghaffari	2315770
	03/31/2022	04/05/2022 09:00	Hoor Shaik	04/06/2022 09:29	Mohammad Ghaffari	2315771
	03/31/2022	04/05/2022 09:00	Hoor Shaik	04/06/2022 11:49	Mohammad Ghaffari	2315769
	03/31/2022	04/05/2022 09:00	Hoor Shaik	04/06/2022 12:00	Mohammad Ghaffari	2315772
	03/31/2022	04/05/2022 09:00	Hoor Shaik	04/06/2022 12:11	Mohammad Ghaffari	2315773
	03/31/2022	04/05/2022 09:00	Hoor Shaik	04/06/2022 12:22	Mohammad Ghaffari	2315774
	03/31/2022	04/05/2022 09:00	Hoor Shaik	04/06/2022 12:33	Mohammad Ghaffari	2315775
	03/31/2022	04/05/2022 09:00	Hoor Shaik	04/06/2022 12:43	Mohammad Ghaffari	2315776
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 08:47	Mohammad Ghaffari	2315780
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 08:58	Mohammad Ghaffari	2315781
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 09:09	Mohammad Ghaffari	2315829
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 10:13	Mohammad Ghaffari	2315824
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 10:24	Mohammad Ghaffari	2315825
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 10:35	Mohammad Ghaffari	2315777
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 10:46	Mohammad Ghaffari	2315778
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 10:57	Mohammad Ghaffari	2315779
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 11:07	Mohammad Ghaffari	2315816
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 11:18	Mohammad Ghaffari	2315817
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 11:29	Mohammad Ghaffari	2315818
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 11:51	Mohammad Ghaffari	2315819
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 12:01	Mohammad Ghaffari	2315820
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 12:12	Mohammad Ghaffari	2315821
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 12:23	Mohammad Ghaffari	2315822
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 12:34	Mohammad Ghaffari	2315823
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 13:18	Mohammad Ghaffari	2315826
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 13:29	Mohammad Ghaffari	2315827
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 13:40	Mohammad Ghaffari	2315828
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 15:17	Mohammad Ghaffari	2315824
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 15:28	Mohammad Ghaffari	2315825
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 15:38	Mohammad Ghaffari	2315778
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/08/2022 15:49	Mohammad Ghaffari	2315779
	03/31/2022	04/07/2022 09:00	Hoor Shaik	04/10/2022 15:52	Mohammad Ghaffari	2315827
	03/31/2022	04/08/2022 09:00	Hoor Shaik	04/10/2022 14:26	Mohammad Ghaffari	2315830
	03/31/2022	04/08/2022 09:00	Hoor Shaik	04/10/2022 14:37	Mohammad Ghaffari	2315831
	03/31/2022	04/08/2022 09:00	Hoor Shaik	04/10/2022 14:48	Mohammad Ghaffari	2315832
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 01:10	Umesh Chiluwal	2315813
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 01:21	Umesh Chiluwal	2315814
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 01:32	Umesh Chiluwal	2315815
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 11:22	Umesh Chiluwal	2315804
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 11:33	Umesh Chiluwal	2315805

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: LC-001-3	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 11:44	Umesh Chiluwal	2315806
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 11:55	Umesh Chiluwal	2315807
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 12:16	Umesh Chiluwal	2315808
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 12:27	Umesh Chiluwal	2315809
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 12:38	Umesh Chiluwal	2315810
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 12:49	Umesh Chiluwal	2315811
	03/31/2022	04/18/2022 12:00	Umesh Chiluwal	04/21/2022 12:59	Umesh Chiluwal	2315812

Chemical Analysis Report

SIS-2022-04-05-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description:	**Former Florda State Fire College Site Wide Soil and GW Investigation**
Request ID:	**RQ-2022-03-28-05**
Customer:	**SIS**
Project ID:	**SIS-PFAS**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Road
Twin Towers Bldg. MS# 4515
Tallahassee, FL 32399
Attn: Robert Cilek

For additional information please contact
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Dr. rer. nat. Bettina Steinbock
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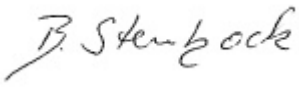
Phone (850) 245-8085

Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 28-APR-2022 11:26



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/29/2022 16:55**

Field ID: SP-26 (66-70') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316746	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	19		ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	33		ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	7.9	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	4.0	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	68		ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	290		ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	77		ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	35		ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	57		ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	1.7E+03		ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	73		ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	4.0	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	4.0	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	4.0	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	17		ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	13		ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.79	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.79	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.79	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	14		ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	110		ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.79	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	4.0	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	4.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	4.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	150		ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	180		ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	1.6	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	1.6	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	7.9	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	7.9	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	7.9	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	7.9	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	7.9	U	ng/L	P411983	

Field ID: SP-26 (66-70') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316746	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	7.9	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	16	U	ng/L	P411983	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/30/2022 10:25**

Field ID: SP-26 (86-90') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316747	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	9.1		ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	13	I	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.1	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	23		ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	92		ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	25		ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	3.6	I	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	22		ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	180		ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	31		ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	11		ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	4.1		ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.41	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.41	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.41	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	6.5		ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	16		ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.41	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	31	I	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	3.2	I	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.81	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.81	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.1	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.1	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.1	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.1	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.1	U	ng/L	P411983	

Field ID: SP-26 (86-90') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316747	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.1	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.1	U	ng/L	P411983	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/30/2022 13:55**

Field ID: SP-29 (36-40') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316748	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	3.9		ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	5.1		ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	4.0	I	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	5.8	I	ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	1.6		ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411983	

Field ID: SP-29 (36-40') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316748	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411983	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/30/2022 14:10**

Field ID: SP-29 (46-50') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316749	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	14		ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	5.8	I	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	5.1	I	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	41		ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	12		ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	5.3	I	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	54		ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	14		ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	7.4		ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	2.4	I	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411983	

Field ID: SP-29 (46-50') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316749	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411983	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/30/2022 14:50**

Field ID: SP-29 (66-70') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316750	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	15		ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	4.8	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.8	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.4	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	7.3	I	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	48		ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	13		ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.4	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	8.0	I	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	58		ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	13		ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.4	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.4	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.4	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	7.2		ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.1	I	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.48	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.48	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.48	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	2.9	I	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.96	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.48	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.4	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.4	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.4	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	19	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.4	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.96	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.96	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.8	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.8	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.8	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.8	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.8	U	ng/L	P411983	

Field ID: SP-29 (66-70') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316750	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.8	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	9.6	U	ng/L	P411983	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/31/2022 09:10**

Field ID: Irrigation Well (105-140') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316751	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	13		ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	7.7	I	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	9.7		ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	60		ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	17		ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	7.3	I	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	82		ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	28		ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	8.6		ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	8.0		ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411983	

Field ID: Irrigation Well (105-140') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316751	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411983	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/31/2022 11:15**

Field ID: SP-30 (41-45') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316752	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	1.1	I	ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	5.4	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	5.4	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.7	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	2.7	U	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	1.1	U	ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	2.7	U	ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.7	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	2.7	U	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	4.9	I	ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	2.7	U	ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.7	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.7	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.7	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	0.54	U	ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.1	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.54	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.54	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.54	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	1.1	U	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	1.1	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.54	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.7	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.7	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.7	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	22	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.7	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	1.1	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	1.1	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	5.4	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	5.4	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	5.4	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	5.4	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	5.4	U	ng/L	P411983	

Field ID: SP-30 (41-45') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316752	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	5.4	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	11	U	ng/L	P411983	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/31/2022 11:35**

Field ID: SP-30 (46-50') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316753	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	2.4		ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	12		ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	2.7	I	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	13		ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	1.8		ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.84	I	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411983	

Field ID: SP-30 (46-50') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316753	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	8.5	I	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411983	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/31/2022 11:50**

Field ID: SP-30 (66-70') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316754	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.43	U	ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	4.3	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.3	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	2.1	U	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	0.85	U	ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	2.1	U	ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.1	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	2.1	U	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	2.1	U	ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	2.1	U	ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	0.43	U	ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.85	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.43	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.43	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.43	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.85	U	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.85	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.43	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.1	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.85	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.85	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.3	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.3	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.3	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.3	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.3	U	ng/L	P411983	

Field ID: SP-30 (66-70') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316754	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.3	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.5	U	ng/L	P411983	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/31/2022 11:50**

Field ID: SP-30 (66-70') DUP Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316755	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.43	U	ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	4.3	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.3	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	2.1	U	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	0.85	U	ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	2.1	U	ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.1	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	2.1	U	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	2.1	U	ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	2.1	U	ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	0.43	U	ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.85	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.43	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.43	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.43	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.85	U	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.85	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.43	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.1	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.85	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.85	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.3	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.3	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.3	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.3	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.3	U	ng/L	P411983	

Field ID: SP-30 (66-70') DUP Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316755	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.3	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.5	U	ng/L	P411983	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/31/2022 12:15**

Field ID: SP-30 (86-90') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316756	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	3.5		ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	5.6	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	5.6	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.8	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	2.8	U	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	16		ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	2.8	U	ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.8	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	2.8	U	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	20		ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	2.8	U	ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.8	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.8	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.8	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	2.9		ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.1	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.56	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.56	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.56	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	1.5	I	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	1.1	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.56	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.8	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.8	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.8	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	22	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.8	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	1.1	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	1.1	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	5.6	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	5.6	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	5.6	UJ	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	5.6	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	5.6	U	ng/L	P411983	

Field ID: SP-30 (86-90') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316756	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	5.6	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	11	U	ng/L	P411983	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 03/31/2022 14:40**

Field ID: EQB-45 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316761	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.40	U	ng/L	P411878	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411878	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411878	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411878	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411878	
		Perfluorohexanesulfonic acid (PFHxS)**	0.80	U	ng/L	P411878	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411878	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411878	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P411878	
		Perfluorooctanesulfonic acid (PFOS)**	2.0	U	ng/L	P411878	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411878	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411878	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411878	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411878	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P411878	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411878	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411878	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411878	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411878	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411878	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411878	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411878	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411878	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411878	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411878	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411878	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411878	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411878	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411878	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411878	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411878	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411878	

Field ID: EQB-45 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316761	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P411878	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411878	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 04/01/2022 09:25**

Field ID: SP-31 (41-45') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316757	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	6.1		ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	7.0	I	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	21		ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	6.9	I	ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	7.3	I	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	60		ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	7.8	I	ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	2.4		ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P411983	

Field ID: SP-31 (41-45') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316757	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.6	I	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P411983	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 04/01/2022 09:40**

Field ID: SP-31 (46-50') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316758	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	1.0	I	ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	4.1	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.1	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	1.9	I	ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	4.1	I	ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	0.41	U	ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.81	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.41	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.41	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.41	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.81	U	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.81	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.41	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.81	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.81	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.1	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.1	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.1	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.1	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.1	U	ng/L	P411983	

Field ID: SP-31 (46-50') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316758	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.1	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.1	U	ng/L	P411983	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 04/01/2022 10:10**

Field ID: SP-31 (66-70') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316759	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	1.2	I	ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	4.2	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	4.2	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	2.1	U	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	1.5	I	ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	2.1	U	ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	2.1	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	2.1	U	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	4.8	I	ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	2.1	U	ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	0.42	U	ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.85	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.42	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.42	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.42	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.85	U	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.85	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.42	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.1	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.85	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.85	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.2	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.2	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.2	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.2	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.2	U	ng/L	P411983	

Field ID: SP-31 (66-70') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316759	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.2	U	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.5	U	ng/L	P411983	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 04/01/2022 10:50**

Field ID: SP-31 (82-86') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316760	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	5.6		ng/L	P411983	
		Perfluorobutanoic acid (PFBA)**	6.0	U	ng/L	P411983	
		Perfluorodecanoic acid (PFDA)**	6.0	U	ng/L	P411983	
		Perfluorododecanoic acid (PFDoA)**	3.0	U	ng/L	P411983	
		Perfluoroheptanoic acid (PFHpA)**	3.0	U	ng/L	P411983	
		Perfluorohexanesulfonic acid (PFHxS)**	15		ng/L	P411983	
		Perfluorohexanoic acid (PFHxA)**	3.0	U	ng/L	P411983	
		Perfluorononanoic acid (PFNA)**	3.0	U	ng/L	P411983	
		Perfluorooctanoic acid (PFOA)**	3.0	U	ng/L	P411983	
		Perfluorooctanesulfonic acid (PFOS)**	38		ng/L	P411983	
		Perfluoropentanoic acid (PFPeA)**	3.0	U	ng/L	P411983	
		Perfluorotetradecanoic acid (PFTeA)**	3.0	U	ng/L	P411983	
		Perfluorotridecanoic acid (PFTriA)**	3.0	U	ng/L	P411983	
		Perfluoroundecanoic acid (PFUnA)**	3.0	U	ng/L	P411983	
		Perfluoropentanesulfonic acid (PFPeS)**	1.2	I	ng/L	P411983	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.2	U	ng/L	P411983	
		Perfluorononanesulfonic acid (PFNS)**	0.60	U	ng/L	P411983	
		Perfluorodecanesulfonic acid (PFDS)**	0.60	U	ng/L	P411983	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.60	U	ng/L	P411983	
		Perfluoro-1-butane sulfonamide (FBSA)**	1.2	U	ng/L	P411983	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	1.2	U	ng/L	P411983	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.60	U	ng/L	P411983	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	3.0	U	ng/L	P411983	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	3.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	3.0	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	24	U	ng/L	P411983	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	3.0	U	ng/L	P411983	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	1.2	U	ng/L	P411983	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	1.2	U	ng/L	P411983	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	6.0	U	ng/L	P411983	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	6.0	U	ng/L	P411983	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	6.0	U	ng/L	P411983	RPD
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	6.0	U	ng/L	P411983	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	6.0	U	ng/L	P411983	

Field ID: SP-31 (82-86') Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2316760	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	7.6	I	ng/L	P411983	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	12	U	ng/L	P411983	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.0	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	4.0	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.0	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.0	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Reference Method: DEP SOP: LC-001-3
Batch ID: P411983

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P411983

Component	Result	Code	Units
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.0	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	4.0	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.0	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.0	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	104		P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	103		P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	91.4		P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	106		P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	140		P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	114		P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	84.2		P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	92.6		P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	117		P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	84.1		P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	154		P	30 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	142		P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	88.1		P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	99.2		P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	76.6		P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	109		P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	115		P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	94.5		P	30 - 160
Perfluorobutanoic acid (PFBA)	109		P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	101		P	30 - 160
Perfluorodecanoic acid (PFDA)	116		P	30 - 160
Perfluorododecanoic acid (PFDoA)	106		P	30 - 160
Perfluoroheptanesulfonic acid (PFHpS)	68.7		P	30 - 160
Perfluoroheptanoic acid (PFHpA)	114		P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	88.1		P	30 - 160
Perfluorohexanoic acid (PFHxA)	67.1		P	30 - 160
Perfluorononanesulfonic acid (PFNS)	91.7		P	30 - 160
Perfluorononanoic acid (PFNA)	133		P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	115		P	30 - 160
Perfluorooctanoic acid (PFOA)	70.8		P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	115		P	30 - 160
Perfluoropentanoic acid (PFPeA)	97.1		P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	96.1		P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	111		P	30 - 160
Perfluorotridecanoic acid (PFTriA)	147		P	30 - 160
Perfluoroundecanoic acid (PFUnA)	103		P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P411983

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	122		P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	113		P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	69.7		P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	105		P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	105		P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	124		P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	117		P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	104		P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	106		P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	129		P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	145		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411983

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Perfluoro-1-hexane sulfonamide (FHxSA)	150		P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	97.4		P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	104		P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	104		P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	128		P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	115		P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	105		P	30 - 160
Perfluorobutanoic acid (PFBA)	103		P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	108		P	30 - 160
Perfluorodecanoic acid (PFDA)	70.6		P	30 - 160
Perfluorododecanoic acid (PFDoA)	112		P	30 - 160
Perfluoroheptanesulfonic acid (PFHpS)	107		P	30 - 160
Perfluoroheptanoic acid (PFHpA)	89.8		P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	102		P	30 - 160
Perfluorohexanoic acid (PFHxA)	87.7		P	30 - 160
Perfluorononanesulfonic acid (PFNS)	112		P	30 - 160
Perfluorononanoic acid (PFNA)	123		P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	108		P	30 - 160
Perfluorooctanoic acid (PFOA)	115		P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	120		P	30 - 160
Perfluoropentanoic acid (PFPeA)	96.5		P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	99.5		P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	125		P	30 - 160
Perfluorotridecanoic acid (PFTriA)	120		P	30 - 160
Perfluoroundecanoic acid (PFUnA)	90.6		P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2316214	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	61.9	66.3	P/P	30 - 160
2316214	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	81.7	109	P/P	30 - 160
2316214	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	92.3	113	P/P	30 - 160
2316214	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	107	118	P/P	30 - 160
2316214	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	133	144	P/P	30 - 160
2316214	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	111	118	P/P	30 - 160
2316214	Hexafluoropropylene oxide dimer acid (HFPO-DA)	82.2	76.5	P/P	30 - 160
2316214	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	85.4	101	P/P	30 - 160
2316214	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	118	113	P/P	30 - 160
2316214	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	81.1	97.9	P/P	30 - 160
2316214	Perfluoro-1-butane sulfonamide (FBSA)	130	134	P/P	30 - 160
2316214	Perfluoro-1-hexane sulfonamide (FHxSA)	130	146	P/P	30 - 160
2316214	Perfluoro-1-octane sulfonamide (FOSA)	97.9	103	P/P	30 - 160
2316214	Perfluoro-3-methoxypropanoic acid (PFMPA)	110	116	P/P	30 - 160
2316214	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	74.0	82.2	P/P	30 - 160
2316214	Perfluoro-4-methoxybutanoic acid (PFMBA)	99.0	107	P/P	30 - 160
2316214	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	118	118	P/P	30 - 160
2316214	Perfluorobutanesulfonic acid (PFBS)	96.6	90.0	P/P	30 - 160
2316214	Perfluorobutanoic acid (PFBA)	119	122	P/P	30 - 160
2316214	Perfluorodecanesulfonic acid (PFDS)	62.4	66.2	P/P	30 - 160
2316214	Perfluorodecanoic acid (PFDA)	114	114	P/P	30 - 160
2316214	Perfluorododecanoic acid (PFDoA)	109	95.3	P/P	30 - 160
2316214	Perfluoroheptanesulfonic acid (PFHpS)	66.8	77.0	P/P	30 - 160
2316214	Perfluoroheptanoic acid (PFHpA)	109	118	P/P	30 - 160
2316214	Perfluorohexanesulfonic acid (PFHxS)	85.2	93.8	P/P	30 - 160
2316214	Perfluorohexanoic acid (PFHxA)	72.4	73.4	P/P	30 - 160
2316214	Perfluorononanesulfonic acid (PFNS)	82.0	83.3	P/P	30 - 160
2316214	Perfluorononanoic acid (PFNA)	102	121	P/P	30 - 160
2316214	Perfluorooctanoic acid (PFOA)	114	125	P/P	30 - 160
2316214	Perfluoropentanesulfonic acid (PFPeS)	116	119	P/P	30 - 160
2316214	Perfluoropentanoic acid (PFPeA)	121	117	P/P	30 - 160
2316214	Perfluoropropanesulfonic acid (PFPrS)	90.5	92.4	P/P	30 - 160
2316214	Perfluorotetradecanoic acid (PFTeA)	127	122	P/P	30 - 160
2316214	Perfluorotridecanoic acid (PFTriA)	147	139	P/P	30 - 160
2316214	Perfluoroundecanoic acid (PFUnA)	96.5	94.6	P/P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P411983

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2316756	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	76.3	74.2	P/P	30 - 160
2316756	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	82.3	104	P/P	30 - 160
2316756	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	65.5	67.5	P/P	30 - 160
2316756	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	146	115	P/P	30 - 160
2316756	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	86.8	92.4	P/P	30 - 160
2316756	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	100	107	P/P	30 - 160
2316756	Hexafluoropropylene oxide dimer acid (HFPO-DA)	95.7	110	P/P	30 - 160
2316756	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	132	99.7	P/P	30 - 160
2316756	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	84.3	78.0	P/P	30 - 160
2316756	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	143	118	P/P	30 - 160
2316756	Perfluoro-1-butane sulfonamide (FBSA)	110	100	P/P	30 - 160
2316756	Perfluoro-1-hexane sulfonamide (FHxSA)	97.2	102	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P411983

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2316756	Perfluoro-1-octane sulfonamide (FOSA)	96.9	99.8	P/P	30 - 160
2316756	Perfluoro-3-methoxypropanoic acid (PFMPA)	106	110	P/P	30 - 160
2316756	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	108	115	P/P	30 - 160
2316756	Perfluoro-4-methoxybutanoic acid (PFMBA)	121	81.0	P/P	30 - 160
2316756	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	104	96.5	P/P	30 - 160
2316756	Perfluorobutanesulfonic acid (PFBS)	93.7	92.1	P/P	30 - 160
2316756	Perfluorobutanoic acid (PFBA)	109	105	P/P	30 - 160
2316756	Perfluorodecanesulfonic acid (PFDS)	80.5	86.8	P/P	30 - 160
2316756	Perfluorodecanoic acid (PFDA)	110	107	P/P	30 - 160
2316756	Perfluorododecanoic acid (PFDoA)	94.6	90.9	P/P	30 - 160
2316756	Perfluoroheptanesulfonic acid (PFHpS)	115	129	P/P	30 - 160
2316756	Perfluoroheptanoic acid (PFHpA)	103	89.5	P/P	30 - 160
2316756	Perfluorohexanesulfonic acid (PFHxS)	96.0	120	P/P	30 - 160
2316756	Perfluorohexanoic acid (PFHxA)	100	113	P/P	30 - 160
2316756	Perfluorononanesulfonic acid (PFNS)	97.4	92.1	P/P	30 - 160
2316756	Perfluorononanoic acid (PFNA)	97.9	113	P/P	30 - 160
2316756	Perfluorooctanesulfonic acid (PFOS)	85.0	105	P/P	30 - 160
2316756	Perfluorooctanoic acid (PFOA)	134	139	P/P	30 - 160
2316756	Perfluoropentanesulfonic acid (PFPeS)	106	92.6	P/P	30 - 160
2316756	Perfluoropentanoic acid (PFPeA)	112	125	P/P	30 - 160
2316756	Perfluoropropanesulfonic acid (PFPrS)	80.5	70.4	P/P	30 - 160
2316756	Perfluorotetradecanoic acid (PFTeA)	92.1	98.7	P/P	30 - 160
2316756	Perfluorotridecanoic acid (PFTriA)	86.8	90.3	P/P	30 - 160
2316756	Perfluoroundecanoic acid (PFUnA)	59.4	75.4	P/P	30 - 160

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P411878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2316214	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	6.92	Spike	P	0 - 30
2316214	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	28.3	Spike	P	0 - 30
2316214	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	20.6	Spike	P	0 - 30
2316214	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	9.09	Spike	P	0 - 30
2316214	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.12	Spike	P	0 - 30
2316214	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	5.59	Spike	P	0 - 30
2316214	Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.12	Spike	P	0 - 30
2316214	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	16.8	Spike	P	0 - 30
2316214	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	3.65	Spike	P	0 - 30
2316214	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	18.8	Spike	P	0 - 30
2316214	Perfluoro-1-butane sulfonamide (FBSA)	3.30	Spike	P	0 - 30
2316214	Perfluoro-1-hexane sulfonamide (FHxSA)	12.0	Spike	P	0 - 30
2316214	Perfluoro-1-octane sulfonamide (FOSA)	4.90	Spike	P	0 - 30
2316214	Perfluoro-3-methoxypropanoic acid (PFMPA)	6.11	Spike	P	0 - 30
2316214	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	10.5	Spike	P	0 - 30
2316214	Perfluoro-4-methoxybutanoic acid (PFMBA)	8.26	Spike	P	0 - 30
2316214	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.103	Spike	P	0 - 30
2316214	Perfluorobutanesulfonic acid (PFBS)	3.90	Spike	P	0 - 30
2316214	Perfluorobutanoic acid (PFBA)	2.08	Spike	P	0 - 30
2316214	Perfluorodecanesulfonic acid (PFDS)	5.88	Spike	P	0 - 30
2316214	Perfluorodecanoic acid (PFDA)	0.644	Spike	P	0 - 30
2316214	Perfluorododecanoic acid (PFDoA)	13.7	Spike	P	0 - 30
2316214	Perfluoroheptanesulfonic acid (PFHpS)	14.2	Spike	P	0 - 30
2316214	Perfluoroheptanoic acid (PFHpA)	8.58	Spike	P	0 - 30
2316214	Perfluorohexanesulfonic acid (PFHxS)	6.74	Spike	P	0 - 30
2316214	Perfluorohexanoic acid (PFHxA)	1.36	Spike	P	0 - 30
2316214	Perfluorononanesulfonic acid (PFNS)	1.54	Spike	P	0 - 30
2316214	Perfluorononanoic acid (PFNA)	17.0	Spike	P	0 - 30
2316214	Perfluorooctanesulfonic acid (PFOS)	12.1	Spike	P	0 - 30
2316214	Perfluorooctanoic acid (PFOA)	7.09	Spike	P	0 - 30
2316214	Perfluoropentanesulfonic acid (PFPeS)	2.44	Spike	P	0 - 30
2316214	Perfluoropentanoic acid (PFPeA)	3.38	Spike	P	0 - 30
2316214	Perfluoropropanesulfonic acid (PFPrS)	2.05	Spike	P	0 - 30
2316214	Perfluorotetradecanoic acid (PFTeA)	3.71	Spike	P	0 - 30
2316214	Perfluorotridecanoic acid (PFTriA)	5.25	Spike	P	0 - 30
2316214	Perfluoroundecanoic acid (PFUnA)	2.02	Spike	P	0 - 30

Reference Method: DEP SOP: LC-001-3
Batch ID: P411983

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2316756	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.77	Spike	P	0 - 30
2316756	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	23.4	Spike	P	0 - 30
2316756	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	3.12	Spike	P	0 - 30
2316756	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	23.9	Spike	P	0 - 30
2316756	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	6.17	Spike	P	0 - 30
2316756	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	6.32	Spike	P	0 - 30
2316756	Hexafluoropropylene oxide dimer acid (HFPO-DA)	13.9	Spike	P	0 - 30
2316756	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	27.8	Spike	P	0 - 30
2316756	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	7.66	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P411983

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2316756	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	18.9	Spike	P	0 - 30
2316756	Perfluoro-1-butane sulfonamide (FBSA)	8.41	Spike	P	0 - 30
2316756	Perfluoro-1-hexane sulfonamide (FHxSA)	4.60	Spike	P	0 - 30
2316756	Perfluoro-1-octane sulfonamide (FOSA)	2.89	Spike	P	0 - 30
2316756	Perfluoro-3-methoxypropanoic acid (PFMPA)	3.27	Spike	P	0 - 30
2316756	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	6.32	Spike	P	0 - 30
2316756	Perfluoro-4-methoxybutanoic acid (PFMBA)	39.3	Spike	F	0 - 30
2316756	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	7.61	Spike	P	0 - 30
2316756	Perfluorobutanesulfonic acid (PFBS)	1.50	Spike	P	0 - 30
2316756	Perfluorobutanoic acid (PFBA)	3.00	Spike	P	0 - 30
2316756	Perfluorodecanesulfonic acid (PFDS)	7.54	Spike	P	0 - 30
2316756	Perfluorodecanoic acid (PFDA)	3.52	Spike	P	0 - 30
2316756	Perfluorododecanoic acid (PFDoA)	4.01	Spike	P	0 - 30
2316756	Perfluoroheptanesulfonic acid (PFHpS)	11.1	Spike	P	0 - 30
2316756	Perfluoroheptanoic acid (PFHpA)	14.4	Spike	P	0 - 30
2316756	Perfluorohexanesulfonic acid (PFHxS)	13.5	Spike	P	0 - 30
2316756	Perfluorohexanoic acid (PFHxA)	12.2	Spike	P	0 - 30
2316756	Perfluorononanesulfonic acid (PFNS)	5.57	Spike	P	0 - 30
2316756	Perfluorononanoic acid (PFNA)	13.9	Spike	P	0 - 30
2316756	Perfluorooctanesulfonic acid (PFOS)	10.7	Spike	P	0 - 30
2316756	Perfluorooctanoic acid (PFOA)	3.63	Spike	P	0 - 30
2316756	Perfluoropentanesulfonic acid (PFPeS)	11.6	Spike	P	0 - 30
2316756	Perfluoropentanoic acid (PFPeA)	10.7	Spike	P	0 - 30
2316756	Perfluoropropanesulfonic acid (PFPrS)	13.4	Spike	P	0 - 30
2316756	Perfluorotetradecanoic acid (PFTeA)	6.96	Spike	P	0 - 30
2316756	Perfluorotridecanoic acid (PFTriA)	3.97	Spike	P	0 - 30
2316756	Perfluoroundecanoic acid (PFUnA)	23.7	Spike	P	0 - 30

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report
Surrogates

Lab Sample ID: 2316746
Field Sample ID: SP-26 (66-70')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	125	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	128	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	97.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	145	P	30 - 160

Lab Sample ID: 2316747
Field Sample ID: SP-26 (86-90')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	147	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	100	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	155	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	100	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	142	P	30 - 160

Lab Sample ID: 2316748
Field Sample ID: SP-29 (36-40')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	138	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	110	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	158	P	30 - 160

Lab Sample ID: 2316749
Field Sample ID: SP-29 (46-50')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	149	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	113	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	98.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	144	P	30 - 160

Lab Sample ID: 2316750
Field Sample ID: SP-29 (66-70')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	113	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	114	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	104	P	30 - 160

Lab Sample ID: 2316751
Field Sample ID: Irrigation Well (105-140')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	98.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	122	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2316751
Field Sample ID: Irrigation Well (105-140')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	111	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	128	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	113	P	30 - 160

Lab Sample ID: 2316752
Field Sample ID: SP-30 (41-45')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	93.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	119	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	97.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	114	P	30 - 160

Lab Sample ID: 2316753
Field Sample ID: SP-30 (46-50')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	122	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	101	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	122	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	91.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	109	P	30 - 160

Lab Sample ID: 2316754
Field Sample ID: SP-30 (66-70')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	79.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	116	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	115	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	137	P	30 - 160

Lab Sample ID: 2316755
Field Sample ID: SP-30 (66-70') DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	115	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	102	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	130	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	105	P	30 - 160

Lab Sample ID: 2316756
Field Sample ID: SP-30 (86-90')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	72.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	111	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	153	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	108	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2316756
Field Sample ID: SP-30 (86-90')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	95.4	P	30 - 160

Lab Sample ID: 2316757
Field Sample ID: SP-31 (41-45')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	86.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	155	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	120	P	30 - 160

Lab Sample ID: 2316758
Field Sample ID: SP-31 (46-50')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	83.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	136	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	124	P	30 - 160

Lab Sample ID: 2316759
Field Sample ID: SP-31 (66-70')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	100	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	107	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	84.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	111	P	30 - 160

Lab Sample ID: 2316760
Field Sample ID: SP-31 (82-86')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	82.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	121	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	155	P	30 - 160

Lab Sample ID: 2316761
Field Sample ID: EQB-45

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	85.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	119	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	114	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	79.2	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111403
Included Lab Sample IDs: 2316761

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	113	117	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	95.4	85.4	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	87.8	90.0	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	116	101	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	143	148	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	115	115	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	79.5	103	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	131	115	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	93.8	114	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	127	115	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	131	145	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	118	127	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	96.8	95.6	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	90.9	104	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	80.9	81.2	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	66.8	107	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	115	105	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	104	94.3	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	94.6	99.3	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	117	116	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	132	71.8	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	90.1	152	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	72.3	72.2	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	104	80.3	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	107	109	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	87.4	92.3	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	111	101	P/P	60 - 160
Perfluorononanoic acid (PFNA)	101	100	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	125	125	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	134	114	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	120	111	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	61.6	104	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	133	93.9	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	106	137	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	132	160	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	91.0	117	P/P	60 - 160

Reference Method: DEP SOP: LC-001-3
Run ID: A111629
Included Lab Sample IDs: 2316746, 2316747, 2316748, 2316749, 2316750, 2316751, 2316752, 2316753, 2316754, 2316755, 2316756, 2316757, 2316758, 2316759, 2316760

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	123	128	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	128	122	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	128	128	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	131	97.3	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	131	131	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	97.3	146	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	101	61.8	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	61.8	147	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3

Run ID: A111629

Included Lab Sample IDs: 2316746, 2316747, 2316748, 2316749, 2316750, 2316751, 2316752, 2316753, 2316754, 2316755, 2316756, 2316757, 2316758, 2316759, 2316760

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	74.0	101	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	106	92.2	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	82.3	90.0	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	92.2	82.3	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	117	99.5	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	79.5	117	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	96.1	79.5	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	107	116	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	114	119	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	119	107	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	121	86.2	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	133	121	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	86.2	129	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	133	128	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	78.7	133	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	90.1	78.7	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	70.4	77.9	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	78.3	89.7	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	89.7	70.4	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	118	71.4	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	122	93.0	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	71.4	122	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	103	128	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	128	106	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	92.7	103	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	147	89.2	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	89.2	98.5	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	98.5	86.9	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	101	98.8	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	105	95.6	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	95.6	101	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	111	116	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	123	111	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	91.2	123	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	106	117	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	117	106	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	128	106	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	101	111	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	108	101	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	70.3	108	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	103	112	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	96.2	103	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	96.4	96.2	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	102	103	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	96.8	99.0	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	99.0	102	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	103	111	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	111	111	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	111	110	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	111	124	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3

Run ID: A111629

Included Lab Sample IDs: 2316746, 2316747, 2316748, 2316749, 2316750, 2316751, 2316752, 2316753, 2316754, 2316755, 2316756, 2316757, 2316758, 2316759, 2316760

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluorodecanesulfonic acid (PFDS)	122	112	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	124	122	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	101	99.0	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	104	86.2	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	99.0	104	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	89.6	98.0	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	98.0	99.8	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	99.8	99.3	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	113	119	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	119	109	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	148	113	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	116	99.5	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	124	116	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	99.5	105	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	92.2	97.2	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	97.2	98.2	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	98.2	110	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	105	79.0	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	82.2	85.8	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	85.8	105	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	110	114	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	112	116	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	116	110	P/P	60 - 160
Perfluorononanoic acid (PFNA)	102	83.1	P/P	60 - 160
Perfluorononanoic acid (PFNA)	110	107	P/P	60 - 160
Perfluorononanoic acid (PFNA)	83.1	110	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	115	102	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	115	115	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	119	115	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	101	155	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	123	76.8	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	76.8	101	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	102	98.9	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	103	102	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	98.9	110	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	124	106	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	73.8	78.8	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	78.8	124	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	101	90.1	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	109	115	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	90.1	109	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	95.5	98.7	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	98.7	97.5	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	98.9	95.5	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	106	93.0	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	89.4	73.6	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	93.0	89.4	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	87.7	110	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	95.7	87.7	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	98.9	95.7	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111663
Included Lab Sample IDs: 2316746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluorooctanesulfonic acid (PFOS)	93.2	96.4	P/P	60 - 160

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	104	61.9	66.3			6.92
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	122	76.3	74.2			2.77
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	103	81.7	109			28.3
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	113	82.3	104			23.4
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	91.4	92.3	113			20.6
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	69.7	65.5	67.5			3.12
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	106	107	118			9.09
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	105	146	115			23.9
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	140	133	144			8.12
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	105	86.8	92.4			6.17
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	114	111	118			5.59
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	124	100	107			6.32
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	84.2	82.2	76.5			7.12
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	117	95.7	110			13.9
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	92.6	85.4	101			16.8
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	104	132	99.7			27.8
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	117	118	113			3.65
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	106	84.3	78.0			7.66
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	84.1	81.1	97.9			18.8
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	129	143	118			18.9
	Perfluoro-1-butane sulfonamide (FBSA)	154	130	134			3.30
	Perfluoro-1-butane sulfonamide (FBSA)	145	110	100			8.41
	Perfluoro-1-hexane sulfonamide (FHxSA)	142	130	146			12.0
	Perfluoro-1-hexane sulfonamide (FHxSA)	150	97.2	102			4.60
	Perfluoro-1-octane sulfonamide (FOSA)	88.1	97.9	103			4.90
	Perfluoro-1-octane sulfonamide (FOSA)	97.4	96.9	99.8			2.89
	Perfluoro-3-methoxypropanoic acid (PFMPA)	99.2	110	116			6.11
	Perfluoro-3-methoxypropanoic acid (PFMPA)	104	106	110			3.27

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	76.6	74.0	82.2			10.5
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	104	108	115			6.32
	Perfluoro-4-methoxybutanoic acid (PFMBA)	109	99.0	107			8.26
	Perfluoro-4-methoxybutanoic acid (PFMBA)	128	121	81.0			39.3
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	115	118	118			0.103
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	115	104	96.5			7.61
	Perfluorobutanesulfonic acid (PFBS)	94.5	96.6	90.0			3.90
	Perfluorobutanesulfonic acid (PFBS)	105	93.7	92.1			1.50
	Perfluorobutanoic acid (PFBA)	109	119	122			2.08
	Perfluorobutanoic acid (PFBA)	103	109	105			3.00
	Perfluorodecanesulfonic acid (PFDS)	101	62.4	66.2			5.88
	Perfluorodecanesulfonic acid (PFDS)	108	80.5	86.8			7.54
	Perfluorodecanoic acid (PFDA)	116	114	114			0.644
	Perfluorodecanoic acid (PFDA)	70.6	110	107			3.52
	Perfluorododecanoic acid (PFDoA)	106	109	95.3			13.7
	Perfluorododecanoic acid (PFDoA)	112	94.6	90.9			4.01
	Perfluoroheptanesulfonic acid (PFHpS)	68.7	66.8	77.0			14.2
	Perfluoroheptanesulfonic acid (PFHpS)	107	115	129			11.1
	Perfluoroheptanoic acid (PFHpA)	114	109	118			8.58
	Perfluoroheptanoic acid (PFHpA)	89.8	103	89.5			14.4
	Perfluorohexanesulfonic acid (PFHxS)	88.1	85.2	93.8			6.74
	Perfluorohexanesulfonic acid (PFHxS)	102	96.0	120			13.5
	Perfluorohexanoic acid (PFHxA)	67.1	72.4	73.4			1.36
	Perfluorohexanoic acid (PFHxA)	87.7	100	113			12.2
	Perfluorononanesulfonic acid (PFNS)	91.7	82.0	83.3			1.54
	Perfluorononanesulfonic acid (PFNS)	112	97.4	92.1			5.57
	Perfluorononanoic acid (PFNA)	133	102	121			17.0
	Perfluorononanoic acid (PFNA)	123	97.9	113			13.9
	Perfluorooctanesulfonic acid (PFOS)	115					12.1
	Perfluorooctanesulfonic acid (PFOS)	108	85.0	105			10.7
	Perfluorooctanoic acid (PFOA)	70.8	114	125			7.09
	Perfluorooctanoic acid (PFOA)	115	134	139			3.63
	Perfluoropentanesulfonic acid (PFPeS)	115	116	119			2.44
	Perfluoropentanesulfonic acid (PFPeS)	120	106	92.6			11.6
	Perfluoropentanoic acid (PFPeA)	97.1	121	117			3.38
	Perfluoropentanoic acid (PFPeA)	96.5	112	125			10.7
	Perfluoropropanesulfonic acid (PFPrS)	96.1	90.5	92.4			2.05

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)	99.5	80.5	70.4			13.4
	Perfluorotetradecanoic acid (PFTeA)	111	127	122			3.71
	Perfluorotetradecanoic acid (PFTeA)	125	92.1	98.7			6.96
	Perfluorotridecanoic acid (PFTriA)	147	147	139			5.25
	Perfluorotridecanoic acid (PFTriA)	120	86.8	90.3			3.97
	Perfluoroundecanoic acid (PFUnA)	103	96.5	94.6			2.02
	Perfluoroundecanoic acid (PFUnA)	90.6	59.4	75.4			23.7

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: LC-001-3	Perfluorinated alkyl substances in water matrices by HPLC/MS/MS	2316746, 2316747, 2316748, 2316749, 2316750, 2316751, 2316752, 2316753, 2316754, 2316755, 2316756, 2316757, 2316758, 2316759, 2316760, 2316761

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: LC-001-3	04/05/2022	04/08/2022 09:00	Hoor Shaik	04/10/2022 15:31	Mohammad Ghaffari	2316761
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 08:27	Mohammad Ghaffari	2316756
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 08:38	Mohammad Ghaffari	2316754
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 08:49	Mohammad Ghaffari	2316755
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 09:00	Mohammad Ghaffari	2316746
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 09:21	Mohammad Ghaffari	2316747
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 09:32	Mohammad Ghaffari	2316748
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 09:43	Mohammad Ghaffari	2316749
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 09:54	Mohammad Ghaffari	2316750
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 10:05	Mohammad Ghaffari	2316751
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 10:16	Mohammad Ghaffari	2316752
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 10:26	Mohammad Ghaffari	2316753
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 10:37	Mohammad Ghaffari	2316757
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 10:59	Mohammad Ghaffari	2316758
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 11:10	Mohammad Ghaffari	2316759
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/14/2022 11:20	Mohammad Ghaffari	2316760
	04/05/2022	04/11/2022 09:00	Hoor Shaik	04/22/2022 02:39	Mohammad Ghaffari	2316746

Chemical Analysis Report

SIS-2022-04-12-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description:	**Former Florda State Fire College Site Wide Soil and GW Investigation**
Request ID:	**RQ-2022-03-28-05**
Customer:	**SIS**
Project ID:	**SIS-PFAS**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Road
Twin Towers Bldg. MS# 4515
Tallahassee, FL 32399
Attn: Robert Cilek

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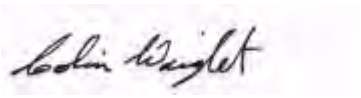
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 02-MAY-2022 14:12



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: FFSFC **Collection Date/Time: 04/06/2022 10:45**

Field ID: SP-35 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318130	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	6.0		ng/L	P412221	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P412221	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P412221	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412221	
		Perfluoroheptanoic acid (PFHpA)**	3.5	I	ng/L	P412221	RPD
		Perfluorohexanesulfonic acid (PFHxS)**	9.6		ng/L	P412221	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P412221	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412221	
		Perfluorooctanoic acid (PFOA)**	4.1	I	ng/L	P412221	
		Perfluorooctanesulfonic acid (PFOS)**	19		ng/L	P412221	
		Perfluoropentanoic acid (PFPeA)**	2.4	I	ng/L	P412221	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412221	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412221	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412221	
		Perfluoropentanesulfonic acid (PFPeS)**	1.3	I	ng/L	P412221	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P412221	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P412221	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P412221	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P412221	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P412221	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P412221	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P412221	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412221	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412221	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P412221	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P412221	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P412221	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P412221	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P412221	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P412221	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P412221	

Field ID: SP-35 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318130	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P412221	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P412221	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample. MS accuracy and precision for 4,8-dioxa-3H-perfluorononanoic acid (ADONA) and perfluorooctanesulfonic acid (PFOS) could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 04/06/2022 11:05**

Field ID: SP-35 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318131	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	4.8		ng/L	P412221	
		Perfluorobutanoic acid (PFBA)**	4.2	U	ng/L	P412221	
		Perfluorodecanoic acid (PFDA)**	4.2	U	ng/L	P412221	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P412221	
		Perfluoroheptanoic acid (PFHpA)**	2.2	I	ng/L	P412221	RPD
		Perfluorohexanesulfonic acid (PFHxS)**	7.9		ng/L	P412221	
		Perfluorohexanoic acid (PFHxA)**	2.1	U	ng/L	P412221	
		Perfluorononanoic acid (PFNA)**	2.1	U	ng/L	P412221	
		Perfluorooctanoic acid (PFOA)**	2.1	U	ng/L	P412221	
		Perfluorooctanesulfonic acid (PFOS)**	2.1	U	ng/L	P412221	
		Perfluoropentanoic acid (PFPeA)**	2.1	U	ng/L	P412221	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P412221	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P412221	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P412221	
		Perfluoropentanesulfonic acid (PFPeS)**	0.85	I	ng/L	P412221	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.83	U	ng/L	P412221	
		Perfluorononanesulfonic acid (PFNS)**	0.42	U	ng/L	P412221	
		Perfluorodecanesulfonic acid (PFDS)**	0.42	U	ng/L	P412221	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.42	U	ng/L	P412221	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.83	U	ng/L	P412221	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.83	U	ng/L	P412221	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.42	U	ng/L	P412221	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P412221	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.1	U	ng/L	P412221	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.83	U	ng/L	P412221	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.83	U	ng/L	P412221	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.2	U	ng/L	P412221	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.2	U	ng/L	P412221	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.2	U	ng/L	P412221	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.2	U	ng/L	P412221	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.2	U	ng/L	P412221	

Field ID: SP-35 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318131	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.2	U	ng/L	P412221	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.3	U	ng/L	P412221	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample. MS accuracy and precision for 4,8-dioxa-3H-perfluorononanoic acid (ADONA) and perfluorooctanesulfonic acid (PFOS) could not be assessed due to high concentration of parameter in the spiked sample. The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/06/2022 11:40**

Field ID: SP-35 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318132	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.42	U	ng/L	P412221	
		Perfluorobutanoic acid (PFBA)**	4.2	U	ng/L	P412221	
		Perfluorodecanoic acid (PFDA)**	4.2	U	ng/L	P412221	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P412221	
		Perfluoroheptanoic acid (PFHpA)**	2.1	U	ng/L	P412221	RPD
		Perfluorohexanesulfonic acid (PFHxS)**	0.83	U	ng/L	P412221	
		Perfluorohexanoic acid (PFHxA)**	2.1	U	ng/L	P412221	
		Perfluorononanoic acid (PFNA)**	2.1	U	ng/L	P412221	
		Perfluorooctanoic acid (PFOA)**	2.1	U	ng/L	P412221	
		Perfluorooctanesulfonic acid (PFOS)**	2.1	U	ng/L	P412221	
		Perfluoropentanoic acid (PFPeA)**	2.1	U	ng/L	P412221	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P412221	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P412221	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P412221	
		Perfluoropentanesulfonic acid (PFPeS)**	0.42	U	ng/L	P412221	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.83	U	ng/L	P412221	
		Perfluorononanesulfonic acid (PFNS)**	0.42	U	ng/L	P412221	
		Perfluorodecanesulfonic acid (PFDS)**	0.42	U	ng/L	P412221	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.42	U	ng/L	P412221	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.83	U	ng/L	P412221	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.83	U	ng/L	P412221	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.42	U	ng/L	P412221	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P412221	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.1	U	ng/L	P412221	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.83	U	ng/L	P412221	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.83	U	ng/L	P412221	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.2	U	ng/L	P412221	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.2	U	ng/L	P412221	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.2	U	ng/L	P412221	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.2	U	ng/L	P412221	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.2	U	ng/L	P412221	

Field ID: SP-35 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318132	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.2	U	ng/L	P412221	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.3	U	ng/L	P412221	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample. MS accuracy and precision for 4,8-dioxa-3H-perfluorononanoic acid (ADONA) and perfluorooctanesulfonic acid (PFOS) could not be assessed due to high concentration of parameter in the spiked sample. The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/06/2022 13:30**

Field ID: SP-35 (78-82) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318133	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.41	U	ng/L	P412221	
		Perfluorobutanoic acid (PFBA)**	4.1	U	ng/L	P412221	
		Perfluorodecanoic acid (PFDA)**	4.1	U	ng/L	P412221	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412221	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P412221	RPD
		Perfluorohexanesulfonic acid (PFHxS)**	1.6	I	ng/L	P412221	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P412221	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412221	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P412221	
		Perfluorooctanesulfonic acid (PFOS)**	6.6	I	ng/L	P412221	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P412221	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412221	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412221	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412221	
		Perfluoropentanesulfonic acid (PFPeS)**	0.41	U	ng/L	P412221	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.81	U	ng/L	P412221	
		Perfluorononanesulfonic acid (PFNS)**	0.41	U	ng/L	P412221	
		Perfluorodecanesulfonic acid (PFDS)**	0.41	U	ng/L	P412221	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.41	U	ng/L	P412221	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.81	U	ng/L	P412221	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.81	U	ng/L	P412221	
		Perfluoro-1-octane sulfonamide (FOSA)**	1.0	I	ng/L	P412221	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412221	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412221	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.81	U	ng/L	P412221	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.81	U	ng/L	P412221	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.1	U	ng/L	P412221	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.1	U	ng/L	P412221	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.1	U	ng/L	P412221	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.1	U	ng/L	P412221	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.1	U	ng/L	P412221	

Field ID: SP-35 (78-82) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318133	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.1	U	ng/L	P412221	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.1	U	ng/L	P412221	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample. MS accuracy and precision for 4,8-dioxa-3H-perfluorononanoic acid (ADONA) and perfluorooctanesulfonic acid (PFOS) could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 04/06/2022 13:30**

Field ID: SP-35 (78-82)_Dup Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318134	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.41	U	ng/L	P412221	
		Perfluorobutanoic acid (PFBA)**	4.1	U	ng/L	P412221	
		Perfluorodecanoic acid (PFDA)**	4.1	U	ng/L	P412221	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412221	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P412221	RPD
		Perfluorohexanesulfonic acid (PFHxS)**	1.4	I	ng/L	P412221	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P412221	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412221	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P412221	
		Perfluorooctanesulfonic acid (PFOS)**	6.0	I	ng/L	P412221	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P412221	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412221	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412221	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412221	
		Perfluoropentanesulfonic acid (PFPeS)**	0.41	U	ng/L	P412221	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.81	U	ng/L	P412221	
		Perfluorononanesulfonic acid (PFNS)**	0.41	U	ng/L	P412221	
		Perfluorodecanesulfonic acid (PFDS)**	0.41	U	ng/L	P412221	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.41	U	ng/L	P412221	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.81	U	ng/L	P412221	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.81	U	ng/L	P412221	
		Perfluoro-1-octane sulfonamide (FOSA)**	1.0	I	ng/L	P412221	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412221	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412221	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412221	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.81	U	ng/L	P412221	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.81	U	ng/L	P412221	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.1	U	ng/L	P412221	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.1	U	ng/L	P412221	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.1	U	ng/L	P412221	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.1	U	ng/L	P412221	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.1	U	ng/L	P412221	

Field ID: SP-35 (78-82)_Dup Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318134	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.1	U	ng/L	P412221	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.1	U	ng/L	P412221	

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample. MS accuracy and precision for 4,8-dioxa-3H-perfluorononanoic acid (ADONA) and perfluorooctanesulfonic acid (PFOS) could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: FFSFC **Collection Date/Time: 04/06/2022 14:25**

Field ID: FRB-10 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318143	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.40	U	ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	0.80	U	ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	2.0	U	ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P412274	

Field ID: FRB-10

Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318143	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P412274	

Sample Location: FFSFC **Collection Date/Time: 04/06/2022 15:55**

Field ID: SP-36 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318135	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	8.8		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.2	U	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.2	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	4.3	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	15		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	2.4	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.1	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	8.1	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	30		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	3.2	I	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	1.6	I	ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.83	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.42	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.42	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.42	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.83	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.83	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.42	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.1	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.83	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.83	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.2	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.2	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.2	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.2	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.2	U	ng/L	P412274	

Field ID: SP-36 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318135	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	7.4	I	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.3	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/06/2022 16:40**

Field ID: SP-36 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318136	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	11		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.4	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	6.4	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	31		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	7.7	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	42		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	9.8		ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	4.8		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.81	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.44	I	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	1.3	I	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.81	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.81	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.81	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P412274	

Field ID: SP-36 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318136	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.1	U	ng/L	P412274	

Sample Location: FFSFC **Collection Date/Time: 04/07/2022 11:05**

Field ID: SP-36 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318137	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	13		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	5.4	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.2	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	5.7	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	38		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	9.2		ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.1	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	8.1	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	48		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	8.6		ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	5.2		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.83	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.42	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.42	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.46	I	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	1.2	I	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.83	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.42	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.1	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.83	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.83	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.2	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.2	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.2	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.2	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.2	U	ng/L	P412274	

Field ID: SP-36 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318137	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.2	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.3	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/07/2022 11:50**

Field ID: SP-36 (81-85) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318138	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	13		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.1	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	5.0	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	41		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	7.2	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	6.5	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	48		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	6.2	I	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	6.2		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.3	I	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	1.4	I	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P412274	

Field ID: SP-36 (81-85) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318138	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P412274	

Sample Location: FFSFC **Collection Date/Time: 04/07/2022 13:35**

Field ID: EQB-47 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318144	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.40	U	ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	0.80	U	ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	2.0	U	ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P412274	

Field ID: EQB-47

Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318144	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P412274	

Sample Location: FFSFC **Collection Date/Time: 04/07/2022 14:25**

Field ID: SP-37 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318139	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	15		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	6.4	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	8.6		ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	52		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	11		ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	4.2	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	67		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	17		ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	5.9		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.6	I	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	4.5		ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P412274	

Field ID: SP-37 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318139	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P412274	

Sample Location: FFSFC **Collection Date/Time: 04/07/2022 14:40**

Field ID: SP-37 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318140	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	8.7		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.1	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.1	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	4.3	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	40		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	7.0	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	48		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	6.3	I	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	6.4		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.82	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.41	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.41	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.41	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	3.8		ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.82	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.41	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.82	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.82	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.1	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.1	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.1	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.1	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.1	U	ng/L	P412274	

Field ID: SP-37 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318140	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.1	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.2	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/07/2022 14:40**

Field ID: SP-37 (46-50)_Dup Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318141	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	9.1		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.4	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.1	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	4.1	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	46		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	7.3	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	49		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	6.1	I	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	6.1		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.82	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.41	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.41	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.41	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	3.6		ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.82	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.41	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.82	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.82	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.1	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.1	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.1	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.1	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.1	U	ng/L	P412274	

Field ID: SP-37 (46-50)_Dup Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318141	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.1	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.2	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/07/2022 15:00**

Field ID: SP-37 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318142	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	2.5		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.2	U	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.2	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	2.1	U	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	6.1		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	2.1	U	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.1	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	2.1	U	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	9.4		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	2.1	U	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	0.42	U	ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.85	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.42	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.42	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.42	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.85	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.85	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.42	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.1	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.85	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.85	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.2	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.2	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.2	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.2	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.2	U	ng/L	P412274	

Field ID: SP-37 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318142	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.2	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.5	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/04/2022 10:35**

Field ID: SP-32 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318164	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	6.9		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.5	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.1	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	5.6	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	32		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	7.3	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	3.3	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	45		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	9.7		ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	4.1		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.82	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.41	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.41	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.41	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.82	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.82	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.41	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.82	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.82	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.1	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.1	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.1	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.1	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.1	U	ng/L	P412274	

Field ID: SP-32 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318164	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.1	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.2	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/04/2022 10:55**

Field ID: SP-32 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318165	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	6.4		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.3	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	5.0	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	41		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	3.8	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	3.5	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	41		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	7.8	I	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	6.2		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	4.3		ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P412274	

Field ID: SP-32 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318165	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P412274	

Sample Location: FFSFC **Collection Date/Time: 04/04/2022 11:15**

Field ID: SP-32 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318166	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	11		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	6.9	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.8	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.4	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	4.7	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	55		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	13		ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.4	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	4.6	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	89		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	19		ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.4	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.4	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.4	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	8.9		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	1.7	I	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.48	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.48	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.48	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	5.1		ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.96	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.48	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.4	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.4	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.4	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	19	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.4	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.96	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.96	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.8	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.8	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.8	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.8	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.8	U	ng/L	P412274	

Field ID: SP-32 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318166	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.8	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	9.6	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/04/2022 11:35**

Field ID: SP-32 (86-90) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318167	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	8.7		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.5	U	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.5	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.2	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	6.4	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	43		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	6.8	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.2	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	2.5	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	48		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	11		ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.2	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.2	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.2	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	6.8		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.89	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.45	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.45	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.46	I	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	4.0		ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.89	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.45	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.2	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	9.8		ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.2	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	18	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.2	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.89	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.89	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.5	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.5	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.5	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.5	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.5	U	ng/L	P412274	

Field ID: SP-32 (86-90) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318167	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.5	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.9	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/04/2022 15:30**

Field ID: SP-33 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318168	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	12		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.5	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.2	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	6.6	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	26		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	7.6	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.1	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	6.2	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	41		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	13		ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	4.1		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.83	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.42	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.42	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.42	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.83	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.83	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.42	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.1	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.83	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.83	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.2	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.2	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.2	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.2	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.2	U	ng/L	P412274	

Field ID: SP-33 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318168	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.2	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.3	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/04/2022 16:05**

Field ID: SP-33 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318169	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	8.6		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	18		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	3.0	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	3.6	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	30		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	6.8	I	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	2.2		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P412274	

Field ID: SP-33 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318169	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P412274	

Sample Location: FFSFC **Collection Date/Time: 04/04/2022 16:05**

Field ID: SP-33 (46-50)_Dup Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318170	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	10		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	22		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	3.5	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	3.6	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	35		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	6.6	I	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	2.0		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P412274	

Field ID: SP-33 (46-50)_Dup Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318170	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P412274	

Sample Location: FFSFC **Collection Date/Time: 04/04/2022 16:30**

Field ID: SP-33 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318171	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	9.0		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.3	U	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.3	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.2	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	3.8	I	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	16		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	6.4	I	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.2	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	2.5	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	40		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	5.7	I	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.2	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.2	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.2	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	2.0		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.87	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.43	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.43	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.43	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.87	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.87	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.43	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.2	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.2	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.2	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.2	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.87	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.87	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.3	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.3	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.3	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.3	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.3	U	ng/L	P412274	

Field ID: SP-33 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318171	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.3	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.7	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/04/2022 16:55**

Field ID: SP-33 (86-90) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318172	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	11		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.7	I	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.5	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.3	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	2.3	U	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	24		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	9.4		ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.3	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	6.1	I	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	43		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	11		ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.3	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.3	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.3	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	3.4		ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.90	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.45	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.45	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.45	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.90	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.90	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.45	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.3	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.3	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.3	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	18	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.3	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.90	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.90	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.5	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.5	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.5	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.5	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.5	U	ng/L	P412274	

Field ID: SP-33 (86-90) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318172	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.5	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	9.0	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/05/2022 09:50**

Field ID: EQB-46 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318177	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.40	U	ng/L	P412421	
		Perfluorobutanoic acid (PFBA)**	4.0	U	ng/L	P412421	
		Perfluorodecanoic acid (PFDA)**	4.0	U	ng/L	P412421	
		Perfluorododecanoic acid (PFDoA)**	2.0	U	ng/L	P412421	
		Perfluoroheptanoic acid (PFHpA)**	2.0	U	ng/L	P412421	
		Perfluorohexanesulfonic acid (PFHxS)**	0.80	U	ng/L	P412421	
		Perfluorohexanoic acid (PFHxA)**	2.0	U	ng/L	P412421	
		Perfluorononanoic acid (PFNA)**	2.0	U	ng/L	P412421	
		Perfluorooctanoic acid (PFOA)**	2.0	U	ng/L	P412421	
		Perfluorooctanesulfonic acid (PFOS)**	2.0	U	ng/L	P412421	
		Perfluoropentanoic acid (PFPeA)**	2.0	U	ng/L	P412421	
		Perfluorotetradecanoic acid (PFTeA)**	2.0	U	ng/L	P412421	
		Perfluorotridecanoic acid (PFTriA)**	2.0	U	ng/L	P412421	
		Perfluoroundecanoic acid (PFUnA)**	2.0	U	ng/L	P412421	
		Perfluoropentanesulfonic acid (PFPeS)**	0.40	U	ng/L	P412421	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.80	U	ng/L	P412421	
		Perfluorononanesulfonic acid (PFNS)**	0.40	U	ng/L	P412421	
		Perfluorodecanesulfonic acid (PFDS)**	0.40	U	ng/L	P412421	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.40	U	ng/L	P412421	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.80	U	ng/L	P412421	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.80	U	ng/L	P412421	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.40	U	ng/L	P412421	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.0	U	ng/L	P412421	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.0	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.0	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	16	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.0	U	ng/L	P412421	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.80	U	ng/L	P412421	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.80	U	ng/L	P412421	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.0	U	ng/L	P412421	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.0	U	ng/L	P412421	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.0	U	ng/L	P412421	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.0	U	ng/L	P412421	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.0	U	ng/L	P412421	

Field ID: EQB-46

Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318177	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.0	U	ng/L	P412421	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.0	U	ng/L	P412421	

Sample Location: FFSFC **Collection Date/Time: 04/05/2022 10:55**

Field ID: SP-34 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318173	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	4.5		ng/L	P412274	
		Perfluorobutanoic acid (PFBA)**	4.3	U	ng/L	P412274	
		Perfluorodecanoic acid (PFDA)**	4.3	U	ng/L	P412274	
		Perfluorododecanoic acid (PFDoA)**	2.2	U	ng/L	P412274	
		Perfluoroheptanoic acid (PFHpA)**	2.2	U	ng/L	P412274	
		Perfluorohexanesulfonic acid (PFHxS)**	12		ng/L	P412274	
		Perfluorohexanoic acid (PFHxA)**	2.2	U	ng/L	P412274	
		Perfluorononanoic acid (PFNA)**	2.2	U	ng/L	P412274	
		Perfluorooctanoic acid (PFOA)**	2.2	U	ng/L	P412274	
		Perfluorooctanesulfonic acid (PFOS)**	12		ng/L	P412274	
		Perfluoropentanoic acid (PFPeA)**	2.2	U	ng/L	P412274	
		Perfluorotetradecanoic acid (PFTeA)**	2.2	U	ng/L	P412274	
		Perfluorotridecanoic acid (PFTriA)**	2.2	U	ng/L	P412274	
		Perfluoroundecanoic acid (PFUnA)**	2.2	U	ng/L	P412274	
		Perfluoropentanesulfonic acid (PFPeS)**	1.5	I	ng/L	P412274	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.86	U	ng/L	P412274	
		Perfluorononanesulfonic acid (PFNS)**	0.43	U	ng/L	P412274	
		Perfluorodecanesulfonic acid (PFDS)**	0.43	U	ng/L	P412274	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.43	U	ng/L	P412274	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.86	U	ng/L	P412274	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.86	U	ng/L	P412274	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.43	U	ng/L	P412274	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.2	U	ng/L	P412274	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.2	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.2	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P412274	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.2	U	ng/L	P412274	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.86	U	ng/L	P412274	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.86	U	ng/L	P412274	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.3	U	ng/L	P412274	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.3	U	ng/L	P412274	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.3	U	ng/L	P412274	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.3	U	ng/L	P412274	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.3	U	ng/L	P412274	

Field ID: SP-34 (36-40) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318173	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.3	U	ng/L	P412274	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.6	U	ng/L	P412274	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/05/2022 11:15**

Field ID: SP-34 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318174	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.45	U	ng/L	P412421	
		Perfluorobutanoic acid (PFBA)**	4.5	U	ng/L	P412421	
		Perfluorodecanoic acid (PFDA)**	4.5	U	ng/L	P412421	
		Perfluorododecanoic acid (PFDoA)**	2.3	U	ng/L	P412421	
		Perfluoroheptanoic acid (PFHpA)**	2.3	U	ng/L	P412421	
		Perfluorohexanesulfonic acid (PFHxS)**	4.0		ng/L	P412421	
		Perfluorohexanoic acid (PFHxA)**	2.3	U	ng/L	P412421	
		Perfluorononanoic acid (PFNA)**	2.3	U	ng/L	P412421	
		Perfluorooctanoic acid (PFOA)**	2.3	U	ng/L	P412421	
		Perfluorooctanesulfonic acid (PFOS)**	6.1	I	ng/L	P412421	
		Perfluoropentanoic acid (PFPeA)**	2.3	U	ng/L	P412421	
		Perfluorotetradecanoic acid (PFTeA)**	2.3	U	ng/L	P412421	
		Perfluorotridecanoic acid (PFTriA)**	2.3	U	ng/L	P412421	
		Perfluoroundecanoic acid (PFUnA)**	2.3	U	ng/L	P412421	
		Perfluoropentanesulfonic acid (PFPeS)**	0.76	I	ng/L	P412421	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.90	U	ng/L	P412421	
		Perfluorononanesulfonic acid (PFNS)**	0.45	U	ng/L	P412421	
		Perfluorodecanesulfonic acid (PFDS)**	0.45	U	ng/L	P412421	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.45	U	ng/L	P412421	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.90	U	ng/L	P412421	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.90	U	ng/L	P412421	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.45	U	ng/L	P412421	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.3	U	ng/L	P412421	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.3	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.3	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	18	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.3	U	ng/L	P412421	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.90	U	ng/L	P412421	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.90	U	ng/L	P412421	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.5	U	ng/L	P412421	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.5	U	ng/L	P412421	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.5	U	ng/L	P412421	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.5	U	ng/L	P412421	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.5	U	ng/L	P412421	

Field ID: SP-34 (46-50) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318174	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.5	U	ng/L	P412421	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	9.0	U	ng/L	P412421	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/05/2022 11:45**

Field ID: SP-34 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318175	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	0.45	U	ng/L	P412421	
		Perfluorobutanoic acid (PFBA)**	4.5	U	ng/L	P412421	
		Perfluorodecanoic acid (PFDA)**	4.5	U	ng/L	P412421	
		Perfluorododecanoic acid (PFDoA)**	2.3	U	ng/L	P412421	
		Perfluoroheptanoic acid (PFHpA)**	2.3	U	ng/L	P412421	
		Perfluorohexanesulfonic acid (PFHxS)**	0.90	U	ng/L	P412421	
		Perfluorohexanoic acid (PFHxA)**	2.3	U	ng/L	P412421	
		Perfluorononanoic acid (PFNA)**	2.3	U	ng/L	P412421	
		Perfluorooctanoic acid (PFOA)**	2.3	U	ng/L	P412421	
		Perfluorooctanesulfonic acid (PFOS)**	2.3	U	ng/L	P412421	
		Perfluoropentanoic acid (PFPeA)**	2.3	U	ng/L	P412421	
		Perfluorotetradecanoic acid (PFTeA)**	2.3	U	ng/L	P412421	
		Perfluorotridecanoic acid (PFTriA)**	2.3	U	ng/L	P412421	
		Perfluoroundecanoic acid (PFUnA)**	2.3	U	ng/L	P412421	
		Perfluoropentanesulfonic acid (PFPeS)**	0.45	U	ng/L	P412421	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.90	U	ng/L	P412421	
		Perfluorononanesulfonic acid (PFNS)**	0.45	U	ng/L	P412421	
		Perfluorodecanesulfonic acid (PFDS)**	0.45	U	ng/L	P412421	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.45	U	ng/L	P412421	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.90	U	ng/L	P412421	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.90	U	ng/L	P412421	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.45	U	ng/L	P412421	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.3	U	ng/L	P412421	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.3	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.3	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	18	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.3	U	ng/L	P412421	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.90	U	ng/L	P412421	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.90	U	ng/L	P412421	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.5	U	ng/L	P412421	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.5	U	ng/L	P412421	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.5	U	ng/L	P412421	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.5	U	ng/L	P412421	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.5	U	ng/L	P412421	

Field ID: SP-34 (66-70) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318175	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.5	U	ng/L	P412421	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	9.0	U	ng/L	P412421	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Sample Location: FFSFC **Collection Date/Time: 04/05/2022 14:35**

Field ID: SP-34 (86-90) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318176	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)**	4.3		ng/L	P412421	
		Perfluorobutanoic acid (PFBA)**	4.2	U	ng/L	P412421	
		Perfluorodecanoic acid (PFDA)**	4.2	U	ng/L	P412421	
		Perfluorododecanoic acid (PFDoA)**	2.1	U	ng/L	P412421	
		Perfluoroheptanoic acid (PFHpA)**	2.1	U	ng/L	P412421	
		Perfluorohexanesulfonic acid (PFHxS)**	7.1		ng/L	P412421	
		Perfluorohexanoic acid (PFHxA)**	2.1	U	ng/L	P412421	
		Perfluorononanoic acid (PFNA)**	2.1	U	ng/L	P412421	
		Perfluorooctanoic acid (PFOA)**	2.1	U	ng/L	P412421	
		Perfluorooctanesulfonic acid (PFOS)**	5.0	I	ng/L	P412421	
		Perfluoropentanoic acid (PFPeA)**	2.1	U	ng/L	P412421	
		Perfluorotetradecanoic acid (PFTeA)**	2.1	U	ng/L	P412421	
		Perfluorotridecanoic acid (PFTriA)**	2.1	U	ng/L	P412421	
		Perfluoroundecanoic acid (PFUnA)**	2.1	U	ng/L	P412421	
		Perfluoropentanesulfonic acid (PFPeS)**	1.4	I	ng/L	P412421	
		Perfluoroheptanesulfonic acid (PFHpS)**	0.84	U	ng/L	P412421	
		Perfluorononanesulfonic acid (PFNS)**	0.42	U	ng/L	P412421	
		Perfluorodecanesulfonic acid (PFDS)**	0.42	U	ng/L	P412421	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)**	0.42	U	ng/L	P412421	
		Perfluoro-1-butane sulfonamide (FBSA)**	0.84	U	ng/L	P412421	
		Perfluoro-1-hexane sulfonamide (FHxSA)**	0.84	U	ng/L	P412421	
		Perfluoro-1-octane sulfonamide (FOSA)**	0.42	U	ng/L	P412421	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)**	2.1	U	ng/L	P412421	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)**	2.1	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)**	2.1	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)**	17	U	ng/L	P412421	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)**	2.1	U	ng/L	P412421	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)**	0.84	U	ng/L	P412421	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)**	0.84	U	ng/L	P412421	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)**	4.2	U	ng/L	P412421	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)**	4.2	U	ng/L	P412421	
		Perfluoro-4-methoxybutanoic acid (PFMBA)**	4.2	U	ng/L	P412421	
		Perfluoro-3-methoxypropanoic acid (PFMPA)**	4.2	U	ng/L	P412421	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)**	4.2	U	ng/L	P412421	

Field ID: SP-34 (86-90) Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318176	DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)**	4.2	U	ng/L	P412421	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)**	8.4	U	ng/L	P412421	

Ref. Method and Comment:
DEP SOP: LC-001-3: The sample bottle contained a significant amount of solids. MDLs are elevated due to a limited amount of sample volume. Results may be biased.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P412221

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.0	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	4.0	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.0	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.0	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Reference Method: DEP SOP: LC-001-3
Batch ID: P412274

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P412274

Component	Result	Code	Units
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.0	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	4.0	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.0	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.0	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Reference Method: DEP SOP: LC-001-3
Batch ID: P412421

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.0	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	4.0	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.0	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.0	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P412421

Component	Result	Code	Units
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P412221

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	74.9		P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	114		P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	102		P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	96.3		P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	76.6		P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	84.3		P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	97.9		P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	97.4		P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	119		P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	130		P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	157		P	30 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	152		P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	104		P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	88.1		P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	102		P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	112		P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	99.1		P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	103		P	30 - 160
Perfluorobutanoic acid (PFBA)	89.1		P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	78.3		P	30 - 160
Perfluorodecanoic acid (PFDA)	88.2		P	30 - 160
Perfluorododecanoic acid (PFDoA)	130		P	30 - 160
Perfluoroheptanesulfonic acid (PFHpS)	90.7		P	30 - 160
Perfluoroheptanoic acid (PFHpA)	95.6		P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	94.3		P	30 - 160
Perfluorohexanoic acid (PFHxA)	110		P	30 - 160
Perfluorononanesulfonic acid (PFNS)	81.0		P	30 - 160
Perfluorononanoic acid (PFNA)	89.5		P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	87.6		P	30 - 160
Perfluorooctanoic acid (PFOA)	127		P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	112		P	30 - 160
Perfluoropentanoic acid (PFPeA)	102		P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	134		P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	118		P	30 - 160
Perfluorotridecanoic acid (PFTriA)	128		P	30 - 160
Perfluoroundecanoic acid (PFUnA)	113		P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P412274

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	92.5		P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	80.9		P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	153		P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	97.8		P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	95.2		P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	117		P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	102		P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	95.6		P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	121		P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	59.8		P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	133		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P412274

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Perfluoro-1-hexane sulfonamide (FHxSA)	156		P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	124		P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	105		P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	96.8		P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	126		P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	109		P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	101		P	30 - 160
Perfluorobutanoic acid (PFBA)	108		P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	95.6		P	30 - 160
Perfluorodecanoic acid (PFDA)	123		P	30 - 160
Perfluorododecanoic acid (PFDoA)	101		P	30 - 160
Perfluoroheptanesulfonic acid (PFHpS)	92.5		P	30 - 160
Perfluoroheptanoic acid (PFHpA)	104		P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	97.1		P	30 - 160
Perfluorohexanoic acid (PFHxA)	99.8		P	30 - 160
Perfluorononanesulfonic acid (PFNS)	109		P	30 - 160
Perfluorononanoic acid (PFNA)	121		P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	108		P	30 - 160
Perfluorooctanoic acid (PFOA)	149		P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	104		P	30 - 160
Perfluoropentanoic acid (PFPeA)	101		P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	106		P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	110		P	30 - 160
Perfluorotridecanoic acid (PFTriA)	116		P	30 - 160
Perfluoroundecanoic acid (PFUnA)	107		P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P412421

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	90.6		P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	105		P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	109		P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	88.2		P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	77.8		P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	112		P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	68.9		P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	93.5		P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	140		P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	103		P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	133		P	30 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	160		P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	99.4		P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	84.2		P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	123		P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	119		P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	108		P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	108		P	30 - 160
Perfluorobutanoic acid (PFBA)	110		P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	92.0		P	30 - 160
Perfluorodecanoic acid (PFDA)	119		P	30 - 160
Perfluorododecanoic acid (PFDoA)	112		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P412421

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Perfluoroheptanesulfonic acid (PFHpS)	104		P	30 - 160
Perfluoroheptanoic acid (PFHpA)	117		P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	96.8		P	30 - 160
Perfluorohexanoic acid (PFHxA)	101		P	30 - 160
Perfluorononanesulfonic acid (PFNS)	90.7		P	30 - 160
Perfluorononanoic acid (PFNA)	67.4		P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	107		P	30 - 160
Perfluorooctanoic acid (PFOA)	105		P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	117		P	30 - 160
Perfluoropentanoic acid (PFPeA)	79.0		P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	108		P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	140		P	30 - 160
Perfluorotridecanoic acid (PFTriA)	130		P	30 - 160
Perfluoroundecanoic acid (PFUnA)	116		P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P412221

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2317972	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	70.5	60.6	P/P	30 - 160
2317972	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	89.0	79.8	P/P	30 - 160
2317972	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	93.9	108	P/P	30 - 160
2317972	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	40.2	33.5	P/P	30 - 160
2317972	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	93.9	82.4	P/P	30 - 160
2317972	Hexafluoropropylene oxide dimer acid (HFPO-DA)	113	93.8	P/P	30 - 160
2317972	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	72.4	75.7	P/P	30 - 160
2317972	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	87.6	97.1	P/P	30 - 160
2317972	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	108	114	P/P	30 - 160
2317972	Perfluoro-1-octane sulfonamide (FOSA)	91.1	90.0	P/P	30 - 160
2317972	Perfluoro-3-methoxypropanoic acid (PFMPA)	110	108	P/P	30 - 160
2317972	Perfluoro-4-methoxybutanoic acid (PFMBA)	148	144	P/P	30 - 160
2317972	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	112	132	P/P	30 - 160
2317972	Perfluorodecanesulfonic acid (PFDS)	69.2	59.8	P/P	30 - 160
2317972	Perfluorodecanoic acid (PFDA)	106	110	P/P	30 - 160
2317972	Perfluorododecanoic acid (PFDoA)	97.7	118	P/P	30 - 160
2317972	Perfluorononanesulfonic acid (PFNS)	81.4	79.8	P/P	30 - 160
2317972	Perfluorotetradecanoic acid (PFTeA)	100	107	P/P	30 - 160
2317972	Perfluorotridecanoic acid (PFTriA)	84.2	105	P/P	30 - 160
2317972	Perfluoroundecanoic acid (PFUnA)	100	89.7	P/P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P412274

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318135	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	88.5	74.5	P/P	30 - 160
2318135	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	136	119	P/P	30 - 160
2318135	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	81.4	106	P/P	30 - 160
2318135	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	109	127	P/P	30 - 160
2318135	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	74.1	73.1	P/P	30 - 160
2318135	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	126	105	P/P	30 - 160
2318135	Hexafluoropropylene oxide dimer acid (HFPO-DA)	112	118	P/P	30 - 160
2318135	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	73.8	88.7	P/P	30 - 160
2318135	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	142	127	P/P	30 - 160
2318135	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	99.7	108	P/P	30 - 160
2318135	Perfluoro-1-butane sulfonamide (FBSA)	111	119	P/P	30 - 160
2318135	Perfluoro-1-hexane sulfonamide (FHxSA)	120	105	P/P	30 - 160
2318135	Perfluoro-1-octane sulfonamide (FOSA)	117	109	P/P	30 - 160
2318135	Perfluoro-3-methoxypropanoic acid (PFMPA)	132	130	P/P	30 - 160
2318135	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	110	123	P/P	30 - 160
2318135	Perfluoro-4-methoxybutanoic acid (PFMBA)	119	139	P/P	30 - 160
2318135	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	123	111	P/P	30 - 160
2318135	Perfluorobutanesulfonic acid (PFBS)	113	90.4	P/P	30 - 160
2318135	Perfluorobutanoic acid (PFBA)	123	126	P/P	30 - 160
2318135	Perfluorodecanesulfonic acid (PFDS)	88.8	83.6	P/P	30 - 160
2318135	Perfluorodecanoic acid (PFDA)	110	106	P/P	30 - 160
2318135	Perfluorododecanoic acid (PFDoA)	143	148	P/P	30 - 160
2318135	Perfluoroheptanesulfonic acid (PFHpS)	107	110	P/P	30 - 160
2318135	Perfluoroheptanoic acid (PFHpA)	119	102	P/P	30 - 160
2318135	Perfluorohexanesulfonic acid (PFHxS)	107	126	P/P	30 - 160
2318135	Perfluorohexanoic acid (PFHxA)	113	138	P/P	30 - 160
2318135	Perfluorononanesulfonic acid (PFNS)	108	95.5	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P412274

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318135	Perfluorononanoic acid (PFNA)	113	105	P/P	30 - 160
2318135	Perfluorooctanesulfonic acid (PFOS)	100	54.5	P/P	30 - 160
2318135	Perfluorooctanoic acid (PFOA)	120	134	P/P	30 - 160
2318135	Perfluoropentanesulfonic acid (PFPeS)	126	111	P/P	30 - 160
2318135	Perfluoropentanoic acid (PFPeA)	94.8	95.8	P/P	30 - 160
2318135	Perfluoropropanesulfonic acid (PFPrS)	97.5	100	P/P	30 - 160
2318135	Perfluorotetradecanoic acid (PFTeA)	116	108	P/P	30 - 160
2318135	Perfluorotridecanoic acid (PFTriA)	87.3	85.0	P/P	30 - 160
2318135	Perfluoroundecanoic acid (PFUnA)	136	132	P/P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P412421

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319848	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	84.5	70.8	P/P	30 - 160
2319848	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	131	98.9	P/P	30 - 160
2319848	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	90.5	105	P/P	30 - 160
2319848	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	122	99.0	P/P	30 - 160
2319848	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	107	87.5	P/P	30 - 160
2319848	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	104	106	P/P	30 - 160
2319848	Hexafluoropropylene oxide dimer acid (HFPO-DA)	116	124	P/P	30 - 160
2319848	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	111	131	P/P	30 - 160
2319848	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	107	125	P/P	30 - 160
2319848	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	76.9	57.7	P/P	30 - 160
2319848	Perfluoro-1-butane sulfonamide (FBSA)	117	112	P/P	30 - 160
2319848	Perfluoro-1-hexane sulfonamide (FHxSA)	122	120	P/P	30 - 160
2319848	Perfluoro-1-octane sulfonamide (FOSA)	109	106	P/P	30 - 160
2319848	Perfluoro-3-methoxypropanoic acid (PFMPA)	103	100	P/P	30 - 160
2319848	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	122	93.3	P/P	30 - 160
2319848	Perfluoro-4-methoxybutanoic acid (PFMBA)	123	111	P/P	30 - 160
2319848	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	117	112	P/P	30 - 160
2319848	Perfluorobutanesulfonic acid (PFBS)	117	134	P/P	30 - 160
2319848	Perfluorobutanoic acid (PFBA)	118	101	P/P	30 - 160
2319848	Perfluorodecanesulfonic acid (PFDS)	88.8	79.5	P/P	30 - 160
2319848	Perfluorodecanoic acid (PFDA)	112	125	P/P	30 - 160
2319848	Perfluorododecanoic acid (PFDoA)	124	110	P/P	30 - 160
2319848	Perfluoroheptanesulfonic acid (PFHpS)	116	93.4	P/P	30 - 160
2319848	Perfluoroheptanoic acid (PFHpA)	78.3	86.3	P/P	30 - 160
2319848	Perfluorohexanesulfonic acid (PFHxS)	125	93.3	P/P	30 - 160
2319848	Perfluorohexanoic acid (PFHxA)	127	107	P/P	30 - 160
2319848	Perfluorononanesulfonic acid (PFNS)	109	91.0	P/P	30 - 160
2319848	Perfluorononanoic acid (PFNA)	112	99.4	P/P	30 - 160
2319848	Perfluorooctanesulfonic acid (PFOS)	107	113	P/P	30 - 160
2319848	Perfluorooctanoic acid (PFOA)	90.0	92.9	P/P	30 - 160
2319848	Perfluoropentanesulfonic acid (PFPeS)	117	115	P/P	30 - 160
2319848	Perfluoropentanoic acid (PFPeA)	96.7	94.2	P/P	30 - 160
2319848	Perfluoropropanesulfonic acid (PFPrS)	120	131	P/P	30 - 160
2319848	Perfluorotetradecanoic acid (PFTeA)	127	118	P/P	30 - 160
2319848	Perfluorotridecanoic acid (PFTriA)	114	98.8	P/P	30 - 160
2319848	Perfluoroundecanoic acid (PFUnA)	102	103	P/P	30 - 160

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P412221

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2317972	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	15.0	Spike	P	0 - 30
2317972	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	10.8	Spike	P	0 - 30
2317972	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	8.42	Spike	P	0 - 30
2317972	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	18.1	Spike	P	0 - 30
2317972	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	13.1	Spike	P	0 - 30
2317972	Hexafluoropropylene oxide dimer acid (HFPO-DA)	18.3	Spike	P	0 - 30
2317972	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	4.48	Spike	P	0 - 30
2317972	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	10.2	Spike	P	0 - 30
2317972	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.31	Spike	P	0 - 30
2317972	Perfluoro-1-butane sulfonamide (FBSA)	8.96	Spike	P	0 - 30
2317972	Perfluoro-1-hexane sulfonamide (FHxSA)	4.73	Spike	P	0 - 30
2317972	Perfluoro-1-octane sulfonamide (FOSA)	1.24	Spike	P	0 - 30
2317972	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.59	Spike	P	0 - 30
2317972	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	10.8	Spike	P	0 - 30
2317972	Perfluoro-4-methoxybutanoic acid (PFMBA)	3.27	Spike	P	0 - 30
2317972	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	16.5	Spike	P	0 - 30
2317972	Perfluorobutanesulfonic acid (PFBS)	17.9	Spike	P	0 - 30
2317972	Perfluorobutanoic acid (PFBA)	1.81	Spike	P	0 - 30
2317972	Perfluorodecanesulfonic acid (PFDS)	14.5	Spike	P	0 - 30
2317972	Perfluorodecanoic acid (PFDA)	4.20	Spike	P	0 - 30
2317972	Perfluorododecanoic acid (PFDoA)	18.8	Spike	P	0 - 30
2317972	Perfluoroheptanesulfonic acid (PFHpS)	4.04	Spike	P	0 - 30
2317972	Perfluoroheptanoic acid (PFHpA)	46.6	Spike	F	0 - 30
2317972	Perfluorohexanesulfonic acid (PFHxS)	9.75	Spike	P	0 - 30
2317972	Perfluorohexanoic acid (PFHxA)	15.6	Spike	P	0 - 30
2317972	Perfluorononanesulfonic acid (PFNS)	1.97	Spike	P	0 - 30
2317972	Perfluorononanoic acid (PFNA)	4.95	Spike	P	0 - 30
2317972	Perfluorooctanoic acid (PFOA)	3.21	Spike	P	0 - 30
2317972	Perfluoropentanesulfonic acid (PFPeS)	15.0	Spike	P	0 - 30
2317972	Perfluoropentanoic acid (PFPeA)	9.44	Spike	P	0 - 30
2317972	Perfluoropropanesulfonic acid (PFPrS)	26.4	Spike	P	0 - 30
2317972	Perfluorotetradecanoic acid (PFTeA)	6.12	Spike	P	0 - 30
2317972	Perfluorotridecanoic acid (PFTriA)	21.5	Spike	P	0 - 30
2317972	Perfluoroundecanoic acid (PFUnA)	11.2	Spike	P	0 - 30

Reference Method: DEP SOP: LC-001-3
Batch ID: P412274

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318135	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	17.1	Spike	P	0 - 30
2318135	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	13.4	Spike	P	0 - 30
2318135	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	26.1	Spike	P	0 - 30
2318135	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	15.2	Spike	P	0 - 30
2318135	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.31	Spike	P	0 - 30
2318135	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	18.5	Spike	P	0 - 30
2318135	Hexafluoropropylene oxide dimer acid (HFPO-DA)	5.31	Spike	P	0 - 30
2318135	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	18.2	Spike	P	0 - 30
2318135	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	10.8	Spike	P	0 - 30
2318135	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.18	Spike	P	0 - 30
2318135	Perfluoro-1-butane sulfonamide (FBSA)	7.27	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P412274

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318135	Perfluoro-1-hexane sulfonamide (FHxSA)	13.3	Spike	P	0 - 30
2318135	Perfluoro-1-octane sulfonamide (FOSA)	7.17	Spike	P	0 - 30
2318135	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.56	Spike	P	0 - 30
2318135	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	10.9	Spike	P	0 - 30
2318135	Perfluoro-4-methoxybutanoic acid (PFMBA)	16.0	Spike	P	0 - 30
2318135	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	9.95	Spike	P	0 - 30
2318135	Perfluorobutanesulfonic acid (PFBS)	14.7	Spike	P	0 - 30
2318135	Perfluorobutanoic acid (PFBA)	2.23	Spike	P	0 - 30
2318135	Perfluorodecanesulfonic acid (PFDS)	6.04	Spike	P	0 - 30
2318135	Perfluorodecanoic acid (PFDA)	3.31	Spike	P	0 - 30
2318135	Perfluorododecanoic acid (PFDoA)	3.46	Spike	P	0 - 30
2318135	Perfluoroheptanesulfonic acid (PFHpS)	2.83	Spike	P	0 - 30
2318135	Perfluoroheptanoic acid (PFHpA)	12.5	Spike	P	0 - 30
2318135	Perfluorohexanesulfonic acid (PFHxS)	8.97	Spike	P	0 - 30
2318135	Perfluorohexanoic acid (PFHxA)	17.8	Spike	P	0 - 30
2318135	Perfluorononanesulfonic acid (PFNS)	12.3	Spike	P	0 - 30
2318135	Perfluorononanoic acid (PFNA)	7.25	Spike	P	0 - 30
2318135	Perfluorooctanesulfonic acid (PFOS)	17.9	Spike	P	0 - 30
2318135	Perfluorooctanoic acid (PFOA)	7.60	Spike	P	0 - 30
2318135	Perfluoropentanesulfonic acid (PFPeS)	11.7	Spike	P	0 - 30
2318135	Perfluoropentanoic acid (PFPeA)	0.838	Spike	P	0 - 30
2318135	Perfluoropropanesulfonic acid (PFPrS)	1.98	Spike	P	0 - 30
2318135	Perfluorotetradecanoic acid (PFTeA)	6.77	Spike	P	0 - 30
2318135	Perfluorotridecanoic acid (PFTriA)	2.75	Spike	P	0 - 30
2318135	Perfluoroundecanoic acid (PFUnA)	2.85	Spike	P	0 - 30

Reference Method: DEP SOP: LC-001-3
Batch ID: P412421

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319848	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	17.7	Spike	P	0 - 30
2319848	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	28.2	Spike	P	0 - 30
2319848	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	15.0	Spike	P	0 - 30
2319848	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	20.7	Spike	P	0 - 30
2319848	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	20.3	Spike	P	0 - 30
2319848	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.43	Spike	P	0 - 30
2319848	Hexafluoropropylene oxide dimer acid (HFPO-DA)	6.25	Spike	P	0 - 30
2319848	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	16.5	Spike	P	0 - 30
2319848	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	15.8	Spike	P	0 - 30
2319848	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	28.4	Spike	P	0 - 30
2319848	Perfluoro-1-butane sulfonamide (FBSA)	4.48	Spike	P	0 - 30
2319848	Perfluoro-1-hexane sulfonamide (FHxSA)	1.79	Spike	P	0 - 30
2319848	Perfluoro-1-octane sulfonamide (FOSA)	3.02	Spike	P	0 - 30
2319848	Perfluoro-3-methoxypropanoic acid (PFMPA)	2.37	Spike	P	0 - 30
2319848	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	26.6	Spike	P	0 - 30
2319848	Perfluoro-4-methoxybutanoic acid (PFMBA)	10.3	Spike	P	0 - 30
2319848	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.71	Spike	P	0 - 30
2319848	Perfluorobutanesulfonic acid (PFBS)	13.0	Spike	P	0 - 30
2319848	Perfluorobutanoic acid (PFBA)	15.9	Spike	P	0 - 30
2319848	Perfluorodecanesulfonic acid (PFDS)	11.1	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P412421

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319848	Perfluorodecanoic acid (PFDA)	10.2	Spike	P	0 - 30
2319848	Perfluorododecanoic acid (PFDoA)	12.5	Spike	P	0 - 30
2319848	Perfluoroheptanesulfonic acid (PFHpS)	21.4	Spike	P	0 - 30
2319848	Perfluoroheptanoic acid (PFHpA)	9.75	Spike	P	0 - 30
2319848	Perfluorohexanesulfonic acid (PFHxS)	29.0	Spike	P	0 - 30
2319848	Perfluorohexanoic acid (PFHxA)	17.5	Spike	P	0 - 30
2319848	Perfluorononanesulfonic acid (PFNS)	18.5	Spike	P	0 - 30
2319848	Perfluorononanoic acid (PFNA)	12.0	Spike	P	0 - 30
2319848	Perfluorooctanesulfonic acid (PFOS)	6.13	Spike	P	0 - 30
2319848	Perfluorooctanoic acid (PFOA)	3.24	Spike	P	0 - 30
2319848	Perfluoropentanesulfonic acid (PFPeS)	2.19	Spike	P	0 - 30
2319848	Perfluoropentanoic acid (PFPeA)	2.57	Spike	P	0 - 30
2319848	Perfluoropropanesulfonic acid (PFPrS)	8.93	Spike	P	0 - 30
2319848	Perfluorotetradecanoic acid (PFTeA)	7.86	Spike	P	0 - 30
2319848	Perfluorotridecanoic acid (PFTriA)	13.9	Spike	P	0 - 30
2319848	Perfluoroundecanoic acid (PFUnA)	0.917	Spike	P	0 - 30

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report
Surrogates

Lab Sample ID: 2318130
Field Sample ID: SP-35 (36-40)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	115	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	102	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	119	P	30 - 160

Lab Sample ID: 2318131
Field Sample ID: SP-35 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	110	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	98.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	101	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	91.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	128	P	30 - 160

Lab Sample ID: 2318132
Field Sample ID: SP-35 (66-70)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	111	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	102	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	121	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	98.6	P	30 - 160

Lab Sample ID: 2318133
Field Sample ID: SP-35 (78-82)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	85.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	96.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	135	P	30 - 160

Lab Sample ID: 2318134
Field Sample ID: SP-35 (78-82)_Dup

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	107	P	30 - 160

Lab Sample ID: 2318135
Field Sample ID: SP-36 (36-40)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	84.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	102	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2318135
Field Sample ID: SP-36 (36-40)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	152	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	126	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	109	P	30 - 160

Lab Sample ID: 2318136
Field Sample ID: SP-36 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	83.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	93.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	84.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	117	P	30 - 160

Lab Sample ID: 2318137
Field Sample ID: SP-36 (66-70)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	90.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	97.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	100	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	102	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	100	P	30 - 160

Lab Sample ID: 2318138
Field Sample ID: SP-36 (81-85)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	73.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	95.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	132	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	130	P	30 - 160

Lab Sample ID: 2318139
Field Sample ID: SP-37 (36-40)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	67.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	96.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	107	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	99.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	90.2	P	30 - 160

Lab Sample ID: 2318140
Field Sample ID: SP-37 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	87.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	97.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	154	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	110	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2318140
Field Sample ID: SP-37 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	113	P	30 - 160

Lab Sample ID: 2318141
Field Sample ID: SP-37 (46-50)_Dup

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	97.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	98.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	156	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	96.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	91.0	P	30 - 160

Lab Sample ID: 2318142
Field Sample ID: SP-37 (66-70)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	73.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	96.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	116	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	97.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	96.8	P	30 - 160

Lab Sample ID: 2318143
Field Sample ID: FRB-10

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	95.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	90.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	113	P	30 - 160

Lab Sample ID: 2318144
Field Sample ID: EQB-47

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	61.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	82.3	P	30 - 160

Lab Sample ID: 2318164
Field Sample ID: SP-32 (36-40)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	115	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	127	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	127	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2318165
Field Sample ID: SP-32 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	89.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	96.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	98.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	120	P	30 - 160

Lab Sample ID: 2318166
Field Sample ID: SP-32 (66-70)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	74.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	113	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	91.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	128	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	93.8	P	30 - 160

Lab Sample ID: 2318167
Field Sample ID: SP-32 (86-90)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	72.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	89.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	158	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	97.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	118	P	30 - 160

Lab Sample ID: 2318168
Field Sample ID: SP-33 (36-40)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	68.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	81.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	127	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	96.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	98.0	P	30 - 160

Lab Sample ID: 2318169
Field Sample ID: SP-33 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	111	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	113	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	114	P	30 - 160

Lab Sample ID: 2318170
Field Sample ID: SP-33 (46-50)_Dup

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	108	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2318170
Field Sample ID: SP-33 (46-50)_Dup

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	88.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	87.3	P	30 - 160

Lab Sample ID: 2318171
Field Sample ID: SP-33 (66-70)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	87.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	95.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	99.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	83.1	P	30 - 160

Lab Sample ID: 2318172
Field Sample ID: SP-33 (86-90)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	64.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	87.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	110	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	89.6	P	30 - 160

Lab Sample ID: 2318173
Field Sample ID: SP-34 (36-40)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	83.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	119	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	86.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	108	P	30 - 160

Lab Sample ID: 2318174
Field Sample ID: SP-34 (46-50)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	75.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	101	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	107	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	130	P	30 - 160

Lab Sample ID: 2318175
Field Sample ID: SP-34 (66-70)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	87.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	96.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	137	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	91.6	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2318175
Field Sample ID: SP-34 (66-70)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	100	P	30 - 160

Lab Sample ID: 2318176
Field Sample ID: SP-34 (86-90)

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	96.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	88.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	133	P	30 - 160

Lab Sample ID: 2318177
Field Sample ID: EQB-46

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	116	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonate-13C	90.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	94.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonate-13C	87.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	88.1	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3

Run ID: A111661

Included Lab Sample IDs: 2318135, 2318136, 2318137, 2318138, 2318139, 2318140, 2318141, 2318142, 2318143, 2318144, 2318164, 2318165, 2318166, 2318167, 2318168, 2318169, 2318170, 2318171, 2318172, 2318173

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	95.8	97.7	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	97.7	113	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	99.4	95.8	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	100	67.0	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	67.0	63.0	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	81.9	100	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	129	95.7	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	84.3	129	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	95.7	107	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	102	127	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	112	129	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	129	102	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	67.1	68.6	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	68.6	89.4	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	82.0	67.1	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	105	111	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	111	105	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	94.4	105	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	121	136	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	136	85.1	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	141	121	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	80.9	118	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	83.3	80.9	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	89.7	83.3	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	137	136	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	143	84.9	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	84.9	137	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	110	131	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	131	124	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	98.1	110	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	102	95.5	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	95.5	96.6	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	95.6	102	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	103	107	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	104	99.6	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	99.6	103	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	100	101	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	101	102	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	102	103	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	87.9	103	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	93.3	98.8	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	98.8	87.9	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	101	112	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	112	96.8	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	127	101	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	105	94.5	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	118	93.2	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	93.2	105	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	104	105	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	105	110	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3

Run ID: A111661

Included Lab Sample IDs: 2318135, 2318136, 2318137, 2318138, 2318139, 2318140, 2318141, 2318142, 2318143, 2318144, 2318164, 2318165, 2318166, 2318167, 2318168, 2318169, 2318170, 2318171, 2318172, 2318173

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	108	104	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	102	96.6	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	112	102	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	96.6	90.6	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	96.4	98.0	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	98.0	103	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	98.5	96.4	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	92.6	97.7	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	97.7	98.0	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	98.0	97.5	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	107	119	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	119	95.8	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	81.5	107	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	120	126	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	150	89.8	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	89.8	120	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	104	86.9	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	117	91.6	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	91.6	104	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	104	94.4	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	82.1	108	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	94.4	82.1	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	105	109	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	109	94.1	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	119	105	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	103	113	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	111	81.8	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	113	111	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	102	94.9	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	93.0	102	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	94.9	93.0	P/P	60 - 160
Perfluorononanoic acid (PFNA)	108	71.8	P/P	60 - 160
Perfluorononanoic acid (PFNA)	71.8	91.4	P/P	60 - 160
Perfluorononanoic acid (PFNA)	91.4	95.5	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	93.5	99.6	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	95.9	100	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	99.6	95.9	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	102	153	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	131	98.3	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	153	131	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	101	102	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	102	102	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	105	101	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	103	92.3	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	122	103	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	125	122	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	106	90.1	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	125	106	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	90.1	115	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	91.7	92.8	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111661
Included Lab Sample IDs: 2318135, 2318136, 2318137, 2318138, 2318139, 2318140, 2318141, 2318142, 2318143, 2318144, 2318164, 2318165, 2318166, 2318167, 2318168, 2318169, 2318170, 2318171, 2318172, 2318173

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluorotetradecanoic acid (PFTeA)	94.1	98.4	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	98.4	91.7	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	102	91.2	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	91.2	96.3	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	96.3	102	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	108	93.0	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	111	108	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	112	111	P/P	60 - 160

Reference Method: DEP SOP: LC-001-3
Run ID: A111663
Included Lab Sample IDs: 2318130, 2318131, 2318132, 2318133, 2318134

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	115	95.0	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	95.0	95.2	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	80.2	113	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	96.1	80.2	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	101	79.3	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	79.3	120	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	86.3	112	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	94.2	86.3	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	65.3	73.7	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	65.4	65.3	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	110	97.8	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	97.8	90.8	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	154	62.9	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	62.9	91.8	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	116	78.8	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	76.6	116	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	111	114	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	152	111	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	123	128	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	127	123	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	101	105	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	88.3	101	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	106	96.4	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	95.8	106	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	100	93.8	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	96.8	100	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	109	87.1	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	87.1	89.1	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	114	110	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	82.9	114	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	103	80.4	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	93.6	103	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	106	110	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	110	99.1	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	103	107	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	107	99.9	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111663
Included Lab Sample IDs: 2318130, 2318131, 2318132, 2318133, 2318134

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluorobutanoic acid (PFBA)	100	88.7	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	88.7	99.9	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	105	84.4	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	84.4	98.4	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	139	86.2	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	86.2	98.7	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	118	128	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	133	118	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	72.9	98.2	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	98.2	119	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	103	123	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	123	87.0	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	111	100	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	83.2	111	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	103	90.7	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	90.7	90.2	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	103	96.1	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	96.1	86.8	P/P	60 - 160
Perfluorononanoic acid (PFNA)	85.6	110	P/P	60 - 160
Perfluorononanoic acid (PFNA)	87.8	85.6	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	103	90.7	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	90.7	94.3	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	120	147	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	147	124	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	102	111	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	111	84.3	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	109	114	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	114	80.0	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	115	127	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	95.5	115	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	111	112	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	112	94.9	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	106	119	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	85.3	106	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	112	143	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	91.2	112	P/P	60 - 160

Reference Method: DEP SOP: LC-001-3
Run ID: A111738
Included Lab Sample IDs: 2318174, 2318175, 2318176, 2318177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	113	92.9	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	92.7	86.5	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	92.9	92.7	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	100	72.6	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	72.6	93.0	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	93.0	153	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	104	92.3	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	113	104	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	92.3	105	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111738
Included Lab Sample IDs: 2318174, 2318175, 2318176, 2318177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	119	126	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	126	86.9	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	140	119	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	103	92.8	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	70.2	103	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	92.8	120	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	104	99.4	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	98.8	104	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	99.4	102	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	67.4	90.4	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	80.2	67.4	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	90.4	88.2	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	67.1	87.1	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	87.1	111	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	96.6	67.1	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	115	96.0	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	93.5	137	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	96.0	93.5	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	102	145	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	145	147	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	147	156	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	139	94.5	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	94.5	97.0	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	95.5	139	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	102	102	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	102	87.9	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	110	102	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	104	92.6	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	105	104	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	92.6	100	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	88.2	93.5	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	88.7	88.2	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	93.5	98.6	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	107	108	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	108	118	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	132	107	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	93.1	93.1	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	94.1	95.1	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	95.1	93.1	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	120	97.3	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	97.3	108	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	99.2	120	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	105	97.1	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	97.1	98.6	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	98.6	103	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	101	91.4	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	102	101	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	99.6	102	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	108	93.5	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	90.0	97.3	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	93.5	90.0	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A111738
Included Lab Sample IDs: 2318174, 2318175, 2318176, 2318177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluorodecanoic acid (PFDA)	118	77.7	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	77.7	88.1	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	88.1	159	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	108	125	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	129	108	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	95.7	129	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	104	118	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	119	95.9	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	95.9	104	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	73.8	80.8	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	80.8	98.5	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	98.5	147	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	102	110	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	131	99.5	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	99.5	102	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	118	63.9	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	62.0	118	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	63.9	96.4	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	102	98.0	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	87.6	90.0	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	98.0	87.6	P/P	60 - 160
Perfluorononanoic acid (PFNA)	116	89.3	P/P	60 - 160
Perfluorononanoic acid (PFNA)	121	116	P/P	60 - 160
Perfluorononanoic acid (PFNA)	72.6	121	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	100	91.8	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	108	100	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	99.2	108	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	104	128	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	108	104	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	128	119	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	105	86.0	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	86.0	132	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	97.4	105	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	76.2	128	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	87.8	96.8	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	96.8	76.2	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	109	110	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	110	77.3	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	77.3	132	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	120	95.2	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	90.8	120	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	95.2	114	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	108	96.1	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	96.1	97.9	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	97.9	130	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	122	124	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	124	100	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	100	108	P/P	60 - 160

Quality Assurance Report
Calibration Verification

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	74.9	70.5	60.6			15.0
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	92.5	88.5	74.5			17.1
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	90.6	84.5	70.8			17.7
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	114	89.0	79.8			10.8
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	80.9	136	119			13.4
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	105	131	98.9			28.2
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	102	93.9	108			8.42
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	153	81.4	106			26.1
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	109	90.5	105			15.0
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	96.3					
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	97.8	109	127			15.2
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	88.2	122	99.0			20.7
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	76.6	40.2	33.5			18.1
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	95.2	74.1	73.1			1.31
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	77.8	107	87.5			20.3
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	84.3	93.9	82.4			13.1
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	117	126	105			18.5
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	112	104	106			2.43
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	97.9	113	93.8			18.3
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	102	112	118			5.31
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	68.9	116	124			6.25
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	97.4	72.4	75.7			4.48
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	95.6	73.8	88.7			18.2
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	93.5	111	131			16.5
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	119	87.6	97.1			10.2
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	121	142	127			10.8
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	140	107	125			15.8

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	130	108	114			5.31
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	59.8	108	99.7			8.18
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	103	76.9	57.7			28.4
	Perfluoro-1-butane sulfonamide (FBSA)	157					8.96
	Perfluoro-1-butane sulfonamide (FBSA)	133	111	119			7.27
	Perfluoro-1-butane sulfonamide (FBSA)	133	117	112			4.48
	Perfluoro-1-hexane sulfonamide (FHxSA)	152					4.73
	Perfluoro-1-hexane sulfonamide (FHxSA)	156	120	105			13.3
	Perfluoro-1-hexane sulfonamide (FHxSA)	160	122	120			1.79
	Perfluoro-1-octane sulfonamide (FOSA)	104	91.1	90.0			1.24
	Perfluoro-1-octane sulfonamide (FOSA)	124	117	109			7.17
	Perfluoro-1-octane sulfonamide (FOSA)	99.4	109	106			3.02
	Perfluoro-3-methoxypropanoic acid (PFMPA)	88.1	110	108			1.59
	Perfluoro-3-methoxypropanoic acid (PFMPA)	105	132	130			1.56
	Perfluoro-3-methoxypropanoic acid (PFMPA)	84.2	103	100			2.37
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	102					10.8
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	96.8	110	123			10.9
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	123	122	93.3			26.6
	Perfluoro-4-methoxybutanoic acid (PFMBA)	112	148	144			3.27
	Perfluoro-4-methoxybutanoic acid (PFMBA)	126	119	139			16.0
	Perfluoro-4-methoxybutanoic acid (PFMBA)	119	123	111			10.3
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	99.1	112	132			16.5
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	109	111	123			9.95
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	108	117	112			4.71
	Perfluorobutanesulfonic acid (PFBS)	103					17.9
	Perfluorobutanesulfonic acid (PFBS)	101	113	90.4			14.7
	Perfluorobutanesulfonic acid (PFBS)	108	117	134			13.0
	Perfluorobutanoic acid (PFBA)	89.1					1.81
	Perfluorobutanoic acid (PFBA)	108	123	126			2.23
	Perfluorobutanoic acid (PFBA)	110	118	101			15.9
	Perfluorodecanesulfonic acid (PFDS)	78.3	69.2	59.8			14.5
	Perfluorodecanesulfonic acid (PFDS)	95.6	88.8	83.6			6.04

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	Perfluorodecanesulfonic acid (PFDS)	92.0	88.8	79.5			11.1
	Perfluorodecanoic acid (PFDA)	88.2	106	110			4.20
	Perfluorodecanoic acid (PFDA)	123	110	106			3.31
	Perfluorodecanoic acid (PFDA)	119	112	125			10.2
	Perfluorododecanoic acid (PFDoA)	130	97.7	118			18.8
	Perfluorododecanoic acid (PFDoA)	101	143	148			3.46
	Perfluorododecanoic acid (PFDoA)	112	124	110			12.5
	Perfluoroheptanesulfonic acid (PFHpS)	90.7					4.04
	Perfluoroheptanesulfonic acid (PFHpS)	92.5	107	110			2.83
	Perfluoroheptanesulfonic acid (PFHpS)	104	116	93.4			21.4
	Perfluoroheptanoic acid (PFHpA)	95.6					46.6
	Perfluoroheptanoic acid (PFHpA)	104	119	102			12.5
	Perfluoroheptanoic acid (PFHpA)	117	78.3	86.3			9.75
	Perfluorohexanesulfonic acid (PFHxS)	94.3					9.75
	Perfluorohexanesulfonic acid (PFHxS)	97.1	107	126			8.97
	Perfluorohexanesulfonic acid (PFHxS)	96.8	125	93.3			29.0
	Perfluorohexanoic acid (PFHxA)	110					15.6
	Perfluorohexanoic acid (PFHxA)	99.8	113	138			17.8
	Perfluorohexanoic acid (PFHxA)	101	127	107			17.5
	Perfluorononanesulfonic acid (PFNS)	81.0	81.4	79.8			1.97
	Perfluorononanesulfonic acid (PFNS)	109	108	95.5			12.3
	Perfluorononanesulfonic acid (PFNS)	90.7	109	91.0			18.5
	Perfluorononanoic acid (PFNA)	89.5					4.95
	Perfluorononanoic acid (PFNA)	121	113	105			7.25
	Perfluorononanoic acid (PFNA)	67.4	112	99.4			12.0
	Perfluorooctanesulfonic acid (PFOS)	87.6					
	Perfluorooctanesulfonic acid (PFOS)	108	100	54.5			17.9
	Perfluorooctanesulfonic acid (PFOS)	107	107	113			6.13
	Perfluorooctanoic acid (PFOA)	127					3.21
	Perfluorooctanoic acid (PFOA)	149	120	134			7.60
	Perfluorooctanoic acid (PFOA)	105	90.0	92.9			3.24
	Perfluoropentanesulfonic acid (PFPeS)	112					15.0
	Perfluoropentanesulfonic acid (PFPeS)	104	126	111			11.7
	Perfluoropentanesulfonic acid (PFPeS)	117	117	115			2.19
	Perfluoropentanoic acid (PFPeA)	102					9.44
	Perfluoropentanoic acid (PFPeA)	101	94.8	95.8			0.838
	Perfluoropentanoic acid (PFPeA)	79.0	96.7	94.2			2.57
	Perfluoropropanesulfonic acid (PFPrS)	134					26.4
	Perfluoropropanesulfonic acid (PFPrS)	106	97.5	100			1.98

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)	108	120	131			8.93
	Perfluorotetradecanoic acid (PFTeA)	118	100	107			6.12
	Perfluorotetradecanoic acid (PFTeA)	110	116	108			6.77
	Perfluorotetradecanoic acid (PFTeA)	140	127	118			7.86
	Perfluorotridecanoic acid (PFTriA)	128	84.2	105			21.5
	Perfluorotridecanoic acid (PFTriA)	116	87.3	85.0			2.75
	Perfluorotridecanoic acid (PFTriA)	130	114	98.8			13.9
	Perfluoroundecanoic acid (PFUnA)	113	100	89.7			11.2
	Perfluoroundecanoic acid (PFUnA)	107	136	132			2.85
	Perfluoroundecanoic acid (PFUnA)	116	102	103			0.917

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: LC-001-3	Perfluorinated alkyl substances in water matrices by HPLC/MS/MS	2318130, 2318131, 2318132, 2318133, 2318134, 2318135, 2318136, 2318137, 2318138, 2318139, 2318140, 2318141, 2318142, 2318143, 2318144, 2318164, 2318165, 2318166, 2318167, 2318168, 2318169, 2318170, 2318171, 2318172, 2318173, 2318174, 2318175, 2318176, 2318177

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: LC-001-3	04/12/2022	04/21/2022 09:00	Hoor Shaik	04/22/2022 06:59	Mohammad Ghaffari	2318133
	04/12/2022	04/21/2022 09:00	Hoor Shaik	04/22/2022 07:09	Mohammad Ghaffari	2318134
	04/12/2022	04/21/2022 09:00	Hoor Shaik	04/22/2022 08:47	Mohammad Ghaffari	2318130
	04/12/2022	04/21/2022 09:00	Hoor Shaik	04/22/2022 08:57	Mohammad Ghaffari	2318131
	04/12/2022	04/21/2022 09:00	Hoor Shaik	04/22/2022 09:08	Mohammad Ghaffari	2318132
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 01:04	Mohammad Ghaffari	2318135
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 01:15	Mohammad Ghaffari	2318140
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 01:26	Mohammad Ghaffari	2318141
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 01:48	Mohammad Ghaffari	2318169
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 01:58	Mohammad Ghaffari	2318170
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 02:09	Mohammad Ghaffari	2318136
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 02:20	Mohammad Ghaffari	2318137
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 02:31	Mohammad Ghaffari	2318138
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 02:42	Mohammad Ghaffari	2318139
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 02:52	Mohammad Ghaffari	2318142
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 03:03	Mohammad Ghaffari	2318164
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 03:25	Mohammad Ghaffari	2318165
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 03:36	Mohammad Ghaffari	2318166
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 03:46	Mohammad Ghaffari	2318167
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 03:57	Mohammad Ghaffari	2318168
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 04:08	Mohammad Ghaffari	2318171
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 04:19	Mohammad Ghaffari	2318172
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 04:30	Mohammad Ghaffari	2318173
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 12:10	Mohammad Ghaffari	2318143
	04/12/2022	04/22/2022 11:00	Hoor Shaik	04/24/2022 12:21	Mohammad Ghaffari	2318144
	04/12/2022	04/26/2022 09:00	Hoor Shaik	04/27/2022 08:49	Mohammad Ghaffari	2318177
	04/12/2022	04/26/2022 09:00	Hoor Shaik	04/27/2022 11:31	Mohammad Ghaffari	2318174
	04/12/2022	04/26/2022 09:00	Hoor Shaik	04/27/2022 11:42	Mohammad Ghaffari	2318175
	04/12/2022	04/26/2022 09:00	Hoor Shaik	04/27/2022 12:03	Mohammad Ghaffari	2318176

Chemical Analysis Report

SIS-2022-12-16-02

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

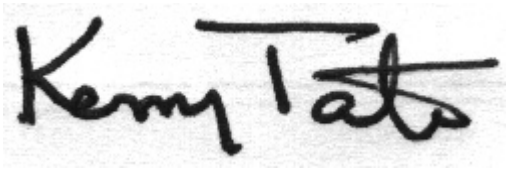
Event Description:	**Former Florida State Fire College Site Wide Soil and GW Investigation**
Request ID:	**RQ-2022-11-14-12**
Customer:	**SIS**
Project ID:	**SIS-PFAS**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Road
Twin Towers Bldg. MS# 4515
Tallahassee, FL 32399
Attn: Robert Cilek

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 29-DEC-2022 09:39



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/06/2022 12:35**

Field ID: SB-78 (0-0.5') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376138	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.11	U	ug/Kg	P423604	
		Perfluorobutanoic acid (PFBA)	0.43	U	ug/Kg	P423604	
		Perfluorodecanoic acid (PFDA)	0.43	U	ug/Kg	P423604	
		Perfluorododecanoic acid (PFDoA)	0.21	U	ug/Kg	P423604	
		Perfluoroheptanoic acid (PFHpA)	0.21	U	ug/Kg	P423604	
		Perfluorohexanesulfonic acid (PFHxS)	0.11	U	ug/Kg	P423604	
		Perfluorohexanoic acid (PFHxA)	0.21	U	ug/Kg	P423604	
		Perfluorononanoic acid (PFNA)	0.21	U	ug/Kg	P423604	
		Perfluorooctanesulfonic acid (PFOS)	1.7		ug/Kg	P423604	
		Perfluorooctanoic acid (PFOA)	0.21	U	ug/Kg	P423604	
		Perfluorotetradecanoic acid (PFTeA)	0.21	U	ug/Kg	P423604	
		Perfluorotridecanoic acid (PFTriA)	0.21	U	ug/Kg	P423604	
		Perfluoroundecanoic acid (PFUnA)	0.21	U	ug/Kg	P423604	
		Perfluoropentanoic acid (PFPeA)	0.21	U	ug/Kg	P423604	
		Perfluoropentanesulfonic acid (PFPeS)	0.11	U	ug/Kg	P423604	
		Perfluoroheptanesulfonic acid (PFHpS)	0.11	U	ug/Kg	P423604	
		Perfluorononanesulfonic acid (PFNS)	0.11	U	ug/Kg	P423604	
		Perfluorodecanesulfonic acid (PFDS)	0.11	U	ug/Kg	P423604	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-butane sulfonamide (FBSA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-octane sulfonamide (FOSA)	0.11	U	ug/Kg	P423604	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.21	U	ug/Kg	P423604	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.21	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.21	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.7	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.21	U	ug/Kg	P423604	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.11	U	ug/Kg	P423604	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.11	U	ug/Kg	P423604	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.43	U	ug/Kg	P423604	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.21	U	ug/Kg	P423604	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.21	U	ug/Kg	P423604	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.21	U	ug/Kg	P423604	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.21	U	ug/Kg	P423604	
		Perfluoropropanesulfonic acid (PFPrS)	0.21	U	ug/Kg	P423604	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.85	U	ug/Kg	P423604	

Field ID: SB-78 (0-0.5') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376153	SM 2540 G (20th)	% Solid	95.5		%	P423888	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/06/2022 12:40**

Field ID: SB-78 (0.5-2') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376139	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.11	U	ug/Kg	P423604	
		Perfluorobutanoic acid (PFBA)	0.42	U	ug/Kg	P423604	
		Perfluorodecanoic acid (PFDA)	0.42	U	ug/Kg	P423604	
		Perfluorododecanoic acid (PFDoA)	0.21	U	ug/Kg	P423604	
		Perfluoroheptanoic acid (PFHpA)	0.21	U	ug/Kg	P423604	
		Perfluorohexanesulfonic acid (PFHxS)	0.11	U	ug/Kg	P423604	
		Perfluorohexanoic acid (PFHxA)	0.21	U	ug/Kg	P423604	
		Perfluorononanoic acid (PFNA)	0.21	U	ug/Kg	P423604	
		Perfluorooctanesulfonic acid (PFOS)	1.2		ug/Kg	P423604	
		Perfluorooctanoic acid (PFOA)	0.21	U	ug/Kg	P423604	
		Perfluorotetradecanoic acid (PFTeA)	0.21	U	ug/Kg	P423604	
		Perfluorotridecanoic acid (PFTriA)	0.21	U	ug/Kg	P423604	
		Perfluoroundecanoic acid (PFUnA)	0.21	U	ug/Kg	P423604	
		Perfluoropentanoic acid (PFPeA)	0.21	U	ug/Kg	P423604	
		Perfluoropentanesulfonic acid (PFPeS)	0.11	U	ug/Kg	P423604	
		Perfluoroheptanesulfonic acid (PFHpS)	0.11	U	ug/Kg	P423604	
		Perfluorononanesulfonic acid (PFNS)	0.11	U	ug/Kg	P423604	
		Perfluorodecanesulfonic acid (PFDS)	0.11	U	ug/Kg	P423604	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-butane sulfonamide (FBSA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-octane sulfonamide (FOSA)	0.11	U	ug/Kg	P423604	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.21	U	ug/Kg	P423604	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.21	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.21	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.7	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.21	U	ug/Kg	P423604	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.11	U	ug/Kg	P423604	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.11	U	ug/Kg	P423604	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.42	U	ug/Kg	P423604	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.21	U	ug/Kg	P423604	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.21	U	ug/Kg	P423604	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.21	U	ug/Kg	P423604	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.21	U	ug/Kg	P423604	
		Perfluoropropanesulfonic acid (PFPrS)	0.21	U	ug/Kg	P423604	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.84	U	ug/Kg	P423604	

Field ID: SB-78 (0.5-2') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376154	SM 2540 G (20th)	% Solid	96.3		%	P423888	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/06/2022 12:45**

Field ID: SB-78 (2.4') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376140	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.10	U	ug/Kg	P423604	
		Perfluorobutanoic acid (PFBA)	0.42	U	ug/Kg	P423604	
		Perfluorodecanoic acid (PFDA)	0.42	U	ug/Kg	P423604	
		Perfluorododecanoic acid (PFDoA)	0.21	U	ug/Kg	P423604	
		Perfluoroheptanoic acid (PFHpA)	0.21	U	ug/Kg	P423604	
		Perfluorohexanesulfonic acid (PFHxS)	0.10	U	ug/Kg	P423604	
		Perfluorohexanoic acid (PFHxA)	0.21	U	ug/Kg	P423604	
		Perfluorononanoic acid (PFNA)	0.21	U	ug/Kg	P423604	
		Perfluorooctanesulfonic acid (PFOS)	0.60	I	ug/Kg	P423604	
		Perfluorooctanoic acid (PFOA)	0.21	U	ug/Kg	P423604	
		Perfluorotetradecanoic acid (PFTeA)	0.21	U	ug/Kg	P423604	
		Perfluorotridecanoic acid (PFTriA)	0.21	U	ug/Kg	P423604	
		Perfluoroundecanoic acid (PFUnA)	0.21	U	ug/Kg	P423604	
		Perfluoropentanoic acid (PFPeA)	0.21	U	ug/Kg	P423604	
		Perfluoropentanesulfonic acid (PFPeS)	0.10	U	ug/Kg	P423604	
		Perfluoroheptanesulfonic acid (PFHpS)	0.10	U	ug/Kg	P423604	
		Perfluorononanesulfonic acid (PFNS)	0.10	U	ug/Kg	P423604	
		Perfluorodecanesulfonic acid (PFDS)	0.10	U	ug/Kg	P423604	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.10	U	ug/Kg	P423604	
		Perfluoro-1-butane sulfonamide (FBSA)	0.10	U	ug/Kg	P423604	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.10	U	ug/Kg	P423604	
		Perfluoro-1-octane sulfonamide (FOSA)	0.10	U	ug/Kg	P423604	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.21	U	ug/Kg	P423604	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.21	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.21	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.7	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.21	U	ug/Kg	P423604	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.10	U	ug/Kg	P423604	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.10	U	ug/Kg	P423604	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.42	U	ug/Kg	P423604	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.21	U	ug/Kg	P423604	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.21	U	ug/Kg	P423604	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.21	U	ug/Kg	P423604	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.21	U	ug/Kg	P423604	
		Perfluoropropanesulfonic acid (PFPrS)	0.21	U	ug/Kg	P423604	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.83	U	ug/Kg	P423604	

Field ID: SB-78 (2.4') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376155	SM 2540 G (20th)	% Solid	96.6		%	P423888	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/06/2022 13:10**

Field ID: SB-79 (0-0.5') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376141	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.11	U	ug/Kg	P423604	
		Perfluorobutanoic acid (PFBA)	0.45	U	ug/Kg	P423604	
		Perfluorodecanoic acid (PFDA)	0.45	U	ug/Kg	P423604	
		Perfluorododecanoic acid (PFDoA)	0.27	I	ug/Kg	P423604	
		Perfluoroheptanoic acid (PFHpA)	0.22	U	ug/Kg	P423604	
		Perfluorohexanesulfonic acid (PFHxS)	0.53		ug/Kg	P423604	
		Perfluorohexanoic acid (PFHxA)	0.22	U	ug/Kg	P423604	
		Perfluorononanoic acid (PFNA)	0.22	U	ug/Kg	P423604	
		Perfluorooctanesulfonic acid (PFOS)	13		ug/Kg	P423604	
		Perfluorooctanoic acid (PFOA)	0.22	U	ug/Kg	P423604	
		Perfluorotetradecanoic acid (PFTeA)	0.22	U	ug/Kg	P423604	
		Perfluorotridecanoic acid (PFTriA)	2.0		ug/Kg	P423604	
		Perfluoroundecanoic acid (PFUnA)	0.22	U	ug/Kg	P423604	
		Perfluoropentanoic acid (PFPeA)	0.23	I	ug/Kg	P423604	
		Perfluoropentanesulfonic acid (PFPeS)	0.11	U	ug/Kg	P423604	
		Perfluoroheptanesulfonic acid (PFHpS)	0.11	U	ug/Kg	P423604	
		Perfluorononanesulfonic acid (PFNS)	0.11	U	ug/Kg	P423604	
		Perfluorodecanesulfonic acid (PFDS)	0.23	I	ug/Kg	P423604	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-butane sulfonamide (FBSA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-octane sulfonamide (FOSA)	0.11	U	ug/Kg	P423604	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.22	U	ug/Kg	P423604	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.22	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.22	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.8	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.22	U	ug/Kg	P423604	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.11	U	ug/Kg	P423604	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.11	U	ug/Kg	P423604	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.45	U	ug/Kg	P423604	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.22	U	ug/Kg	P423604	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.22	U	ug/Kg	P423604	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.22	U	ug/Kg	P423604	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.22	U	ug/Kg	P423604	
		Perfluoropropanesulfonic acid (PFPrS)	0.22	U	ug/Kg	P423604	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.89	U	ug/Kg	P423604	

Field ID: SB-79 (0-0.5') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376156	SM 2540 G (20th)	% Solid	92.2		%	P423888	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/06/2022 13:15**

Field ID: SB-79 (0.5-2') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376142	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.11	U	ug/Kg	P423604	
		Perfluorobutanoic acid (PFBA)	0.44	U	ug/Kg	P423604	
		Perfluorodecanoic acid (PFDA)	2.2		ug/Kg	P423604	
		Perfluorododecanoic acid (PFDoA)	0.22	U	ug/Kg	P423604	
		Perfluoroheptanoic acid (PFHpA)	0.22	U	ug/Kg	P423604	
		Perfluorohexanesulfonic acid (PFHxS)	0.12	I	ug/Kg	P423604	
		Perfluorohexanoic acid (PFHxA)	0.22	U	ug/Kg	P423604	
		Perfluorononanoic acid (PFNA)	0.22	U	ug/Kg	P423604	
		Perfluorooctanesulfonic acid (PFOS)	6.6		ug/Kg	P423604	
		Perfluorooctanoic acid (PFOA)	0.22	U	ug/Kg	P423604	
		Perfluorotetradecanoic acid (PFTeA)	0.22	U	ug/Kg	P423604	
		Perfluorotridecanoic acid (PFTriA)	0.22	U	ug/Kg	P423604	
		Perfluoroundecanoic acid (PFUnA)	0.22	U	ug/Kg	P423604	
		Perfluoropentanoic acid (PFPeA)	0.22	U	ug/Kg	P423604	
		Perfluoropentanesulfonic acid (PFPeS)	0.11	U	ug/Kg	P423604	
		Perfluoroheptanesulfonic acid (PFHpS)	0.11	U	ug/Kg	P423604	
		Perfluorononanesulfonic acid (PFNS)	0.53		ug/Kg	P423604	
		Perfluorodecanesulfonic acid (PFDS)	0.12	I	ug/Kg	P423604	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-butane sulfonamide (FBSA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-octane sulfonamide (FOSA)	0.12	I	ug/Kg	P423604	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.22	U	ug/Kg	P423604	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.22	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.22	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.7	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.22	U	ug/Kg	P423604	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.11	U	ug/Kg	P423604	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.11	U	ug/Kg	P423604	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.44	U	ug/Kg	P423604	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.22	U	ug/Kg	P423604	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.22	U	ug/Kg	P423604	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.22	U	ug/Kg	P423604	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.22	U	ug/Kg	P423604	
		Perfluoropropanesulfonic acid (PFPrS)	0.22	U	ug/Kg	P423604	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.89	U	ug/Kg	P423604	

Field ID: SB-79 (0.5-2') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376157	SM 2540 G (20th)	% Solid	93.3		%	P423888	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/06/2022 13:20**

Field ID: SB-79 (2.4') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376143	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.11	U	ug/Kg	P423604	
		Perfluorobutanoic acid (PFBA)	0.43	U	ug/Kg	P423604	
		Perfluorodecanoic acid (PFDA)	2.4		ug/Kg	P423604	
		Perfluorododecanoic acid (PFDoA)	0.22	U	ug/Kg	P423604	
		Perfluoroheptanoic acid (PFHpA)	0.22	U	ug/Kg	P423604	
		Perfluorohexanesulfonic acid (PFHxS)	0.21	I	ug/Kg	P423604	
		Perfluorohexanoic acid (PFHxA)	0.22	U	ug/Kg	P423604	
		Perfluorononanoic acid (PFNA)	0.22	U	ug/Kg	P423604	
		Perfluorooctanesulfonic acid (PFOS)	17		ug/Kg	P423604	
		Perfluorooctanoic acid (PFOA)	0.22	U	ug/Kg	P423604	
		Perfluorotetradecanoic acid (PFTeA)	0.22	U	ug/Kg	P423604	
		Perfluorotridecanoic acid (PFTriA)	0.22	U	ug/Kg	P423604	
		Perfluoroundecanoic acid (PFUnA)	0.22	U	ug/Kg	P423604	
		Perfluoropentanoic acid (PFPeA)	0.22	U	ug/Kg	P423604	
		Perfluoropentanesulfonic acid (PFPeS)	0.11	U	ug/Kg	P423604	
		Perfluoroheptanesulfonic acid (PFHpS)	0.11	U	ug/Kg	P423604	
		Perfluorononanesulfonic acid (PFNS)	0.11	U	ug/Kg	P423604	
		Perfluorodecanesulfonic acid (PFDS)	0.11	U	ug/Kg	P423604	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-butane sulfonamide (FBSA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.11	U	ug/Kg	P423604	
		Perfluoro-1-octane sulfonamide (FOSA)	0.11	U	ug/Kg	P423604	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.22	U	ug/Kg	P423604	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.22	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.22	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.7	U	ug/Kg	P423604	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.22	U	ug/Kg	P423604	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.11	U	ug/Kg	P423604	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.11	U	ug/Kg	P423604	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.43	U	ug/Kg	P423604	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.22	U	ug/Kg	P423604	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.22	U	ug/Kg	P423604	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.22	U	ug/Kg	P423604	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.22	U	ug/Kg	P423604	
		Perfluoropropanesulfonic acid (PFPrS)	0.22	U	ug/Kg	P423604	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.87	U	ug/Kg	P423604	

Field ID: SB-79 (2.4') Matrix: S-SOIL

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376158	SM 2540 G (20th)	% Solid	94.9		%	P423888	

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/06/2022 13:05**

Field ID: EQB-53 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376149	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P423639	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P423639	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P423639	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P423639	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P423639	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P423639	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P423639	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P423639	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P423639	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P423639	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P423639	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P423639	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P423639	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P423639	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P423639	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P423639	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P423639	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P423639	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P423639	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P423639	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P423639	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P423639	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P423639	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P423639	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P423639	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P423639	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P423639	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P423639	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P423639	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P423639	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P423639	

Field ID: EQB-53 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/07/2022 16:28**

Field ID: EQB-54 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376150	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P423639	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P423639	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P423639	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P423639	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P423639	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P423639	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P423639	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P423639	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P423639	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P423639	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P423639	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P423639	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P423639	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P423639	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P423639	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P423639	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P423639	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P423639	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P423639	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P423639	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P423639	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P423639	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P423639	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P423639	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P423639	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P423639	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P423639	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P423639	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P423639	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P423639	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P423639	

Field ID: EQB-54 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/07/2022 10:23**

Field ID: EQB-55 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376151	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.43	U	ng/L	P423639	
		Perfluorobutanoic acid (PFBA)	4.3	U	ng/L	P423639	
		Perfluorodecanoic acid (PFDA)	4.3	U	ng/L	P423639	
		Perfluorododecanoic acid (PFDoA)	2.2	U	ng/L	P423639	
		Perfluoroheptanoic acid (PFHpA)	2.2	U	ng/L	P423639	
		Perfluorohexanesulfonic acid (PFHxS)	0.87	U	ng/L	P423639	
		Perfluorohexanoic acid (PFHxA)	2.2	U	ng/L	P423639	
		Perfluorononanoic acid (PFNA)	2.2	U	ng/L	P423639	
		Perfluorooctanoic acid (PFOA)	2.2	U	ng/L	P423639	
		Perfluorooctanesulfonic acid (PFOS)	2.2	U	ng/L	P423639	
		Perfluoropentanoic acid (PFPeA)	2.2	U	ng/L	P423639	
		Perfluorotetradecanoic acid (PFTeA)	2.2	U	ng/L	P423639	
		Perfluorotridecanoic acid (PFTriA)	2.2	U	ng/L	P423639	
		Perfluoroundecanoic acid (PFUnA)	2.2	U	ng/L	P423639	
		Perfluoropentanesulfonic acid (PFPeS)	0.43	U	ng/L	P423639	
		Perfluoroheptanesulfonic acid (PFHpS)	0.87	U	ng/L	P423639	
		Perfluorononanesulfonic acid (PFNS)	0.43	U	ng/L	P423639	
		Perfluorodecanesulfonic acid (PFDS)	0.43	U	ng/L	P423639	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.43	U	ng/L	P423639	
		Perfluoro-1-butane sulfonamide (FBSA)	0.87	U	ng/L	P423639	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.87	U	ng/L	P423639	
		Perfluoro-1-octane sulfonamide (FOSA)	0.43	U	ng/L	P423639	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.2	U	ng/L	P423639	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.2	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.2	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	17	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.2	U	ng/L	P423639	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.87	U	ng/L	P423639	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.87	U	ng/L	P423639	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.3	U	ng/L	P423639	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.87	U	ng/L	P423639	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.87	U	ng/L	P423639	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.87	U	ng/L	P423639	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.87	U	ng/L	P423639	
		Perfluoropropanesulfonic acid (PFPrS)	4.3	U	ng/L	P423639	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.7	U	ng/L	P423639	

Field ID: EQB-55 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample. MDLs elevated due to limited volume of sample available for extraction.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/07/2022 10:31**

Field ID: FRB-11 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376146	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P423639	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P423639	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P423639	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P423639	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P423639	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P423639	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P423639	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P423639	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P423639	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P423639	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P423639	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P423639	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P423639	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P423639	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P423639	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P423639	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P423639	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P423639	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P423639	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P423639	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P423639	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P423639	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P423639	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P423639	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P423639	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P423639	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P423639	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P423639	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P423639	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P423639	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P423639	

Field ID: FRB-11 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/06/2022 13:03**

Field ID: FRB-12 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376147	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P423639	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P423639	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P423639	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P423639	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P423639	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P423639	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P423639	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P423639	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P423639	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P423639	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P423639	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P423639	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P423639	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P423639	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P423639	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P423639	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P423639	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P423639	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P423639	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P423639	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P423639	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P423639	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P423639	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P423639	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P423639	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P423639	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P423639	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P423639	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P423639	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P423639	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P423639	

Field ID: FRB-12 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/15/2022 08:09**

Field ID: FRB-14 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376148	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P423639	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P423639	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P423639	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P423639	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P423639	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P423639	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P423639	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P423639	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P423639	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P423639	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P423639	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P423639	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P423639	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P423639	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P423639	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P423639	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P423639	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P423639	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P423639	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P423639	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P423639	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P423639	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P423639	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P423639	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P423639	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P423639	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P423639	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P423639	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P423639	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P423639	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P423639	

Field ID: FRB-14 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College (FFSFC) **Collection Date/Time: 12/15/2022 10:20**

Field ID: EQB-56 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2376152	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P423639	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P423639	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P423639	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P423639	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P423639	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P423639	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P423639	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P423639	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P423639	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P423639	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P423639	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P423639	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P423639	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P423639	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P423639	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P423639	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P423639	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P423639	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P423639	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P423639	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P423639	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P423639	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P423639	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P423639	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P423639	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P423639	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P423639	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P423639	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P423639	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P423639	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P423639	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P423639	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P423639	

Field ID: EQB-56 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P423604

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.20	U	ug/Kg
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.20	U	ug/Kg
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.20	U	ug/Kg
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.6	U	ug/Kg
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.10	U	ug/Kg
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.20	U	ug/Kg
Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.40	U	ug/Kg
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.10	U	ug/Kg
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.10	U	ug/Kg
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.80	U	ug/Kg
Perfluoro-1-butane sulfonamide (FBSA)	0.10	U	ug/Kg
Perfluoro-1-hexane sulfonamide (FHxSA)	0.10	U	ug/Kg
Perfluoro-1-octane sulfonamide (FOSA)	0.10	U	ug/Kg
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.20	U	ug/Kg
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.20	U	ug/Kg
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.20	U	ug/Kg
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.20	U	ug/Kg
Perfluorobutanesulfonic acid (PFBS)	0.10	U	ug/Kg
Perfluorobutanoic acid (PFBA)	0.40	U	ug/Kg
Perfluorodecanesulfonic acid (PFDS)	0.10	U	ug/Kg
Perfluorodecanoic acid (PFDA)	0.40	U	ug/Kg
Perfluorododecanoic acid (PFDoA)	0.20	U	ug/Kg
Perfluoroheptanesulfonic acid (PFHpS)	0.10	U	ug/Kg
Perfluoroheptanoic acid (PFHpA)	0.20	U	ug/Kg
Perfluorohexanesulfonic acid (PFHxS)	0.10	U	ug/Kg
Perfluorohexanoic acid (PFHxA)	0.20	U	ug/Kg
Perfluorononanesulfonic acid (PFNS)	0.10	U	ug/Kg
Perfluorononanoic acid (PFNA)	0.20	U	ug/Kg
Perfluorooctanesulfonic acid (PFOS)	0.20	U	ug/Kg
Perfluorooctanoic acid (PFOA)	0.20	U	ug/Kg
Perfluoropentanesulfonic acid (PFPeS)	0.10	U	ug/Kg
Perfluoropentanoic acid (PFPeA)	0.20	U	ug/Kg
Perfluoropropanesulfonic acid (PFPrS)	0.20	U	ug/Kg
Perfluorotetradecanoic acid (PFTeA)	0.20	U	ug/Kg
Perfluorotridecanoic acid (PFTriA)	0.20	U	ug/Kg
Perfluoroundecanoic acid (PFUnA)	0.20	U	ug/Kg

Reference Method: DEP SOP: LC-001-3
Batch ID: P423639

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P423639

Component	Result	Code	Units
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P423604

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	100		P	40 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	99.0		P	40 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	109		P	40 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	154		P	40 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	127		P	40 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	103		P	40 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	99.2		P	40 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	115		P	40 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	133		P	40 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	76.3		P	40 - 160
Perfluoro-1-butane sulfonamide (FBSA)	72.9		P	40 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	81.0		P	40 - 160
Perfluoro-1-octane sulfonamide (FOSA)	114		P	40 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	135		P	40 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	107		P	40 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	119		P	40 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	121		P	40 - 160
Perfluorobutanesulfonic acid (PFBS)	116		P	40 - 160
Perfluorobutanoic acid (PFBA)	109		P	40 - 160
Perfluorodecanesulfonic acid (PFDS)	119		P	40 - 160
Perfluorodecanoic acid (PFDA)	139		P	40 - 160
Perfluorododecanoic acid (PFDoA)	74.5		P	40 - 160
Perfluoroheptanesulfonic acid (PFHpS)	124		P	40 - 160
Perfluoroheptanoic acid (PFHpA)	123		P	40 - 160
Perfluorohexanesulfonic acid (PFHxS)	121		P	40 - 160
Perfluorohexanoic acid (PFHxA)	103		P	40 - 160
Perfluorononanesulfonic acid (PFNS)	118		P	40 - 160
Perfluorononanoic acid (PFNA)	128		P	40 - 160
Perfluorooctanesulfonic acid (PFOS)	111		P	40 - 160
Perfluorooctanoic acid (PFOA)	102		P	40 - 160
Perfluoropentanesulfonic acid (PFPeS)	119		P	40 - 160
Perfluoropentanoic acid (PFPeA)	114		P	40 - 160
Perfluoropropanesulfonic acid (PFPrS)	106		P	40 - 160
Perfluorotetradecanoic acid (PFTeA)	111		P	40 - 160
Perfluorotridecanoic acid (PFTriA)	128		P	40 - 160
Perfluoroundecanoic acid (PFUnA)	124		P	40 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P423639

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	75.2		P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	93.6		P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	103		P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	144		P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	95.7		P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	98.3		P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	133		P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	97.9		P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	153		P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	133		P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	151		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P423639

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Perfluoro-1-hexane sulfonamide (FHxSA)	157		P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	127		P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	102		P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	109		P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	83.9		P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	122		P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	114		P	30 - 160
Perfluorobutanoic acid (PFBA)	107		P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	79.3		P	30 - 160
Perfluorodecanoic acid (PFDA)	103		P	30 - 160
Perfluorododecanoic acid (PFDoA)	118		P	30 - 160
Perfluoroheptanesulfonic acid (PFHpS)	120		P	30 - 160
Perfluoroheptanoic acid (PFHpA)	113		P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	118		P	30 - 160
Perfluorohexanoic acid (PFHxA)	90.1		P	30 - 160
Perfluorononanesulfonic acid (PFNS)	103		P	30 - 160
Perfluorononanoic acid (PFNA)	146		P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	108		P	30 - 160
Perfluorooctanoic acid (PFOA)	126		P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	115		P	30 - 160
Perfluoropentanoic acid (PFPeA)	117		P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	129		P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	129		P	30 - 160
Perfluorotridecanoic acid (PFTriA)	144		P	30 - 160
Perfluoroundecanoic acid (PFUnA)	128		P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P423604

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2376139	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	90.7	105	P/P	40 - 160
2376139	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	91.6	96.7	P/P	40 - 160
2376139	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	109	93.8	P/P	40 - 160
2376139	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	119	142	P/P	40 - 160
2376139	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	71.9	89.3	P/P	40 - 160
2376139	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	83.5	92.6	P/P	40 - 160
2376139	Hexafluoropropylene oxide dimer acid (HFPO-DA)	121	112	P/P	40 - 160
2376139	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	111	107	P/P	40 - 160
2376139	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	104	121	P/P	40 - 160
2376139	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	79.2	69.3	P/P	40 - 160
2376139	Perfluoro-1-butane sulfonamide (FBSA)	94.1	88.0	P/P	40 - 160
2376139	Perfluoro-1-hexane sulfonamide (FHxSA)	115	102	P/P	40 - 160
2376139	Perfluoro-1-octane sulfonamide (FOSA)	113	113	P/P	40 - 160
2376139	Perfluoro-3-methoxypropanoic acid (PFMPA)	120	107	P/P	40 - 160
2376139	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	111	111	P/P	40 - 160
2376139	Perfluoro-4-methoxybutanoic acid (PFMBA)	108	91.4	P/P	40 - 160
2376139	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	121	108	P/P	40 - 160
2376139	Perfluorobutanesulfonic acid (PFBS)	123	111	P/P	40 - 160
2376139	Perfluorobutanoic acid (PFBA)	111	109	P/P	40 - 160
2376139	Perfluorodecanesulfonic acid (PFDS)	111	106	P/P	40 - 160
2376139	Perfluorodecanoic acid (PFDA)	113	130	P/P	40 - 160
2376139	Perfluorododecanoic acid (PFDoA)	108	108	P/P	40 - 160
2376139	Perfluoroheptanesulfonic acid (PFHpS)	121	120	P/P	40 - 160
2376139	Perfluoroheptanoic acid (PFHpA)	132	131	P/P	40 - 160
2376139	Perfluorohexanesulfonic acid (PFHxS)	130	124	P/P	40 - 160
2376139	Perfluorohexanoic acid (PFHxA)	107	107	P/P	40 - 160
2376139	Perfluorononanesulfonic acid (PFNS)	77.4	99.5	P/P	40 - 160
2376139	Perfluorononanoic acid (PFNA)	136	145	P/P	40 - 160
2376139	Perfluorooctanesulfonic acid (PFOS)	123	134	P/P	40 - 160
2376139	Perfluorooctanoic acid (PFOA)	116	123	P/P	40 - 160
2376139	Perfluoropentanesulfonic acid (PFPeS)	116	112	P/P	40 - 160
2376139	Perfluoropentanoic acid (PFPeA)	136	128	P/P	40 - 160
2376139	Perfluoropropanesulfonic acid (PFPrS)	97.9	95.0	P/P	40 - 160
2376139	Perfluorotetradecanoic acid (PFTeA)	123	110	P/P	40 - 160
2376139	Perfluorotridecanoic acid (PFTriA)	158	150	P/P	40 - 160
2376139	Perfluoroundecanoic acid (PFUnA)	79.8	69.8	P/P	40 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P423639

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2375946	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	51.5	52.8	P/P	30 - 160
2375946	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	101	123	P/P	30 - 160
2375946	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	106	112	P/P	30 - 160
2375946	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	125	133	P/P	30 - 160
2375946	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	94.1	109	P/P	30 - 160
2375946	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	88.7	87.7	P/P	30 - 160
2375946	Hexafluoropropylene oxide dimer acid (HFPO-DA)	111	117	P/P	30 - 160
2375946	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	125	132	P/P	30 - 160
2375946	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	135	136	P/P	30 - 160
2375946	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	136	133	P/P	30 - 160
2375946	Perfluoro-1-butane sulfonamide (FBSA)	130	158	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P423639

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2375946	Perfluoro-1-hexane sulfonamide (FHxSA)	149	134	P/P	30 - 160
2375946	Perfluoro-1-octane sulfonamide (FOSA)	118	128	P/P	30 - 160
2375946	Perfluoro-3-methoxypropanoic acid (PFMPA)	98.5	105	P/P	30 - 160
2375946	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	118	125	P/P	30 - 160
2375946	Perfluoro-4-methoxybutanoic acid (PFMBA)	73.8	80.2	P/P	30 - 160
2375946	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	127	132	P/P	30 - 160
2375946	Perfluorobutanesulfonic acid (PFBS)	114	123	P/P	30 - 160
2375946	Perfluorobutanoic acid (PFBA)	123	123	P/P	30 - 160
2375946	Perfluorodecanesulfonic acid (PFDS)	56.0	55.4	P/P	30 - 160
2375946	Perfluorodecanoic acid (PFDA)	104	122	P/P	30 - 160
2375946	Perfluorododecanoic acid (PFDoA)	94.2	122	P/P	30 - 160
2375946	Perfluoroheptanesulfonic acid (PFHpS)	133	145	P/P	30 - 160
2375946	Perfluoroheptanoic acid (PFHpA)	128	123	P/P	30 - 160
2375946	Perfluorohexanesulfonic acid (PFHxS)	123	147	P/P	30 - 160
2375946	Perfluorohexanoic acid (PFHxA)	120	113	P/P	30 - 160
2375946	Perfluorononanesulfonic acid (PFNS)	75.6	83.5	P/P	30 - 160
2375946	Perfluorononanoic acid (PFNA)	130	126	P/P	30 - 160
2375946	Perfluorooctanoic acid (PFOA)	99.3	87.6	P/P	30 - 160
2375946	Perfluoropentanesulfonic acid (PFPeS)	128	128	P/P	30 - 160
2375946	Perfluoropentanoic acid (PFPeA)	149	138	P/P	30 - 160
2375946	Perfluoropropanesulfonic acid (PFPrS)	127	134	P/P	30 - 160
2375946	Perfluorotetradecanoic acid (PFTeA)	107	111	P/P	30 - 160
2375946	Perfluorotridecanoic acid (PFTriA)	134	114	P/P	30 - 160
2375946	Perfluoroundecanoic acid (PFUnA)	97.0	95.3	P/P	30 - 160

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P423604

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2376139	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	14.8	Spike	P	0 - 35
2376139	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	5.37	Spike	P	0 - 35
2376139	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	14.8	Spike	P	0 - 35
2376139	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	17.4	Spike	P	0 - 35
2376139	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	21.5	Spike	P	0 - 35
2376139	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	10.4	Spike	P	0 - 35
2376139	Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.49	Spike	P	0 - 35
2376139	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	3.06	Spike	P	0 - 35
2376139	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	14.9	Spike	P	0 - 35
2376139	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	13.3	Spike	P	0 - 35
2376139	Perfluoro-1-butane sulfonamide (FBSA)	6.74	Spike	P	0 - 35
2376139	Perfluoro-1-hexane sulfonamide (FHxSA)	12.0	Spike	P	0 - 35
2376139	Perfluoro-1-octane sulfonamide (FOSA)	0.461	Spike	P	0 - 35
2376139	Perfluoro-3-methoxypropanoic acid (PFMPA)	11.6	Spike	P	0 - 35
2376139	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.520	Spike	P	0 - 35
2376139	Perfluoro-4-methoxybutanoic acid (PFMBA)	16.3	Spike	P	0 - 35
2376139	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	11.7	Spike	P	0 - 35
2376139	Perfluorobutanesulfonic acid (PFBS)	10.9	Spike	P	0 - 35
2376139	Perfluorobutanoic acid (PFBA)	2.25	Spike	P	0 - 35
2376139	Perfluorodecanesulfonic acid (PFDS)	5.07	Spike	P	0 - 35
2376139	Perfluorodecanoic acid (PFDA)	14.3	Spike	P	0 - 35
2376139	Perfluorododecanoic acid (PFDoA)	0.0463	Spike	P	0 - 35
2376139	Perfluoroheptanesulfonic acid (PFHpS)	0.300	Spike	P	0 - 35
2376139	Perfluoroheptanoic acid (PFHpA)	1.10	Spike	P	0 - 35
2376139	Perfluorohexanesulfonic acid (PFHxS)	4.69	Spike	P	0 - 35
2376139	Perfluorohexanoic acid (PFHxA)	0.0422	Spike	P	0 - 35
2376139	Perfluorononanesulfonic acid (PFNS)	25.0	Spike	P	0 - 35
2376139	Perfluorononanoic acid (PFNA)	6.75	Spike	P	0 - 35
2376139	Perfluorooctanesulfonic acid (PFOS)	5.58	Spike	P	0 - 35
2376139	Perfluorooctanoic acid (PFOA)	6.00	Spike	P	0 - 35
2376139	Perfluoropentanesulfonic acid (PFPeS)	3.31	Spike	P	0 - 35
2376139	Perfluoropentanoic acid (PFPeA)	6.11	Spike	P	0 - 35
2376139	Perfluoropropanesulfonic acid (PFPrS)	2.97	Spike	P	0 - 35
2376139	Perfluorotetradecanoic acid (PFTeA)	11.1	Spike	P	0 - 35
2376139	Perfluorotridecanoic acid (PFTriA)	4.73	Spike	P	0 - 35
2376139	Perfluoroundecanoic acid (PFUnA)	13.3	Spike	P	0 - 35

Reference Method: DEP SOP: LC-001-3
Batch ID: P423639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2375946	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.36	Spike	P	0 - 30
2375946	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	19.6	Spike	P	0 - 30
2375946	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	5.52	Spike	P	0 - 30
2375946	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	3.78	Spike	P	0 - 30
2375946	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	14.7	Spike	P	0 - 30
2375946	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	1.22	Spike	P	0 - 30
2375946	Hexafluoropropylene oxide dimer acid (HFPO-DA)	5.81	Spike	P	0 - 30
2375946	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	5.62	Spike	P	0 - 30
2375946	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.21	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P423639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2375946	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.10	Spike	P	0 - 30
2375946	Perfluoro-1-butane sulfonamide (FBSA)	19.7	Spike	P	0 - 30
2375946	Perfluoro-1-hexane sulfonamide (FHxSA)	10.8	Spike	P	0 - 30
2375946	Perfluoro-1-octane sulfonamide (FOSA)	8.33	Spike	P	0 - 30
2375946	Perfluoro-3-methoxypropanoic acid (PFMPA)	6.77	Spike	P	0 - 30
2375946	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	5.61	Spike	P	0 - 30
2375946	Perfluoro-4-methoxybutanoic acid (PFMBA)	8.42	Spike	P	0 - 30
2375946	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.94	Spike	P	0 - 30
2375946	Perfluorobutanesulfonic acid (PFBS)	4.34	Spike	P	0 - 30
2375946	Perfluorobutanoic acid (PFBA)	0.0276	Spike	P	0 - 30
2375946	Perfluorodecanesulfonic acid (PFDS)	1.04	Spike	P	0 - 30
2375946	Perfluorodecanoic acid (PFDA)	16.2	Spike	P	0 - 30
2375946	Perfluorododecanoic acid (PFDoA)	25.5	Spike	P	0 - 30
2375946	Perfluoroheptanesulfonic acid (PFHpS)	8.73	Spike	P	0 - 30
2375946	Perfluoroheptanoic acid (PFHpA)	3.81	Spike	P	0 - 30
2375946	Perfluorohexanesulfonic acid (PFHxS)	15.3	Spike	P	0 - 30
2375946	Perfluorohexanoic acid (PFHxA)	5.25	Spike	P	0 - 30
2375946	Perfluorononanesulfonic acid (PFNS)	9.90	Spike	P	0 - 30
2375946	Perfluorononanoic acid (PFNA)	3.36	Spike	P	0 - 30
2375946	Perfluorooctanesulfonic acid (PFOS)	11.0	Spike	P	0 - 30
2375946	Perfluorooctanoic acid (PFOA)	12.4	Spike	P	0 - 30
2375946	Perfluoropentanesulfonic acid (PFPeS)	0.612	Spike	P	0 - 30
2375946	Perfluoropentanoic acid (PFPeA)	7.65	Spike	P	0 - 30
2375946	Perfluoropropanesulfonic acid (PFPrS)	5.09	Spike	P	0 - 30
2375946	Perfluorotetradecanoic acid (PFTeA)	4.40	Spike	P	0 - 30
2375946	Perfluorotridecanoic acid (PFTriA)	16.5	Spike	P	0 - 30
2375946	Perfluoroundecanoic acid (PFUnA)	1.75	Spike	P	0 - 30

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report
Surrogates

Lab Sample ID: 2376138
Field Sample ID: SB-78 (0-0.5')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	102	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	115	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	50.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	100	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	102	P	30 - 160

Lab Sample ID: 2376139
Field Sample ID: SB-78 (0.5-2')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	99.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	128	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	64.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	109	P	30 - 160

Lab Sample ID: 2376140
Field Sample ID: SB-78 (2.4')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	97.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	127	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	89.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	96.6	P	30 - 160

Lab Sample ID: 2376141
Field Sample ID: SB-79 (0-0.5')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	92.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	60.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	101	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	86.3	P	30 - 160

Lab Sample ID: 2376142
Field Sample ID: SB-79 (0.5-2')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	92.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	110	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	78.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	91.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	103	P	30 - 160

Lab Sample ID: 2376143
Field Sample ID: SB-79 (2.4')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	115	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	120	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2376143
Field Sample ID: SB-79 (2.4')

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	49.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	96.6	P	30 - 160

Lab Sample ID: 2376146
Field Sample ID: FRB-11

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	99.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	125	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	82.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	101	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	117	P	30 - 160

Lab Sample ID: 2376147
Field Sample ID: FRB-12

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	119	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	121	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	90.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	123	P	30 - 160

Lab Sample ID: 2376148
Field Sample ID: FRB-14

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	111	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	63.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	95.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	92.6	P	30 - 160

Lab Sample ID: 2376149
Field Sample ID: EQB-53

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	93.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	127	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	120	P	30 - 160

Lab Sample ID: 2376150
Field Sample ID: EQB-54

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	131	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	148	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	98.1	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2376150
Field Sample ID: EQB-54

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	114	P	30 - 160

Lab Sample ID: 2376151
Field Sample ID: EQB-55

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	81.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	124	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	128	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	89.1	P	30 - 160

Lab Sample ID: 2376152
Field Sample ID: EQB-56

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	95.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	131	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	92.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	105	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A116581
Included Lab Sample IDs: 2376146, 2376147, 2376148, 2376149, 2376150, 2376151, 2376152

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	101	95.2	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	85.2	102	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	93.6	92.0	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	124	108	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	106	88.0	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	89.7	85.6	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	109	114	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	121	108	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	122	123	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	76.5	65.9	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	78.7	89.2	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	82.6	106	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	109	113	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	101	100	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	84.9	98.8	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	96.3	72.0	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	93.2	105	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	95.7	95.8	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	85.0	92.6	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	107	104	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	112	90.3	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	103	132	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	90.2	110	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	117	131	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	102	109	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	99.2	78.8	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	101	93.1	P/P	60 - 160
Perfluorononanoic acid (PFNA)	127	115	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	99.5	97.1	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	108	104	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	93.0	101	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	106	107	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	85.4	100	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	109	100	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	123	141	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	107	136	P/P	60 - 160

Reference Method: DEP SOP: LC-001-3
Run ID: A116612
Included Lab Sample IDs: 2376138, 2376139, 2376140, 2376141, 2376142, 2376143

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	102	105	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	105	91.4	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	85.3	88.9	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	98.7	85.3	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	106	108	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	108	98.5	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	115	124	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	136	115	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	81.1	76.1	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A116612
Included Lab Sample IDs: 2376138, 2376139, 2376140, 2376141, 2376142, 2376143

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	85.9	81.1	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	83.5	89.2	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	89.7	83.5	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	101	102	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	105	101	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	115	115	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	115	118	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	111	128	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	128	111	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	114	102	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	125	114	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	69.2	93.2	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	93.2	91.4	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	108	99.7	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	77.9	108	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	103	104	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	104	109	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	96.0	106	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	99.1	96.0	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	106	98.1	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	94.3	106	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	66.9	81.0	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	84.6	66.9	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	106	97.2	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	97.2	101	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	92.6	97.7	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	98.8	92.6	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	89.3	96.7	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	96.7	89.9	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	108	96.8	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	96.8	86.0	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	102	136	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	136	130	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	104	96.9	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	86.5	104	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	108	113	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	113	112	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	103	103	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	105	103	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	112	112	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	113	112	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	88.6	89.7	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	89.7	78.3	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	86.1	97.4	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	99.0	86.1	P/P	60 - 160
Perfluorononanoic acid (PFNA)	115	129	P/P	60 - 160
Perfluorononanoic acid (PFNA)	138	115	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	100	99.9	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	99.9	92.2	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	108	123	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	84.8	108	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A116612
Included Lab Sample IDs: 2376138, 2376139, 2376140, 2376141, 2376142, 2376143

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluoropentanesulfonic acid (PFPeS)	102	89.4	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	89.4	97.5	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	107	119	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	108	107	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	82.9	101	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	85.2	82.9	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	106	84.8	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	109	106	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	114	102	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	116	114	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	119	91.6	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	92.2	119	P/P	60 - 160

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	100	90.7	105			14.8
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	75.2	51.5	52.8			2.36
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	99.0	91.6	96.7			5.37
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	93.6	101	123			19.6
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	109	109	93.8			14.8
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	103	106	112			5.52
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	154	119	142			17.4
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	144	125	133			3.78
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	127	71.9	89.3			21.5
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	95.7	94.1	109			14.7
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	103	83.5	92.6			10.4
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	98.3	88.7	87.7			1.22
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	99.2	121	112			8.49
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	133	111	117			5.81
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	115	111	107			3.06
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	97.9	125	132			5.62
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	133	104	121			14.9
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	153	135	136			1.21
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	76.3	79.2	69.3			13.3
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	133	136	133			2.10
	Perfluoro-1-butane sulfonamide (FBSA)	72.9	94.1	88.0			6.74
	Perfluoro-1-butane sulfonamide (FBSA)	151	130	158			19.7
	Perfluoro-1-hexane sulfonamide (FHxSA)	81.0	115	102			12.0
	Perfluoro-1-hexane sulfonamide (FHxSA)	157	149	134			10.8
	Perfluoro-1-octane sulfonamide (FOSA)	114	113	113			0.461
	Perfluoro-1-octane sulfonamide (FOSA)	127	118	128			8.33
	Perfluoro-3-methoxypropanoic acid (PFMPA)	135	120	107			11.6
	Perfluoro-3-methoxypropanoic acid (PFMPA)	102	98.5	105			6.77

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	107	111	111			0.520
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	109	118	125			5.61
	Perfluoro-4-methoxybutanoic acid (PFMBA)	119	108	91.4			16.3
	Perfluoro-4-methoxybutanoic acid (PFMBA)	83.9	73.8	80.2			8.42
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	121	121	108			11.7
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	122	127	132			3.94
	Perfluorobutanesulfonic acid (PFBS)	116	123	111			10.9
	Perfluorobutanesulfonic acid (PFBS)	114	114	123			4.34
	Perfluorobutanoic acid (PFBA)	109	111	109			2.25
	Perfluorobutanoic acid (PFBA)	107	123	123			0.0276
	Perfluorodecanesulfonic acid (PFDS)	119	111	106			5.07
	Perfluorodecanesulfonic acid (PFDS)	79.3	56.0	55.4			1.04
	Perfluorodecanoic acid (PFDA)	139	113	130			14.3
	Perfluorodecanoic acid (PFDA)	103	104	122			16.2
	Perfluorododecanoic acid (PFDoA)	74.5	108	108			0.0463
	Perfluorododecanoic acid (PFDoA)	118	94.2	122			25.5
	Perfluoroheptanesulfonic acid (PFHpS)	124	121	120			0.300
	Perfluoroheptanesulfonic acid (PFHpS)	120	133	145			8.73
	Perfluoroheptanoic acid (PFHpA)	123	132	131			1.10
	Perfluoroheptanoic acid (PFHpA)	113	128	123			3.81
	Perfluorohexanesulfonic acid (PFHxS)	121	130	124			4.69
	Perfluorohexanesulfonic acid (PFHxS)	118	123	147			15.3
	Perfluorohexanoic acid (PFHxA)	103	107	107			0.0422
	Perfluorohexanoic acid (PFHxA)	90.1	120	113			5.25
	Perfluorononanesulfonic acid (PFNS)	118	77.4	99.5			25.0
	Perfluorononanesulfonic acid (PFNS)	103	75.6	83.5			9.90
	Perfluorononanoic acid (PFNA)	128	136	145			6.75
	Perfluorononanoic acid (PFNA)	146	130	126			3.36
	Perfluorooctanesulfonic acid (PFOS)	111	123	134			5.58
	Perfluorooctanesulfonic acid (PFOS)	108					11.0
	Perfluorooctanoic acid (PFOA)	102	116	123			6.00
	Perfluorooctanoic acid (PFOA)	126	99.3	87.6			12.4
	Perfluoropentanesulfonic acid (PFPeS)	119	116	112			3.31
	Perfluoropentanesulfonic acid (PFPeS)	115	128	128			0.612
	Perfluoropentanoic acid (PFPeA)	114	136	128			6.11
	Perfluoropentanoic acid (PFPeA)	117	149	138			7.65
	Perfluoropropanesulfonic acid (PFPrS)	106	97.9	95.0			2.97

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)	129	127	134			5.09
	Perfluorotetradecanoic acid (PFTeA)	111	123	110			11.1
	Perfluorotetradecanoic acid (PFTeA)	129	107	111			4.40
	Perfluorotridecanoic acid (PFTriA)	128	158	150			4.73
	Perfluorotridecanoic acid (PFTriA)	144	134	114			16.5
	Perfluoroundecanoic acid (PFUnA)	124	79.8	69.8			13.3
	Perfluoroundecanoic acid (PFUnA)	128	97.0	95.3			1.75

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: LC-001-3	Perfluorinated alkyl substances in sediment/solid matrices by HPLC/MS/MS	2376138, 2376139, 2376140, 2376141, 2376142, 2376143
DEP SOP: LC-001-3	Perfluorinated alkyl substances in water matrices by HPLC/MS/MS	2376146, 2376147, 2376148, 2376149, 2376150, 2376151, 2376152
SM 2540 G (20th)	Percent solid determination before the other sample preparations.	2376153, 2376154, 2376155, 2376156, 2376157, 2376158

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: LC-001-3	12/16/2022	12/20/2022 11:00	Hoor Shaik	12/21/2022 10:24	Mohammad Ghaffari	2376139
	12/16/2022	12/20/2022 11:00	Hoor Shaik	12/21/2022 11:18	Mohammad Ghaffari	2376138
	12/16/2022	12/20/2022 11:00	Hoor Shaik	12/21/2022 11:29	Mohammad Ghaffari	2376140
	12/16/2022	12/20/2022 11:00	Hoor Shaik	12/21/2022 11:39	Mohammad Ghaffari	2376141
	12/16/2022	12/20/2022 11:00	Hoor Shaik	12/21/2022 11:50	Mohammad Ghaffari	2376142
	12/16/2022	12/20/2022 11:00	Hoor Shaik	12/21/2022 12:01	Mohammad Ghaffari	2376143
	12/16/2022	12/20/2022 13:00	Hoor Shaik	12/20/2022 15:33	Mohammad Ghaffari	2376146
	12/16/2022	12/20/2022 13:00	Hoor Shaik	12/20/2022 15:44	Mohammad Ghaffari	2376147
	12/16/2022	12/20/2022 13:00	Hoor Shaik	12/20/2022 15:55	Mohammad Ghaffari	2376148
	12/16/2022	12/20/2022 13:00	Hoor Shaik	12/20/2022 16:06	Mohammad Ghaffari	2376149
	12/16/2022	12/20/2022 13:00	Hoor Shaik	12/20/2022 16:16	Mohammad Ghaffari	2376150
	12/16/2022	12/20/2022 13:00	Hoor Shaik	12/20/2022 16:27	Mohammad Ghaffari	2376151
	12/16/2022	12/20/2022 13:00	Hoor Shaik	12/20/2022 16:38	Mohammad Ghaffari	2376152

Chemical Analysis Report

SIS-2023-01-10-01

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description:	**Former Florida State Fire College Site Wide Soil and GW Investigation**
Request ID:	**RQ-2022-11-14-12**
Customer:	**SIS**
Project ID:	**SIS-PFAS**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Road
Twin Towers Bldg. MS# 4515
Tallahassee, FL 32399
Attn: Robert Cilek

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 23-JAN-2023 12:21

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 15:06**

Field ID: DEPMW-1 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379234	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	14		ng/L	P424211	
		Perfluorobutanoic acid (PFBA)	6.9	I	ng/L	P424211	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424211	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424211	
		Perfluoroheptanoic acid (PFHpA)	16		ng/L	P424211	
		Perfluorohexanesulfonic acid (PFHxS)	78		ng/L	P424211	
		Perfluorohexanoic acid (PFHxA)	16		ng/L	P424211	
		Perfluorononanoic acid (PFNA)	2.6	I	ng/L	P424211	
		Perfluorooctanoic acid (PFOA)	9.9		ng/L	P424211	
		Perfluorooctanesulfonic acid (PFOS)	110		ng/L	P424211	
		Perfluoropentanoic acid (PFPeA)	23		ng/L	P424211	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424211	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424211	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424211	
		Perfluoropentanesulfonic acid (PFPeS)	8.8		ng/L	P424211	
		Perfluoroheptanesulfonic acid (PFHpS)	1.8	I	ng/L	P424211	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424211	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424211	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424211	
		Perfluoro-1-butane sulfonamide (FBSA)	8.1		ng/L	P424211	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424211	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424211	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424211	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424211	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424211	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424211	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424211	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424211	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424211	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424211	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424211	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424211	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424211	

Field ID: DEPMW-1 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 15:50**

Field ID: DEPMW-2 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379235	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	17		ng/L	P424211	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424211	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424211	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424211	
		Perfluoroheptanoic acid (PFHpA)	5.3	I	ng/L	P424211	
		Perfluorohexanesulfonic acid (PFHxS)	75		ng/L	P424211	
		Perfluorohexanoic acid (PFHxA)	8.3		ng/L	P424211	
		Perfluorononanoic acid (PFNA)	2.1	I	ng/L	P424211	
		Perfluorooctanoic acid (PFOA)	4.4	I	ng/L	P424211	
		Perfluorooctanesulfonic acid (PFOS)	83		ng/L	P424211	
		Perfluoropentanoic acid (PFPeA)	12		ng/L	P424211	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424211	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424211	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424211	
		Perfluoropentanesulfonic acid (PFPeS)	10		ng/L	P424211	
		Perfluoroheptanesulfonic acid (PFHpS)	1.4	I	ng/L	P424211	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424211	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424211	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424211	
		Perfluoro-1-butane sulfonamide (FBSA)	6.0		ng/L	P424211	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424211	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424211	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424211	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424211	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424211	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424211	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424211	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424211	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424211	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424211	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424211	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424211	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424211	

Field ID: DEPMW-2 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 10:49**

Field ID: DEPMW-3 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379236	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	10		ng/L	P424211	
		Perfluorobutanoic acid (PFBA)	16		ng/L	P424211	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424211	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424211	
		Perfluoroheptanoic acid (PFHpA)	31		ng/L	P424211	
		Perfluorohexanesulfonic acid (PFHxS)	110		ng/L	P424211	
		Perfluorohexanoic acid (PFHxA)	29		ng/L	P424211	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424211	
		Perfluorooctanoic acid (PFOA)	14		ng/L	P424211	
		Perfluorooctanesulfonic acid (PFOS)	87		ng/L	P424211	
		Perfluoropentanoic acid (PFPeA)	48		ng/L	P424211	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424211	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424211	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424211	
		Perfluoropentanesulfonic acid (PFPeS)	10		ng/L	P424211	
		Perfluoroheptanesulfonic acid (PFHpS)	1.8	I	ng/L	P424211	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424211	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424211	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424211	
		Perfluoro-1-butane sulfonamide (FBSA)	3.5		ng/L	P424211	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424211	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424211	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424211	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424211	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424211	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424211	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424211	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424211	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424211	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424211	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424211	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424211	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424211	

Field ID: DEPMW-3 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 10:05**

Field ID: DEPMW-4 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379237	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.48	I	ng/L	P424211	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424211	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424211	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424211	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424211	
		Perfluorohexanesulfonic acid (PFHxS)	1.0	I	ng/L	P424211	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P424211	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424211	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424211	
		Perfluorooctanesulfonic acid (PFOS)	3.1	I	ng/L	P424211	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P424211	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424211	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424211	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424211	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P424211	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424211	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424211	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424211	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424211	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424211	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424211	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424211	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424211	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424211	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424211	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424211	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424211	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424211	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424211	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424211	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424211	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424211	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424211	

Field ID: DEPMW-4 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 13:39**

Field ID: DEPMW-5 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379238	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	19		ng/L	P424211	
		Perfluorobutanoic acid (PFBA)	13	I	ng/L	P424211	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424211	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424211	
		Perfluoroheptanoic acid (PFHpA)	26		ng/L	P424211	
		Perfluorohexanesulfonic acid (PFHxS)	180		ng/L	P424211	
		Perfluorohexanoic acid (PFHxA)	32		ng/L	P424211	
		Perfluorononanoic acid (PFNA)	4.4	I	ng/L	P424211	
		Perfluorooctanoic acid (PFOA)	18		ng/L	P424211	
		Perfluorooctanesulfonic acid (PFOS)	380		ng/L	P424211	
		Perfluoropentanoic acid (PFPeA)	49		ng/L	P424211	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424211	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424211	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424211	
		Perfluoropentanesulfonic acid (PFPeS)	16		ng/L	P424211	
		Perfluoroheptanesulfonic acid (PFHpS)	4.1		ng/L	P424211	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424211	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424211	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424211	
		Perfluoro-1-butane sulfonamide (FBSA)	17		ng/L	P424211	
		Perfluoro-1-hexane sulfonamide (FHxSA)	4.2		ng/L	P424211	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424211	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424211	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	I	ng/L	P424211	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424211	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424211	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424211	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424211	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424211	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424211	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424211	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424211	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424211	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424211	

Field ID: DEPMW-5 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 12:51**

Field ID: DEPMW-6 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379239	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	19		ng/L	P424211	
		Perfluorobutanoic acid (PFBA)	4.4	I	ng/L	P424211	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424211	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424211	
		Perfluoroheptanoic acid (PFHpA)	8.9		ng/L	P424211	
		Perfluorohexanesulfonic acid (PFHxS)	160		ng/L	P424211	
		Perfluorohexanoic acid (PFHxA)	11		ng/L	P424211	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424211	
		Perfluorooctanoic acid (PFOA)	7.4	I	ng/L	P424211	
		Perfluorooctanesulfonic acid (PFOS)	470		ng/L	P424211	
		Perfluoropentanoic acid (PFPeA)	12		ng/L	P424211	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424211	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424211	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424211	
		Perfluoropentanesulfonic acid (PFPeS)	11		ng/L	P424211	
		Perfluoroheptanesulfonic acid (PFHpS)	3.7		ng/L	P424211	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424211	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424211	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424211	
		Perfluoro-1-butane sulfonamide (FBSA)	7.8		ng/L	P424211	
		Perfluoro-1-hexane sulfonamide (FHxSA)	18		ng/L	P424211	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424211	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424211	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424211	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424211	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424211	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424211	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424211	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424211	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424211	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424211	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424211	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424211	

Field ID: DEPMW-6 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 12:51**

Field ID: DEPMW-6 [25-45']DUP Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379240	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	17		ng/L	P424211	
		Perfluorobutanoic acid (PFBA)	4.3	I	ng/L	P424211	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424211	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424211	
		Perfluoroheptanoic acid (PFHpA)	9.7		ng/L	P424211	
		Perfluorohexanesulfonic acid (PFHxS)	160		ng/L	P424211	
		Perfluorohexanoic acid (PFHxA)	9.3		ng/L	P424211	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424211	
		Perfluorooctanoic acid (PFOA)	7.0	I	ng/L	P424211	
		Perfluorooctanesulfonic acid (PFOS)	480		ng/L	P424211	
		Perfluoropentanoic acid (PFPeA)	13		ng/L	P424211	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424211	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424211	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424211	
		Perfluoropentanesulfonic acid (PFPeS)	10		ng/L	P424211	
		Perfluoroheptanesulfonic acid (PFHpS)	3.8		ng/L	P424211	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424211	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424211	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424211	
		Perfluoro-1-butane sulfonamide (FBSA)	8.4		ng/L	P424211	
		Perfluoro-1-hexane sulfonamide (FHxSA)	21		ng/L	P424211	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424211	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424211	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424211	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424211	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424211	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424211	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424211	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424211	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424211	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424211	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424211	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424211	

Field ID: DEPMW-6 [25-45']DUP Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 12:08**

Field ID: DEPMW-7 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379241	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	13		ng/L	P424211	
		Perfluorobutanoic acid (PFBA)	6.5	I	ng/L	P424211	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424211	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424211	
		Perfluoroheptanoic acid (PFHpA)	15		ng/L	P424211	
		Perfluorohexanesulfonic acid (PFHxS)	68		ng/L	P424211	
		Perfluorohexanoic acid (PFHxA)	13		ng/L	P424211	
		Perfluorononanoic acid (PFNA)	3.0	I	ng/L	P424211	
		Perfluorooctanoic acid (PFOA)	9.2		ng/L	P424211	
		Perfluorooctanesulfonic acid (PFOS)	93		ng/L	P424211	
		Perfluoropentanoic acid (PFPeA)	23		ng/L	P424211	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424211	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424211	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424211	
		Perfluoropentanesulfonic acid (PFPeS)	7.4		ng/L	P424211	
		Perfluoroheptanesulfonic acid (PFHpS)	1.2	I	ng/L	P424211	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424211	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424211	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424211	
		Perfluoro-1-butane sulfonamide (FBSA)	5.9		ng/L	P424211	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424211	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424211	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424211	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424211	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424211	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424211	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424211	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424211	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424211	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424211	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424211	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424211	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424211	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424211	

Field ID: DEPMW-7 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: MS accuracy for PFOS could not be assessed due to a high concentration of parameter in the spiked sample.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 11:23**

Field ID: DEPMW-8 [20-40'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379242	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	32		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	22		ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	23		ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	900		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	67		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	9.8		ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	33		ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	5.2E+03		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	40		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	34		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	33		ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	1.9		ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	65		ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	760		ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	7.4		ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	8.8	I	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-8 [20-40'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 14:11**

Field ID: DEPMW-9 [150-170'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379243	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	14		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	8.5	I	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.2	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.1	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	15		ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	80		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	16		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.1	I	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	7.4	I	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	85		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	24		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.1	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.1	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.1	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	9.0		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	1.4	I	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.42	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.42	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.42	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	7.3		ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.83	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.42	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.1	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.1	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.1	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	17	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.1	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.83	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.83	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.2	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.83	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.83	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.83	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.83	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.2	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.3	U	ng/L	P424572	

Field ID: DEPMW-9 [150-170'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 14:11**

Field ID: DEPMW-9 [150-170']DUP Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379244	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	14		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	8.3	I	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.1	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	14		ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	87		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	18		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.2	I	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	7.8	I	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	91		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	25		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	10		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	1.3	I	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.41	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.41	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.41	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	7.0		ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.82	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.41	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.82	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.82	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.1	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.82	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.82	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.82	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.82	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.1	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.2	U	ng/L	P424572	

Field ID: DEPMW-9 [150-170']DUP Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 16:18**

Field ID: DEPMW-10 [160-180'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379245	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-10 [160-180'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 14:36**

Field ID: DEPMW-11 [165-185'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379246	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	3.6		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	3.5	I	ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	5.8	I	ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	75		ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-11 [165-185'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 12:29**

Field ID: DEPMW-12 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379247	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	14		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	7.5	I	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	14		ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	99		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	20		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.9	I	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	9.5		ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	90		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	31		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	11		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	1.5	I	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	13		ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-12 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 11:37**

Field ID: DEPMW-13 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379248	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	15		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	9.2	I	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	19		ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	100		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	21		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.1	I	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	9.9		ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	110		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	32		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	9.7		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	1.4	I	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	9.8		ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-13 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 11:18**

Field ID: DEPMW-14[100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379249	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	3.0	I	ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	3.0	I	ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	3.2	I	ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-14[100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 12:40**

Field ID: DEPMW-15 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379250	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	20		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	5.4	I	ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	11		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	7.4	I	ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	2.6	I	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	2.2	I	ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	12		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	3.1		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-15 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 09:19**

Field ID: DEPMW-16 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379251	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	14		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	5.6	I	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	9.5		ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	56		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	14		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.0	I	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	6.4	I	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	48		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	19		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	5.7		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	4.3		ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-16 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 10:13**

Field ID: DEPMW-17 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379252	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	1.2	I	ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	7.5	I	ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	7.9		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	12		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	6.6	I	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	16		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	22		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	0.77	I	ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-17 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 10:16**

Field ID: DEPMW-18 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379253	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	15		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	7.8	I	ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	57		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	14		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	4.8	I	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	55		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	14		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	7.2		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	3.5		ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-18 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 09:26**

Field ID: DEPMW-19 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379254	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	10		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	6.0	I	ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	25		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	7.9	I	ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	4.4	I	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	32		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	12		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	2.4		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	0.92	I	ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-19 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 16:39**

Field ID: DEPMW-20 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379255	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-20 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/04/2023 15:57**

Field ID: DEPMW-21 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379256	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-21 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/03/2023 17:14**

Field ID: DEPMW-22 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379257	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	7.9		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	42		ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	28		ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	110		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	13		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	7.5	I	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	34		ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	270		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	20		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	8.4		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	2.5	I	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	5.1		ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.84	I	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-22 [100-120'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/03/2023 16:57**

Field ID: DEPMW-23 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379258	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	4.2		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	11	I	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	20		ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	33		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	18		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	2.1	I	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	14		ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	78		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	31		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	2.0		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	I	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: DEPMW-23 [25-45'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 09:56**

Field ID: UISAMW [M-200] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379259	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	7.3		ng/L	P424369	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424369	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424369	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424369	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424369	
		Perfluorohexanesulfonic acid (PFHxS)	37		ng/L	P424369	
		Perfluorohexanoic acid (PFHxA)	4.3	I	ng/L	P424369	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424369	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424369	
		Perfluorooctanesulfonic acid (PFOS)	72		ng/L	P424369	
		Perfluoropentanoic acid (PFPeA)	4.5	I	ng/L	P424369	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424369	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424369	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424369	
		Perfluoropentanesulfonic acid (PFPeS)	3.3		ng/L	P424369	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424369	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424369	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424369	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424369	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424369	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424369	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424369	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424369	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424369	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424369	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424369	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424369	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424369	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424369	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424369	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424369	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424369	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424369	

Field ID: UISAMW [M-200] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform duplicate matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/03/2023 15:41**

Field ID: Irrigation Well [105-140'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379260	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	15		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	10	I	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	23		ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	86		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	29		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	7.2	I	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	19		ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	140		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	50		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	9.9		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	1.5	I	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	8.0		ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: Irrigation Well [105-140'] Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/03/2023 15:41**

Field ID: Irrigation Well [105-140']DUP Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379261	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	14		ng/L	P424572	
		Perfluorobutanoic acid (PFBA)	10	I	ng/L	P424572	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424572	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424572	
		Perfluoroheptanoic acid (PFHpA)	24		ng/L	P424572	
		Perfluorohexanesulfonic acid (PFHxS)	88		ng/L	P424572	
		Perfluorohexanoic acid (PFHxA)	30		ng/L	P424572	
		Perfluorononanoic acid (PFNA)	6.4	I	ng/L	P424572	
		Perfluorooctanoic acid (PFOA)	19		ng/L	P424572	
		Perfluorooctanesulfonic acid (PFOS)	130		ng/L	P424572	
		Perfluoropentanoic acid (PFPeA)	49		ng/L	P424572	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424572	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424572	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424572	
		Perfluoropentanesulfonic acid (PFPeS)	9.9		ng/L	P424572	
		Perfluoroheptanesulfonic acid (PFHpS)	1.5	I	ng/L	P424572	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424572	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424572	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424572	
		Perfluoro-1-butane sulfonamide (FBSA)	7.7		ng/L	P424572	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424572	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424572	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424572	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424572	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424572	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424572	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424572	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424572	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424572	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424572	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424572	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424572	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424572	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424572	

Field ID: Irrigation Well [105-140']DUP Matrix: W-FLD-REP

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform matrix spikes.

Sample Location: Former Florida State Fire College {FFSFC} **Collection Date/Time: 01/05/2023 08:31**

Field ID: EQB-57 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379262	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P424369	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424369	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424369	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424369	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424369	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P424369	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P424369	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424369	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424369	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P424369	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P424369	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424369	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424369	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424369	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P424369	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424369	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424369	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424369	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424369	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424369	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424369	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424369	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424369	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424369	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424369	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424369	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424369	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424369	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424369	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424369	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424369	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424369	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424369	

Field ID: EQB-57 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform duplicate matrix spikes.

Sample Location: Former Florida State Fire College [FFSFC] **Collection Date/Time: 01/05/2023 08:42**

Field ID: EQB-58 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379366	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P424369	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424369	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424369	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424369	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424369	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P424369	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P424369	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424369	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424369	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P424369	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P424369	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424369	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424369	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424369	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P424369	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424369	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424369	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424369	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424369	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424369	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424369	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424369	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424369	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424369	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424369	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424369	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424369	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424369	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424369	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424369	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424369	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424369	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424369	

Field ID: EQB-58 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform duplicate matrix spikes.

Sample Location: Former Florida State Fire College [FFSFC] **Collection Date/Time: 01/05/2023 13:05**

Field ID: EQB-59 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379367	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P424369	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424369	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424369	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424369	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424369	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P424369	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P424369	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424369	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424369	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P424369	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P424369	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424369	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424369	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424369	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P424369	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424369	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424369	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424369	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424369	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424369	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424369	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424369	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424369	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424369	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424369	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424369	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424369	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424369	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424369	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424369	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424369	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424369	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424369	

Field ID: EQB-59 Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform duplicate matrix spikes.

Sample Location: Former Florida State Fire College [FFSFC] **Collection Date/Time: 01/05/2023 08:35**

Field ID: FRB-13 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379365	DEP SOP: LC-001-3	Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L	P424369	
		Perfluorobutanoic acid (PFBA)	4.0	U	ng/L	P424369	
		Perfluorodecanoic acid (PFDA)	4.0	U	ng/L	P424369	
		Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L	P424369	
		Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L	P424369	
		Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L	P424369	
		Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L	P424369	
		Perfluorononanoic acid (PFNA)	2.0	U	ng/L	P424369	
		Perfluorooctanoic acid (PFOA)	2.0	U	ng/L	P424369	
		Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L	P424369	
		Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L	P424369	
		Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L	P424369	
		Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L	P424369	
		Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L	P424369	
		Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L	P424369	
		Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L	P424369	
		Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L	P424369	
		Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L	P424369	
		4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L	P424369	
		Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L	P424369	
		Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L	P424369	
		Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L	P424369	
		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L	P424369	
		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L	P424369	
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L	P424369	
		N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L	P424369	
		N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L	P424369	
		Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L	P424369	
		Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L	P424369	
		Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L	P424369	
		Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L	P424369	
		Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L	P424369	
		Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L	P424369	
		Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L	P424369	

Field ID: FRB-13 Matrix: W-FRB

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
DEP SOP: LC-001-3: Insufficient sample to perform duplicate matrix spikes.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P424211

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Reference Method: DEP SOP: LC-001-3
Batch ID: P424369

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P424369

Component	Result	Code	Units
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Reference Method: DEP SOP: LC-001-3
Batch ID: P424572

Component	Result	Code	Units
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	2.0	U	ng/L
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	16	U	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.40	U	ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.0	U	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.0	U	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.80	U	ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.80	U	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.0	U	ng/L
Perfluoro-1-butane sulfonamide (FBSA)	0.80	U	ng/L
Perfluoro-1-hexane sulfonamide (FHxSA)	0.80	U	ng/L
Perfluoro-1-octane sulfonamide (FOSA)	0.40	U	ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.80	U	ng/L
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	0.80	U	ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.80	U	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.80	U	ng/L
Perfluorobutanesulfonic acid (PFBS)	0.40	U	ng/L
Perfluorobutanoic acid (PFBA)	4.0	U	ng/L
Perfluorodecanesulfonic acid (PFDS)	0.40	U	ng/L
Perfluorodecanoic acid (PFDA)	4.0	U	ng/L
Perfluorododecanoic acid (PFDoA)	2.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: LC-001-3
Batch ID: P424572

Component	Result	Code	Units
Perfluoroheptanesulfonic acid (PFHpS)	0.80	U	ng/L
Perfluoroheptanoic acid (PFHpA)	2.0	U	ng/L
Perfluorohexanesulfonic acid (PFHxS)	0.80	U	ng/L
Perfluorohexanoic acid (PFHxA)	2.0	U	ng/L
Perfluorononanesulfonic acid (PFNS)	0.40	U	ng/L
Perfluorononanoic acid (PFNA)	2.0	U	ng/L
Perfluorooctanesulfonic acid (PFOS)	2.0	U	ng/L
Perfluorooctanoic acid (PFOA)	2.0	U	ng/L
Perfluoropentanesulfonic acid (PFPeS)	0.40	U	ng/L
Perfluoropentanoic acid (PFPeA)	2.0	U	ng/L
Perfluoropropanesulfonic acid (PFPrS)	4.0	U	ng/L
Perfluorotetradecanoic acid (PFTeA)	2.0	U	ng/L
Perfluorotridecanoic acid (PFTriA)	2.0	U	ng/L
Perfluoroundecanoic acid (PFUnA)	2.0	U	ng/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P424211

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	74.2		P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	78.7		P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	81.4		P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	109		P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	103		P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	83.3		P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	90.5		P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	97.3		P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	98.6		P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	95.6		P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	127		P	30 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	116		P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	87.5		P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	104		P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	94.1		P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	97.1		P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	93.6		P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	91.0		P	30 - 160
Perfluorobutanoic acid (PFBA)	80.2		P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	80.7		P	30 - 160
Perfluorodecanoic acid (PFDA)	133		P	30 - 160
Perfluorododecanoic acid (PFDoA)	91.2		P	30 - 160
Perfluoroheptanesulfonic acid (PFHpS)	103		P	30 - 160
Perfluoroheptanoic acid (PFHpA)	92.3		P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	101		P	30 - 160
Perfluorohexanoic acid (PFHxA)	79.6		P	30 - 160
Perfluorononanesulfonic acid (PFNS)	80.9		P	30 - 160
Perfluorononanoic acid (PFNA)	130		P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	89.2		P	30 - 160
Perfluorooctanoic acid (PFOA)	92.6		P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	93.0		P	30 - 160
Perfluoropentanoic acid (PFPeA)	100		P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	79.1		P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	72.7		P	30 - 160
Perfluorotridecanoic acid (PFTriA)	124		P	30 - 160
Perfluoroundecanoic acid (PFUnA)	104		P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P424369

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	72.7	76.5	P/P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	101	108	P/P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	77.8	92.5	P/P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	109	125	P/P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	81.4	73.6	P/P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	83.2	81.1	P/P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	86.6	84.6	P/P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	86.8	96.0	P/P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	89.9	90.8	P/P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	90.3	86.8	P/P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	121	121	P/P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P424369

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Perfluoro-1-hexane sulfonamide (FHxSA)	116	101	P/P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	96.4	91.9	P/P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	97.5	97.3	P/P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	94.3	95.3	P/P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	81.9	89.4	P/P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	86.4	88.6	P/P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	85.2	88.4	P/P	30 - 160
Perfluorobutanoic acid (PFBA)	76.2	77.9	P/P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	79.2	80.6	P/P	30 - 160
Perfluorodecanoic acid (PFDA)	107	95.1	P/P	30 - 160
Perfluorododecanoic acid (PFDoA)	72.4	88.2	P/P	30 - 160
Perfluoroheptanesulfonic acid (PFHpS)	102	99.3	P/P	30 - 160
Perfluoroheptanoic acid (PFHpA)	73.6	89.7	P/P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	99.2	94.0	P/P	30 - 160
Perfluorohexanoic acid (PFHxA)	73.7	71.6	P/P	30 - 160
Perfluorononanesulfonic acid (PFNS)	83.9	87.1	P/P	30 - 160
Perfluorononanoic acid (PFNA)	128	112	P/P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	82.6	82.7	P/P	30 - 160
Perfluorooctanoic acid (PFOA)	93.1	88.7	P/P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	83.7	88.0	P/P	30 - 160
Perfluoropentanoic acid (PFPeA)	96.9	92.6	P/P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	77.3	75.8	P/P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	81.5	82.5	P/P	30 - 160
Perfluorotridecanoic acid (PFTriA)	98.2	93.5	P/P	30 - 160
Perfluoroundecanoic acid (PFUnA)	103	86.5	P/P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P424572

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	93.2	104	P/P	30 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	82.0	100	P/P	30 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	96.9	104	P/P	30 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	137	137	P/P	30 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	63.5	65.8	P/P	30 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	94.1	115	P/P	30 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	99.9	105	P/P	30 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	120	119	P/P	30 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	114	111	P/P	30 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	117	131	P/P	30 - 160
Perfluoro-1-butane sulfonamide (FBSA)	158	153	P/P	30 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	137	143	P/P	30 - 160
Perfluoro-1-octane sulfonamide (FOSA)	109	113	P/P	30 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	117	127	P/P	30 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	114	105	P/P	30 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	116	132	P/P	30 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	104	110	P/P	30 - 160
Perfluorobutanesulfonic acid (PFBS)	106	114	P/P	30 - 160
Perfluorobutanoic acid (PFBA)	93.9	104	P/P	30 - 160
Perfluorodecanesulfonic acid (PFDS)	99.2	110	P/P	30 - 160
Perfluorodecanoic acid (PFDA)	116	147	P/P	30 - 160
Perfluorododecanoic acid (PFDoA)	99.3	107	P/P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P424572

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Perfluoroheptanesulfonic acid (PFHpS)	113	112	P/P	30 - 160
Perfluoroheptanoic acid (PFHpA)	123	133	P/P	30 - 160
Perfluorohexanesulfonic acid (PFHxS)	121	114	P/P	30 - 160
Perfluorohexanoic acid (PFHxA)	83.2	93.8	P/P	30 - 160
Perfluorononanesulfonic acid (PFNS)	100	110	P/P	30 - 160
Perfluorononanoic acid (PFNA)	131	140	P/P	30 - 160
Perfluorooctanesulfonic acid (PFOS)	91.5	107	P/P	30 - 160
Perfluorooctanoic acid (PFOA)	127	148	P/P	30 - 160
Perfluoropentanesulfonic acid (PFPeS)	104	112	P/P	30 - 160
Perfluoropentanoic acid (PFPeA)	117	115	P/P	30 - 160
Perfluoropropanesulfonic acid (PFPrS)	117	104	P/P	30 - 160
Perfluorotetradecanoic acid (PFTeA)	95.1	99.6	P/P	30 - 160
Perfluorotridecanoic acid (PFTriA)	125	115	P/P	30 - 160
Perfluoroundecanoic acid (PFUnA)	119	124	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P424211

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2378722	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	63.7	62.4	P/P	30 - 160
2378722	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	91.9	112	P/P	30 - 160
2378722	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	89.9	95.0	P/P	30 - 160
2378722	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	127	115	P/P	30 - 160
2378722	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	121	121	P/P	30 - 160
2378722	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	84.5	86.8	P/P	30 - 160
2378722	Hexafluoropropylene oxide dimer acid (HFPO-DA)	98.7	94.5	P/P	30 - 160
2378722	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	116	113	P/P	30 - 160
2378722	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	104	103	P/P	30 - 160
2378722	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	107	122	P/P	30 - 160
2378722	Perfluoro-1-butane sulfonamide (FBSA)	134	124	P/P	30 - 160
2378722	Perfluoro-1-hexane sulfonamide (FHxSA)	106	105	P/P	30 - 160
2378722	Perfluoro-1-octane sulfonamide (FOSA)	114	96.8	P/P	30 - 160
2378722	Perfluoro-3-methoxypropanoic acid (PFMPA)	118	119	P/P	30 - 160
2378722	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	100	98.3	P/P	30 - 160
2378722	Perfluoro-4-methoxybutanoic acid (PFMBA)	122	121	P/P	30 - 160
2378722	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	98.3	94.7	P/P	30 - 160
2378722	Perfluorobutanesulfonic acid (PFBS)	108	88.7	P/P	30 - 160
2378722	Perfluorobutanoic acid (PFBA)	90.4	109	P/P	30 - 160
2378722	Perfluorodecanesulfonic acid (PFDS)	66.9	71.6	P/P	30 - 160
2378722	Perfluorodecanoic acid (PFDA)	95.6	113	P/P	30 - 160
2378722	Perfluorododecanoic acid (PFDoA)	93.7	81.3	P/P	30 - 160
2378722	Perfluoroheptanesulfonic acid (PFHpS)	102	110	P/P	30 - 160
2378722	Perfluoroheptanoic acid (PFHpA)	112	116	P/P	30 - 160
2378722	Perfluorohexanesulfonic acid (PFHxS)	114	92.1	P/P	30 - 160
2378722	Perfluorohexanoic acid (PFHxA)	86.0	67.9	P/P	30 - 160
2378722	Perfluorononanesulfonic acid (PFNS)	83.8	88.0	P/P	30 - 160
2378722	Perfluorononanoic acid (PFNA)	142	151	P/P	30 - 160
2378722	Perfluorooctanoic acid (PFOA)	103	103	P/P	30 - 160
2378722	Perfluoropentanesulfonic acid (PFPeS)	80.6	89.9	P/P	30 - 160
2378722	Perfluoropentanoic acid (PFPeA)	115	122	P/P	30 - 160
2378722	Perfluoropropanesulfonic acid (PFPrS)	105	96.4	P/P	30 - 160
2378722	Perfluorotetradecanoic acid (PFTeA)	113	91.7	P/P	30 - 160
2378722	Perfluorotridecanoic acid (PFTriA)	103	117	P/P	30 - 160
2378722	Perfluoroundecanoic acid (PFUnA)	93.7	102	P/P	30 - 160

Reference Method: DEP SOP: LC-001-3
Batch ID: P424369

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379493	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	55.8		P	30 - 160
2379493	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	83.5		P	30 - 160
2379493	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	74.7		P	30 - 160
2379493	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	132		P	30 - 160
2379493	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	61.5		P	30 - 160
2379493	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	84.3		P	30 - 160
2379493	Hexafluoropropylene oxide dimer acid (HFPO-DA)	107		P	30 - 160
2379493	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	103		P	30 - 160
2379493	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	94.5		P	30 - 160
2379493	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	100		P	30 - 160
2379493	Perfluoro-1-butane sulfonamide (FBSA)	95.7		P	30 - 160
2379493	Perfluoro-1-hexane sulfonamide (FHxSA)	94.8		P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-3
Batch ID: P424369

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379493	Perfluoro-1-octane sulfonamide (FOSA)	93.1		P	30 - 160
2379493	Perfluoro-3-methoxypropanoic acid (PFMPA)	99.3		P	30 - 160
2379493	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	90.9		P	30 - 160
2379493	Perfluoro-4-methoxybutanoic acid (PFMBA)	91.6		P	30 - 160
2379493	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	88.5		P	30 - 160
2379493	Perfluorobutanesulfonic acid (PFBS)	91.7		P	30 - 160
2379493	Perfluorobutanoic acid (PFBA)	91.3		P	30 - 160
2379493	Perfluorodecanesulfonic acid (PFDS)	66.2		P	30 - 160
2379493	Perfluorodecanoic acid (PFDA)	105		P	30 - 160
2379493	Perfluorododecanoic acid (PFDoA)	112		P	30 - 160
2379493	Perfluoroheptanesulfonic acid (PFHpS)	95.6		P	30 - 160
2379493	Perfluoroheptanoic acid (PFHpA)	109		P	30 - 160
2379493	Perfluorohexanesulfonic acid (PFHxS)	95.0		P	30 - 160
2379493	Perfluorohexanoic acid (PFHxA)	87.4		P	30 - 160
2379493	Perfluorononanesulfonic acid (PFNS)	80.8		P	30 - 160
2379493	Perfluorononanoic acid (PFNA)	111		P	30 - 160
2379493	Perfluorooctanesulfonic acid (PFOS)	94.5		P	30 - 160
2379493	Perfluorooctanoic acid (PFOA)	115		P	30 - 160
2379493	Perfluoropentanesulfonic acid (PFPeS)	91.2		P	30 - 160
2379493	Perfluoropentanoic acid (PFPeA)	105		P	30 - 160
2379493	Perfluoropropanesulfonic acid (PFPrS)	80.4		P	30 - 160
2379493	Perfluorotetradecanoic acid (PFTeA)	68.2		P	30 - 160
2379493	Perfluorotridecanoic acid (PFTriA)	87.2		P	30 - 160
2379493	Perfluoroundecanoic acid (PFUnA)	81.8		P	30 - 160

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P424211

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2378722	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.10	Spike	P	0 - 30
2378722	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	19.8	Spike	P	0 - 30
2378722	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	5.54	Spike	P	0 - 30
2378722	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	9.89	Spike	P	0 - 30
2378722	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.0842	Spike	P	0 - 30
2378722	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.64	Spike	P	0 - 30
2378722	Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.38	Spike	P	0 - 30
2378722	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.73	Spike	P	0 - 30
2378722	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.999	Spike	P	0 - 30
2378722	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	12.8	Spike	P	0 - 30
2378722	Perfluoro-1-butane sulfonamide (FBSA)	8.11	Spike	P	0 - 30
2378722	Perfluoro-1-hexane sulfonamide (FHxSA)	0.542	Spike	P	0 - 30
2378722	Perfluoro-1-octane sulfonamide (FOSA)	16.1	Spike	P	0 - 30
2378722	Perfluoro-3-methoxypropanoic acid (PFMPA)	0.670	Spike	P	0 - 30
2378722	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	1.79	Spike	P	0 - 30
2378722	Perfluoro-4-methoxybutanoic acid (PFMBA)	0.667	Spike	P	0 - 30
2378722	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.83	Spike	P	0 - 30
2378722	Perfluorobutanesulfonic acid (PFBS)	8.82	Spike	P	0 - 30
2378722	Perfluorobutanoic acid (PFBA)	9.54	Spike	P	0 - 30
2378722	Perfluorodecanesulfonic acid (PFDS)	6.67	Spike	P	0 - 30
2378722	Perfluorodecanoic acid (PFDA)	12.9	Spike	P	0 - 30
2378722	Perfluorododecanoic acid (PFDoA)	14.2	Spike	P	0 - 30
2378722	Perfluoroheptanesulfonic acid (PFHpS)	7.52	Spike	P	0 - 30
2378722	Perfluoroheptanoic acid (PFHpA)	2.49	Spike	P	0 - 30
2378722	Perfluorohexanesulfonic acid (PFHxS)	11.8	Spike	P	0 - 30
2378722	Perfluorohexanoic acid (PFHxA)	14.1	Spike	P	0 - 30
2378722	Perfluorononanesulfonic acid (PFNS)	4.95	Spike	P	0 - 30
2378722	Perfluorononanoic acid (PFNA)	4.46	Spike	P	0 - 30
2378722	Perfluorooctanesulfonic acid (PFOS)	5.53	Spike	P	0 - 30
2378722	Perfluorooctanoic acid (PFOA)	0.0428	Spike	P	0 - 30
2378722	Perfluoropentanesulfonic acid (PFPeS)	10.2	Spike	P	0 - 30
2378722	Perfluoropentanoic acid (PFPeA)	3.42	Spike	P	0 - 30
2378722	Perfluoropropanesulfonic acid (PFPrS)	8.35	Spike	P	0 - 30
2378722	Perfluorotetradecanoic acid (PFTeA)	20.4	Spike	P	0 - 30
2378722	Perfluorotridecanoic acid (PFTriA)	12.9	Spike	P	0 - 30
2378722	Perfluoroundecanoic acid (PFUnA)	8.37	Spike	P	0 - 30

Reference Method: DEP SOP: LC-001-3
Batch ID: P424369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	5.07	LCS	P	0 - 30
LFB	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	7.09	LCS	P	0 - 30
LFB	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	17.3	LCS	P	0 - 30
LFB	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	13.7	LCS	P	0 - 30
LFB	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.98	LCS	P	0 - 30
LFB	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.59	LCS	P	0 - 30
LFB	Hexafluoropropylene oxide dimer acid (HFPO-DA)	2.27	LCS	P	0 - 30
LFB	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	10.2	LCS	P	0 - 30
LFB	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.02	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P424369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.87	LCS	P	0 - 30
LFB	Perfluoro-1-butane sulfonamide (FBSA)	0.0802	LCS	P	0 - 30
LFB	Perfluoro-1-hexane sulfonamide (FHxSA)	13.3	LCS	P	0 - 30
LFB	Perfluoro-1-octane sulfonamide (FOSA)	4.85	LCS	P	0 - 30
LFB	Perfluoro-3-methoxypropanoic acid (PFMPA)	0.173	LCS	P	0 - 30
LFB	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	1.11	LCS	P	0 - 30
LFB	Perfluoro-4-methoxybutanoic acid (PFMBA)	8.69	LCS	P	0 - 30
LFB	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.59	LCS	P	0 - 30
LFB	Perfluorobutanesulfonic acid (PFBS)	3.66	LCS	P	0 - 30
LFB	Perfluorobutanoic acid (PFBA)	2.18	LCS	P	0 - 30
LFB	Perfluorodecanesulfonic acid (PFDS)	1.78	LCS	P	0 - 30
LFB	Perfluorodecanoic acid (PFDA)	11.6	LCS	P	0 - 30
LFB	Perfluorododecanoic acid (PFDoA)	19.7	LCS	P	0 - 30
LFB	Perfluoroheptanesulfonic acid (PFHpS)	2.80	LCS	P	0 - 30
LFB	Perfluoroheptanoic acid (PFHpA)	19.8	LCS	P	0 - 30
LFB	Perfluorohexanesulfonic acid (PFHxS)	5.43	LCS	P	0 - 30
LFB	Perfluorohexanoic acid (PFHxA)	2.90	LCS	P	0 - 30
LFB	Perfluorononanesulfonic acid (PFNS)	3.76	LCS	P	0 - 30
LFB	Perfluorononanoic acid (PFNA)	13.9	LCS	P	0 - 30
LFB	Perfluorooctanesulfonic acid (PFOS)	0.125	LCS	P	0 - 30
LFB	Perfluorooctanoic acid (PFOA)	4.91	LCS	P	0 - 30
LFB	Perfluoropentanesulfonic acid (PFPeS)	5.04	LCS	P	0 - 30
LFB	Perfluoropentanoic acid (PFPeA)	4.54	LCS	P	0 - 30
LFB	Perfluoropropanesulfonic acid (PFPrS)	1.94	LCS	P	0 - 30
LFB	Perfluorotetradecanoic acid (PFTeA)	1.18	LCS	P	0 - 30
LFB	Perfluorotridecanoic acid (PFTriA)	4.90	LCS	P	0 - 30
LFB	Perfluoroundecanoic acid (PFUnA)	17.8	LCS	P	0 - 30

Reference Method: DEP SOP: LC-001-3
Batch ID: P424572

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	10.6	LCS	P	0 - 30
LFB	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	19.9	LCS	P	0 - 30
LFB	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	7.22	LCS	P	0 - 30
LFB	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	0.0373	LCS	P	0 - 30
LFB	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	3.49	LCS	P	0 - 30
LFB	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	19.8	LCS	P	0 - 30
LFB	Hexafluoropropylene oxide dimer acid (HFPO-DA)	4.51	LCS	P	0 - 30
LFB	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.309	LCS	P	0 - 30
LFB	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.37	LCS	P	0 - 30
LFB	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	11.3	LCS	P	0 - 30
LFB	Perfluoro-1-butane sulfonamide (FBSA)	3.70	LCS	P	0 - 30
LFB	Perfluoro-1-hexane sulfonamide (FHxSA)	4.40	LCS	P	0 - 30
LFB	Perfluoro-1-octane sulfonamide (FOSA)	4.13	LCS	P	0 - 30
LFB	Perfluoro-3-methoxypropanoic acid (PFMPA)	7.56	LCS	P	0 - 30
LFB	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	7.93	LCS	P	0 - 30
LFB	Perfluoro-4-methoxybutanoic acid (PFMBA)	13.3	LCS	P	0 - 30
LFB	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.87	LCS	P	0 - 30
LFB	Perfluorobutanesulfonic acid (PFBS)	7.20	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: DEP SOP: LC-001-3
Batch ID: P424572

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Perfluorobutanoic acid (PFBA)	10.2	LCS	P	0 - 30
LFB	Perfluorodecanesulfonic acid (PFDS)	10.4	LCS	P	0 - 30
LFB	Perfluorodecanoic acid (PFDA)	24.1	LCS	P	0 - 30
LFB	Perfluorododecanoic acid (PFDoA)	7.35	LCS	P	0 - 30
LFB	Perfluoroheptanesulfonic acid (PFHpS)	0.768	LCS	P	0 - 30
LFB	Perfluoroheptanoic acid (PFHpA)	7.55	LCS	P	0 - 30
LFB	Perfluorohexanesulfonic acid (PFHxS)	5.82	LCS	P	0 - 30
LFB	Perfluorohexanoic acid (PFHxA)	11.9	LCS	P	0 - 30
LFB	Perfluorononanesulfonic acid (PFNS)	9.37	LCS	P	0 - 30
LFB	Perfluorononanoic acid (PFNA)	7.09	LCS	P	0 - 30
LFB	Perfluorooctanesulfonic acid (PFOS)	16.1	LCS	P	0 - 30
LFB	Perfluorooctanoic acid (PFOA)	15.9	LCS	P	0 - 30
LFB	Perfluoropentanesulfonic acid (PFPeS)	7.53	LCS	P	0 - 30
LFB	Perfluoropentanoic acid (PFPeA)	1.64	LCS	P	0 - 30
LFB	Perfluoropropanesulfonic acid (PFPrS)	11.9	LCS	P	0 - 30
LFB	Perfluorotetradecanoic acid (PFTeA)	4.57	LCS	P	0 - 30
LFB	Perfluorotridecanoic acid (PFTriA)	8.68	LCS	P	0 - 30
LFB	Perfluoroundecanoic acid (PFUnA)	4.15	LCS	P	0 - 30

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report
Surrogates

Lab Sample ID: 2379234
Field Sample ID: DEPMW-1 [100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	86.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	142	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	133	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	116	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	97.6	P	30 - 160

Lab Sample ID: 2379235
Field Sample ID: DEPMW-2 [25-45']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	82.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	112	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	130	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	96.5	P	30 - 160

Lab Sample ID: 2379236
Field Sample ID: DEPMW-3 [100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	79.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	130	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	115	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	99.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	107	P	30 - 160

Lab Sample ID: 2379237
Field Sample ID: DEPMW-4 [25-45']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	78.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	131	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	128	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	93.0	P	30 - 160

Lab Sample ID: 2379238
Field Sample ID: DEPMW-5 [100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	79.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	149	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	123	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	126	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	80.3	P	30 - 160

Lab Sample ID: 2379239
Field Sample ID: DEPMW-6 [25-45']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	91.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	125	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2379239
Field Sample ID: DEPMW-6 [25-45']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	101	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	87.5	P	30 - 160

Lab Sample ID: 2379240
Field Sample ID: DEPMW-6 [25-45']DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	69.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	142	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	109	P	30 - 160

Lab Sample ID: 2379241
Field Sample ID: DEPMW-7 [100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	83.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	131	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	114	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	113	P	30 - 160

Lab Sample ID: 2379242
Field Sample ID: DEPMW-8 [20-40']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	89.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	153	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	158	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	142	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	114	P	30 - 160

Lab Sample ID: 2379243
Field Sample ID: DEPMW-9 [150-170']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	78.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	136	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	132	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	114	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	111	P	30 - 160

Lab Sample ID: 2379244
Field Sample ID: DEPMW-9 [150-170']DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	73.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	137	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	117	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	116	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2379244
Field Sample ID: DEPMW-9 [150-170']DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	89.3	P	30 - 160

Lab Sample ID: 2379245
Field Sample ID: DEPMW-10 [160-180']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	75.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	131	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	103	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	91.4	P	30 - 160

Lab Sample ID: 2379246
Field Sample ID: DEPMW-11 [165-185']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	74.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	144	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	130	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	107	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	93.6	P	30 - 160

Lab Sample ID: 2379247
Field Sample ID: DEPMW-12 [100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	91.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	151	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	122	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	104	P	30 - 160

Lab Sample ID: 2379248
Field Sample ID: DEPMW-13 [25-45']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	88.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	150	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	119	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	111	P	30 - 160

Lab Sample ID: 2379249
Field Sample ID: DEPMW-14[100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	91.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	126	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	142	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	88.9	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2379250
Field Sample ID: DEPMW-15 [25-45']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	85.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	117	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	114	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	94.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	97.5	P	30 - 160

Lab Sample ID: 2379251
Field Sample ID: DEPMW-16 [100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	88.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	136	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	154	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	114	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	93.8	P	30 - 160

Lab Sample ID: 2379252
Field Sample ID: DEPMW-17 [25-45']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	82.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	139	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	114	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	104	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	110	P	30 - 160

Lab Sample ID: 2379253
Field Sample ID: DEPMW-18 [100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	80.4	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	140	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	97.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	116	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	88.4	P	30 - 160

Lab Sample ID: 2379254
Field Sample ID: DEPMW-19 [25-45']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	82.6	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	147	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	118	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	101	P	30 - 160

Lab Sample ID: 2379255
Field Sample ID: DEPMW-20 [100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	98.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	126	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2379255
Field Sample ID: DEPMW-20 [100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	106	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	94.6	P	30 - 160

Lab Sample ID: 2379256
Field Sample ID: DEPMW-21 [25-45']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	84.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	129	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	148	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	102	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	102	P	30 - 160

Lab Sample ID: 2379257
Field Sample ID: DEPMW-22 [100-120']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	96.8	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	133	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	148	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	116	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	100	P	30 - 160

Lab Sample ID: 2379258
Field Sample ID: DEPMW-23 [25-45']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	68.5	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	123	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	113	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	102	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	115	P	30 - 160

Lab Sample ID: 2379259
Field Sample ID: UISAMW [M-200]

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	83.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	129	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	139	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	106	P	30 - 160

Lab Sample ID: 2379260
Field Sample ID: Irrigation Well [105-140']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	78.9	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	126	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	121	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	105	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2379260
Field Sample ID: Irrigation Well [105-140']

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	99.4	P	30 - 160

Lab Sample ID: 2379261
Field Sample ID: Irrigation Well [105-140']DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	95.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	127	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	109	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	98.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	98.8	P	30 - 160

Lab Sample ID: 2379262
Field Sample ID: EQB-57

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	90.7	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	101	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	103	P	30 - 160

Lab Sample ID: 2379365
Field Sample ID: FRB-13

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	83.3	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	120	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	105	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	101	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	106	P	30 - 160

Lab Sample ID: 2379366
Field Sample ID: EQB-58

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	80.1	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	117	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	111	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	96.0	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	100	P	30 - 160

Lab Sample ID: 2379367
Field Sample ID: EQB-59

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-3	Hexafluoropropylene oxide dimer acid-13C	88.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorobutanesulfonic acid-13C	108	P	30 - 160
DEP SOP: LC-001-3	Perfluorodecanoic acid-13C	127	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanesulfonic acid-13C	96.2	P	30 - 160
DEP SOP: LC-001-3	Perfluorohexanoic acid-13C	111	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A116852
Included Lab Sample IDs: 2379234, 2379235, 2379236, 2379237, 2379238, 2379239, 2379240, 2379241

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	104	101	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	94.7	104	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	82.7	92.4	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	92.4	95.1	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	101	103	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	103	92.4	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	125	126	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	126	115	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	113	113	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	113	108	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	94.5	84.1	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	95.7	94.5	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	107	120	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	120	115	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	112	99.7	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	113	112	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	112	107	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	121	112	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	107	123	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	123	131	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	112	121	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	118	112	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	95.6	99.9	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	96.2	95.6	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	107	113	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	113	108	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	108	111	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	111	109	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	102	101	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	103	102	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	103	103	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	103	112	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	101	96.8	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	96.8	92.0	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	100	92.7	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	108	100	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	83.8	92.4	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	88.3	83.8	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	102	106	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	106	97.6	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	109	112	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	91.8	109	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	103	80.3	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	80.3	93.7	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	106	112	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	112	109	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	101	116	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	116	128	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	105	111	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	111	113	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	73.7	89.1	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A116852
Included Lab Sample IDs: 2379234, 2379235, 2379236, 2379237, 2379238, 2379239, 2379240, 2379241

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluorohexanoic acid (PFHxA)	87.8	73.7	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	108	98.0	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	98.3	108	P/P	60 - 160
Perfluorononanoic acid (PFNA)	115	125	P/P	60 - 160
Perfluorononanoic acid (PFNA)	130	115	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	100	90.9	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	92.1	100	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	101	111	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	107	101	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	91.4	90.5	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	93.9	91.4	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	102	106	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	107	102	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	101	95.2	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	95.2	88.4	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	91.9	92.5	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	93.9	91.9	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	100	101	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	115	100	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	121	98.1	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	98.1	129	P/P	60 - 160

Reference Method: DEP SOP: LC-001-3
Run ID: A116888
Included Lab Sample IDs: 2379259, 2379262, 2379365, 2379366, 2379367

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	102	97.9	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	103	102	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	105	76.8	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	82.7	82.8	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	92.6	87.5	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	94.3	91.6	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	117	98.5	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	118	138	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	71.7	97.9	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	83.3	73.9	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	89.9	95.0	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	95.8	93.9	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	109	95.5	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	118	111	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	100	95.3	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	113	105	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	115	117	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	115	116	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	115	131	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	148	101	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	111	110	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	111	105	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	106	100	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	97.7	94.5	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3
Run ID: A116888
Included Lab Sample IDs: 2379259, 2379262, 2379365, 2379366, 2379367

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluoro-1-octane sulfonamide (FOSA)	110	107	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	110	99.0	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	103	97.0	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	96.9	94.0	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	114	103	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	98.1	105	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	105	93.4	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	95.6	87.9	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	91.7	99.9	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	94.9	100	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	90.9	98.5	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	91.3	96.7	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	86.4	88.1	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	91.4	83.2	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	101	99.7	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	103	98.0	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	121	103	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	127	145	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	104	104	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	113	98.3	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	105	109	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	105	111	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	106	110	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	115	101	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	102	112	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	115	105	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	85.3	93.5	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	93.6	79.9	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	100	97.9	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	102	103	P/P	60 - 160
Perfluorononanoic acid (PFNA)	109	120	P/P	60 - 160
Perfluorononanoic acid (PFNA)	128	133	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	90.8	92.0	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	93.6	92.1	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	107	103	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	109	113	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	92.9	92.3	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	98.7	92.8	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	104	103	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	112	107	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	86.3	77.0	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	95.0	103	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	87.7	89.6	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	87.8	77.8	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	104	110	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	127	97.9	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	105	120	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	111	84.8	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3

Run ID: A116930

Included Lab Sample IDs: 2379242, 2379243, 2379244, 2379245, 2379246, 2379247, 2379248, 2379249, 2379250, 2379251, 2379252, 2379253, 2379254, 2379255, 2379256, 2379257, 2379258, 2379260, 2379261

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	101	99.8	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	103	95.3	P/P	60 - 160
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	99.8	103	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	110	72.9	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	72.9	88.6	P/P	60 - 160
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	86.3	110	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	86.1	88.8	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	88.8	97.5	P/P	60 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	97.5	115	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	103	121	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	105	103	P/P	60 - 160
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	121	118	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	61.8	70.1	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	70.1	74.4	P/P	60 - 160
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	74.4	66.1	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	85.8	91.7	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	87.0	97.2	P/P	60 - 160
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	91.7	87.0	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	100	114	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	114	118	P/P	60 - 160
Hexafluoropropylene oxide dimer acid (HFPO-DA)	126	100	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	102	109	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	109	85.0	P/P	60 - 160
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	85.0	107	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	100	107	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	107	100	P/P	60 - 160
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	107	88.3	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	133	96.4	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	142	133	P/P	60 - 160
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	96.4	112	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	104	114	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	114	104	P/P	60 - 160
Perfluoro-1-butane sulfonamide (FBSA)	91.7	114	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	87.8	98.8	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	94.2	97.6	P/P	60 - 160
Perfluoro-1-hexane sulfonamide (FHxSA)	98.8	94.2	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	106	106	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	106	106	P/P	60 - 160
Perfluoro-1-octane sulfonamide (FOSA)	109	106	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	105	108	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	108	97.6	P/P	60 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	97.6	109	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	104	98.9	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	111	104	P/P	60 - 160
Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	94.7	111	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	100	88.7	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	88.7	99.4	P/P	60 - 160
Perfluoro-4-methoxybutanoic acid (PFMBA)	92.3	100	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	76.7	94.6	P/P	60 - 160
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	94.6	95.7	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3

Run ID: A116930

Included Lab Sample IDs: 2379242, 2379243, 2379244, 2379245, 2379246, 2379247, 2379248, 2379249, 2379250, 2379251, 2379252, 2379253, 2379254, 2379255, 2379256, 2379257, 2379258, 2379260, 2379261

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	95.7	97.6	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	101	95.2	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	93.2	94.8	P/P	60 - 160
Perfluorobutanesulfonic acid (PFBS)	95.2	93.2	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	84.2	85.3	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	85.3	88.1	P/P	60 - 160
Perfluorobutanoic acid (PFBA)	88.1	86.9	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	102	95.9	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	104	102	P/P	60 - 160
Perfluorodecanesulfonic acid (PFDS)	95.9	104	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	107	124	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	109	132	P/P	60 - 160
Perfluorodecanoic acid (PFDA)	132	107	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	105	109	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	108	90.1	P/P	60 - 160
Perfluorododecanoic acid (PFDoA)	109	108	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	103	107	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	107	111	P/P	60 - 160
Perfluoroheptanesulfonic acid (PFHpS)	111	106	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	109	99.5	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	114	122	P/P	60 - 160
Perfluoroheptanoic acid (PFHpA)	99.5	114	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	109	112	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	112	111	P/P	60 - 160
Perfluorohexanesulfonic acid (PFHxS)	112	112	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	81.8	89.8	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	84.4	81.8	P/P	60 - 160
Perfluorohexanoic acid (PFHxA)	94.5	84.4	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	94.2	97.1	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	95.6	94.6	P/P	60 - 160
Perfluorononanesulfonic acid (PFNS)	97.1	95.6	P/P	60 - 160
Perfluorononanoic acid (PFNA)	115	136	P/P	60 - 160
Perfluorononanoic acid (PFNA)	136	137	P/P	60 - 160
Perfluorononanoic acid (PFNA)	137	121	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	81.4	81.7	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	81.7	85.2	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	85.2	80.1	P/P	60 - 160
Perfluorooctanesulfonic acid (PFOS)	88.6	76.5	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	102	116	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	116	106	P/P	60 - 160
Perfluorooctanoic acid (PFOA)	116	102	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	74.9	87.3	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	87.3	89.7	P/P	60 - 160
Perfluoropentanesulfonic acid (PFPeS)	89.7	101	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	106	114	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	107	112	P/P	60 - 160
Perfluoropentanoic acid (PFPeA)	114	107	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	100	107	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	109	88.8	P/P	60 - 160
Perfluoropropanesulfonic acid (PFPrS)	88.8	100	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: LC-001-3

Run ID: A116930

Included Lab Sample IDs: 2379242, 2379243, 2379244, 2379245, 2379246, 2379247, 2379248, 2379249, 2379250, 2379251, 2379252, 2379253, 2379254, 2379255, 2379256, 2379257, 2379258, 2379260, 2379261

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Perfluorotetradecanoic acid (PFTeA)	105	79.2	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	79.2	100	P/P	60 - 160
Perfluorotetradecanoic acid (PFTeA)	100	88.5	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	105	116	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	107	105	P/P	60 - 160
Perfluorotridecanoic acid (PFTriA)	111	107	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	115	105	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	117	115	P/P	60 - 160
Perfluoroundecanoic acid (PFUnA)	120	117	P/P	60 - 160

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
DEP SOP: LC-001-3	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	74.2		63.7	62.4			2.10
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	76.5	72.7	55.8		5.07		
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	93.2	104			10.6		
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	78.7		91.9	112			19.8
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	108	101	83.5		7.09		
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	82.0	100			19.9		
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	81.4		89.9	95.0			5.54
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	92.5	77.8	74.7		17.3		
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	96.9	104			7.22		
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	109		127	115			9.89
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	109	125	132		13.7		
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	137	137			0.0373		
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	103		121	121			0.0842
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	73.6	81.4	61.5		9.98		
	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	63.5	65.8			3.49		
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	83.3		84.5	86.8			2.64
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	81.1	83.2	84.3		2.59		
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	94.1	115			19.8		
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	90.5		98.7	94.5			4.38
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	84.6	86.6	107		2.27		
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	99.9	105			4.51		
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	97.3		116	113			2.73
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	96.0	86.8	103		10.2		
	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	120	119			0.309		
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	98.6		104	103			0.999
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	90.8	89.9	94.5		1.02		
	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	114	111			2.37		

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
DEP SOP: LC-001-3	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	95.6		107	122			12.8
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	90.3	86.8	100		3.87		
	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	117	131			11.3		
	Perfluoro-1-butane sulfonamide (FBSA)	127		134	124			8.11
	Perfluoro-1-butane sulfonamide (FBSA)	121	121	95.7		0.0802		
	Perfluoro-1-butane sulfonamide (FBSA)	158	153			3.70		
	Perfluoro-1-hexane sulfonamide (FHxSA)	116		106	105			0.542
	Perfluoro-1-hexane sulfonamide (FHxSA)	116	101	94.8		13.3		
	Perfluoro-1-hexane sulfonamide (FHxSA)	137	143			4.40		
	Perfluoro-1-octane sulfonamide (FOSA)	87.5		114	96.8			16.1
	Perfluoro-1-octane sulfonamide (FOSA)	91.9	96.4	93.1		4.85		
	Perfluoro-1-octane sulfonamide (FOSA)	109	113			4.13		
	Perfluoro-3-methoxypropanoic acid (PFMPA)	104		118	119			0.670
	Perfluoro-3-methoxypropanoic acid (PFMPA)	97.5	97.3	99.3		0.173		
	Perfluoro-3-methoxypropanoic acid (PFMPA)	117	127			7.56		
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	94.1		100	98.3			1.79
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	94.3	95.3	90.9		1.11		
	Perfluoro-4-ethylcyclohexanesulfonic acid (PFECHS)	114	105			7.93		
	Perfluoro-4-methoxybutanoic acid (PFMBA)	97.1		122	121			0.667
	Perfluoro-4-methoxybutanoic acid (PFMBA)	81.9	89.4	91.6		8.69		
	Perfluoro-4-methoxybutanoic acid (PFMBA)	116	132			13.3		
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	93.6		98.3	94.7			3.83
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	86.4	88.6	88.5		2.59		
	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	104	110			4.87		
	Perfluorobutanesulfonic acid (PFBS)	91.0		108	88.7			8.82
	Perfluorobutanesulfonic acid (PFBS)	88.4	85.2	91.7		3.66		
	Perfluorobutanesulfonic acid (PFBS)	106	114			7.20		
	Perfluorobutanoic acid (PFBA)	80.2		90.4	109			9.54
	Perfluorobutanoic acid (PFBA)	77.9	76.2	91.3		2.18		
	Perfluorobutanoic acid (PFBA)	93.9	104			10.2		
	Perfluorodecanesulfonic acid (PFDS)	80.7		66.9	71.6			6.67
	Perfluorodecanesulfonic acid (PFDS)	80.6	79.2	66.2		1.78		

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
DEP SOP: LC-001-3	Perfluorodecanesulfonic acid (PFDS)	99.2	110			10.4		
	Perfluorodecanoic acid (PFDA)	133		95.6	113			12.9
	Perfluorodecanoic acid (PFDA)	95.1	107	105		11.6		
	Perfluorodecanoic acid (PFDA)	116	147			24.1		
	Perfluorododecanoic acid (PFDoA)	91.2		93.7	81.3			14.2
	Perfluorododecanoic acid (PFDoA)	88.2	72.4	112		19.7		
	Perfluorododecanoic acid (PFDoA)	99.3	107			7.35		
	Perfluoroheptanesulfonic acid (PFHpS)	103		102	110			7.52
	Perfluoroheptanesulfonic acid (PFHpS)	99.3	102	95.6		2.80		
	Perfluoroheptanesulfonic acid (PFHpS)	113	112			0.768		
	Perfluoroheptanoic acid (PFHpA)	92.3		112	116			2.49
	Perfluoroheptanoic acid (PFHpA)	89.7	73.6	109		19.8		
	Perfluoroheptanoic acid (PFHpA)	123	133			7.55		
	Perfluorohexanesulfonic acid (PFHxS)	101		114	92.1			11.8
	Perfluorohexanesulfonic acid (PFHxS)	94.0	99.2	95.0		5.43		
	Perfluorohexanesulfonic acid (PFHxS)	121	114			5.82		
	Perfluorohexanoic acid (PFHxA)	79.6		86.0	67.9			14.1
	Perfluorohexanoic acid (PFHxA)	71.6	73.7	87.4		2.90		
	Perfluorohexanoic acid (PFHxA)	83.2	93.8			11.9		
	Perfluorononanesulfonic acid (PFNS)	80.9		83.8	88.0			4.95
	Perfluorononanesulfonic acid (PFNS)	87.1	83.9	80.8		3.76		
	Perfluorononanesulfonic acid (PFNS)	100	110			9.37		
	Perfluorononanoic acid (PFNA)	130		142	151			4.46
	Perfluorononanoic acid (PFNA)	112	128	111		13.9		
	Perfluorononanoic acid (PFNA)	131	140			7.09		
	Perfluorooctanesulfonic acid (PFOS)	89.2						5.53
	Perfluorooctanesulfonic acid (PFOS)	82.7	82.6	94.5		0.125		
	Perfluorooctanesulfonic acid (PFOS)	91.5	107			16.1		
	Perfluorooctanoic acid (PFOA)	92.6		103	103			0.0428
	Perfluorooctanoic acid (PFOA)	88.7	93.1	115		4.91		
	Perfluorooctanoic acid (PFOA)	127	148			15.9		
	Perfluoropentanesulfonic acid (PFPeS)	93.0		80.6	89.9			10.2
	Perfluoropentanesulfonic acid (PFPeS)	88.0	83.7	91.2		5.04		
	Perfluoropentanesulfonic acid (PFPeS)	104	112			7.53		
	Perfluoropentanoic acid (PFPeA)	100		115	122			3.42
	Perfluoropentanoic acid (PFPeA)	92.6	96.9	105		4.54		
	Perfluoropentanoic acid (PFPeA)	117	115			1.64		
	Perfluoropropanesulfonic acid (PFPrS)	79.1		105	96.4			8.35
	Perfluoropropanesulfonic acid (PFPrS)	77.3	75.8	80.4		1.94		

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
DEP SOP: LC-001-3	Perfluoropropanesulfonic acid (PFPrS)	117	104			11.9		
	Perfluorotetradecanoic acid (PFTeA)	72.7		113	91.7			20.4
	Perfluorotetradecanoic acid (PFTeA)	82.5	81.5	68.2		1.18		
	Perfluorotetradecanoic acid (PFTeA)	95.1	99.6			4.57		
	Perfluorotridecanoic acid (PFTriA)	124		103	117			12.9
	Perfluorotridecanoic acid (PFTriA)	93.5	98.2	87.2		4.90		
	Perfluorotridecanoic acid (PFTriA)	125	115			8.68		
	Perfluoroundecanoic acid (PFUnA)	104		93.7	102			8.37
	Perfluoroundecanoic acid (PFUnA)	86.5	103	81.8		17.8		
	Perfluoroundecanoic acid (PFUnA)	119	124			4.15		

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: LC-001-3	Perfluorinated alkyl substances in water matrices by HPLC/MS/MS	2379234, 2379235, 2379236, 2379237, 2379238, 2379239, 2379240, 2379241, 2379242, 2379243, 2379244, 2379245, 2379246, 2379247, 2379248, 2379249, 2379250, 2379251, 2379252, 2379253, 2379254, 2379255, 2379256, 2379257, 2379258, 2379259, 2379260, 2379261, 2379262, 2379365, 2379366, 2379367

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: LC-001-3	01/10/2023	01/11/2023 09:00	Hoor Shaik	01/11/2023 17:18	Mohammad Ghaffari	2379239
	01/10/2023	01/11/2023 09:00	Hoor Shaik	01/11/2023 17:29	Mohammad Ghaffari	2379240
	01/10/2023	01/11/2023 09:00	Hoor Shaik	01/11/2023 19:17	Mohammad Ghaffari	2379234
	01/10/2023	01/11/2023 09:00	Hoor Shaik	01/11/2023 19:27	Mohammad Ghaffari	2379235
	01/10/2023	01/11/2023 09:00	Hoor Shaik	01/11/2023 19:38	Mohammad Ghaffari	2379236
	01/10/2023	01/11/2023 09:00	Hoor Shaik	01/11/2023 19:49	Mohammad Ghaffari	2379237
	01/10/2023	01/11/2023 09:00	Hoor Shaik	01/11/2023 20:00	Mohammad Ghaffari	2379238
	01/10/2023	01/11/2023 09:00	Hoor Shaik	01/11/2023 20:11	Mohammad Ghaffari	2379241
	01/10/2023	01/12/2023 09:00	Hoor Shaik	01/12/2023 21:49	Mohammad Ghaffari	2379262
	01/10/2023	01/12/2023 09:00	Hoor Shaik	01/12/2023 22:00	Mohammad Ghaffari	2379365
	01/10/2023	01/12/2023 09:00	Hoor Shaik	01/12/2023 22:10	Mohammad Ghaffari	2379366
	01/10/2023	01/12/2023 09:00	Hoor Shaik	01/12/2023 22:21	Mohammad Ghaffari	2379367
	01/10/2023	01/12/2023 09:00	Hoor Shaik	01/13/2023 02:08	Mohammad Ghaffari	2379259
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 16:07	Mohammad Ghaffari	2379243
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 16:18	Mohammad Ghaffari	2379244
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 16:29	Mohammad Ghaffari	2379260
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 16:40	Mohammad Ghaffari	2379261
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 17:01	Mohammad Ghaffari	2379242
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 17:12	Mohammad Ghaffari	2379245
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 17:23	Mohammad Ghaffari	2379246
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 17:34	Mohammad Ghaffari	2379247
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 17:44	Mohammad Ghaffari	2379248
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 17:55	Mohammad Ghaffari	2379249
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 18:06	Mohammad Ghaffari	2379250
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 18:17	Mohammad Ghaffari	2379251
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 18:38	Mohammad Ghaffari	2379252
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 18:49	Mohammad Ghaffari	2379253
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 19:00	Mohammad Ghaffari	2379254
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 19:11	Mohammad Ghaffari	2379255
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 19:21	Mohammad Ghaffari	2379256
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 19:32	Mohammad Ghaffari	2379257
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 19:43	Mohammad Ghaffari	2379258
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/17/2023 20:05	Mohammad Ghaffari	2379242
	01/10/2023	01/17/2023 09:00	Hoor Shaik	01/18/2023 08:33	Mohammad Ghaffari	2379242

APPENDIX E

Final IDW Manifests

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
ERIC_5641			

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

Former Florida State Fire College
1501 W. Silver Springs Blvd
Ocala, FL 34475

6. Transporter 1 Company Name: Erwin Remediation, Inc.

U.S. EPA ID Number: FLR000223867

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Facility's Phone:

Ecosouth Services
12950-A Highway 43
Axis, AL 36505

U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Soil		DM	1		
2.	Non-Hazardous Groundwater		DM	6		
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: AS AGENT for FDEP under HW 683: RIK MATHIAS

Signature: Rik Mathias

Month: 4 Day: 21 Year: 22

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S.

Transporter Signature (for exports only):

Port of Entry/Exit:

Date Leaving U.S.:

TRANSPORTER

16. Transport Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: John Rogalski

Signature

Month: 4 Day: 21 Year: 22

Transporter 2 Printed/Typed Name

Signature

Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA IS Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: M. Memmott

Signature: M. Memmott

Month: 4 Day: 25 Year: 22

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

Former Florida State Fire College
1501 West Silver Springs
Ocala, FL 34475

6. Transporter 1 Company Name: Erwin Remediation, Inc.

U.S. EPA ID Number: FLR000223867

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Ecosouth Services
12950-A Highway 43
Axis, AL 36505

Facility's Phone:

U.S. EPA ID Number

GENERATOR

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Soil		DM	6		
2.	Non-Hazardous Water		DM	6		
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: As agent for FDEP: James Mills

Signature: James Mills

Month: 11 Day: 30 Year: 22

INTL

15. International Shipments ☐ Import to U.S. ☐ Export from U.S.

Port of Entry/Exit:

Transporter Signature (for exports only):

Date Leaving U.S.:

TRANSPORTER

16. Transport Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: C. Bass

Signature: C. Bass

Month: 11 Day: 30 Year: 22

Transporter 2 Printed/Typed Name

Signature

Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA IS Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: Linda Nichols

Signature: LN

Month: 12 Day: 10 Year: 22

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

Former Florida State Fire College
1501 West Silver Springs
Ocala, FL 34475

6. Transporter 1 Company Name: Erwin Remediation, Inc.

U.S. EPA ID Number: FLR000223867

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Facility's Phone:

Ecosouth Services
12950-A Highway 43
Axis, AL 36505

U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Soil		DM	7		
2.	Non-Hazardous Water		DM	8		
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: As agent for FDEP: Alex Lamore

Signature

Month: 12 Day: 8 Year: 22

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S.

Port of Entry/Exit:

Transporter Signature (for exports only):

Date Leaving U.S.:

TRANSPORTER

16. Transport Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: Tyler Marolf

Signature

Month: 12 Day: 8 Year: 22

Transporter 2 Printed/Typed Name

Signature

Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA IS Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: Linda Nichols

Signature

Month: 12 Day: 10 Year: 22

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

Former Florida State Fire College
1501 West Silver Springs Rd
Ocala, FL 34475

6. Transporter 1 Company Name: Erwin Remediation, Inc.

U.S. EPA ID Number: FLR000223867

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Facility's Phone:

Ecosouth Services
12950-A Highway 43
Axis, AL 36505

U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Soil	2	DM			
2.	Non-Hazardous Water	12	DM			
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: As agent for FDEP: James Mills

Signature: James Mills III

Month: 12 Day: 16 Year: 22

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S.

Transporter Signature (for exports only):

Port of Entry/Exit:

Date Leaving U.S.:

TRANSPORTER

16. Transport Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: Tyler Marolf

Signature: T. Marolf

Month: 12 Day: 16 Year: 22

Transporter 2 Printed/Typed Name

Signature

Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA IS Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: M. Mumsett

Signature: M. Mumsett

Month Day Year 12/22

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

Former Florida State Fire College
1501 West Silver Springs
Ocala, FL 34475

6. Transporter 1 Company Name: Erwin Remediation, Inc.

U.S. EPA ID Number: FLR000223867

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Facility's Phone:

Ecosouth Services
12950-A Highway 43
Axis, AL 36505

U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Soil		DM	10		
2.	Non-Hazardous Groundwater		DM	3		
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: Alex Lamore as agent for FDFP

Signature

Month: 12 Day: 21 Year: 22

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S.

Port of Entry/Exit:

Transporter Signature (for exports only):

Date Leaving U.S.:

TRANSPORTER

16. Transport Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: Tyler Marolf

Signature

Month: 12 Day: 21 Year: 22

Transporter 2 Printed/Typed Name

Signature

Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA IS Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: M. Mumsett

Signature: M. Mumsett

Month Day Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

Former Florida State Fire College
1501 West Silver Springs Blvd
Ocala, FL 34475

6. Transporter 1 Company Name: Erwin Remediation, Inc.

U.S. EPA ID Number: FLR000223867

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Facility's Phone:

Ecosouth Services
12950-A Highway 43
Axis, AL 36505

U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Groundwater		DM	9		
2.	Non-Hazardous Soil		DM	1		
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: AS agent for FDEP under HW683 : samaKemari

Signature: SamaKemari

Month: 01 Day: 19 Year: 2023

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S.

Port of Entry/Exit:

Transporter Signature (for exports only):

Date Leaving U.S.:

TRANSPORTER

16. Transport Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: Tyler Mavolf

Signature

Month: 1 Day: 19 Year: 23

Transporter 2 Printed/Typed Name

Signature

Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA IS Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: Linda Nichols

Signature

Month Day Year: 01/20/23