Air Force Civil Engineer Center

FINAL

Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P

Eielson Air Force Base, Fairbanks North Star Borough, Alaska

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Eielson Air Force Base, Alaska
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Acronyms and Abbreviations

Acronym	Definition
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
µg/m^2/day	micrograms per square meter per day
A-A 8(a) JV	Ahtna Solutions, LLC-Arcadis U.S., Inc. 8(a) Joint Venture
AAC	Alaska Administrative Code
AFCEC	Air Force Civil Engineer Center
AFFF	aqueous film-forming foam
Ahtna	Ahtna Solutions, LLC
Arcadis	Arcadis U.S., Inc.
B&R	Bouwer & Rice
bgs	below ground surface
CAC	colloidal activated carbon
cm/day	centimeters per day
cm/sec	centimeters per second
DEC	Alaska Department of Environmental Conservation
DGI	data gap investigation
DQO	data quality objective
EAFB	Eielson Air Force Base
Enviroflux	Enviroflux, LLC
EPA	United States Environmental Protection Agency
Foc	fraction of organic carbon
ft/ft	foot per foot
GAC	granular activated carbon
GPR	ground penetrating radar
GPS	Global Positioning System
HDPE	high-density polyethylene
HFPO-DA	hexafluoropropylene oxide dimer acid
HQ	hazard quotient
IDW	investigation-derived waste
IWMP	installation-wide monitoring program
KGS	KGS Model
LOD	Limit of detection
L/kg	liters per kilogram
MCL	Maximum Contaminant Level

Acronym	Definition
mg/L	Milligram per liter
ND	non-detect
ng/L	nanograms per liter
OUSD	Office of the Under Secretary of Defense
PAL	project action level
PFAS	per- and polyfluoroalkyl substances
PFM	passive flux meter
PFOS	perfluorooctane sulfonate
PFOA	perfluorooctanoic acid
PFHxS	perfluorohexane sulfonate
PFHxA	perfluorohexanoic acid
PFNA	perfluorononanoic acid
PFBS	perfluorobutanesulfonic acid
PFBA	perfluorobutanoic acid
PPE	personal protective equipment
PSC	pilot study construction
psi	pounds per square inch
PSL	project screening level
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
QC	quality control
RCRA	Resource Conservation and Recovery Act
Republic	Republic Services, Inc.
RI	Remedial Investigation
RSL	Regional Screening Level
SOP	standard operating procedure
TCLP	toxicity characteristic leaching procedure
TDS	total dissolved solids
TOC	total organic carbon
TSS	total suspended solids
U.S.	United States
VAP	vertical aquifer profile

1 Introduction

The Ahtna Solutions, LLC (Ahtna)-Arcadis U.S., Inc. (Arcadis) 8(a) Joint Venture (A-A 8(a) JV) is under contract (FA8903-23-C-0037) to the Air Force Civil Engineer Center (AFCEC) to provide remediation services to conduct a data gap investigation (DGI) and groundwater pilot study construction (PSC) in support of the groundwater response action for per- and polyfluoroalkyl substances (PFAS) treatment at site FT009P at Eielson Air Force Base (EAFB), Alaska (site). The site vicinity and location are shown on **Figure 1**.

PFAS are a group of synthetic fluorinated compounds used to make everyday products more resistant to heat, stains, grease, and water; they are also used as components in aqueous film-forming foams (AFFFs). These chemicals were used by the military to extinguish fires or for training purposes, as well as in some waterproofing and laundry activities. The chemical structures of PFAS make them very resistant to breakdown in the environment. Because of their persistence, bioaccumulation potential, mobility, and toxicity, PFAS can negatively impact human health and the environment.

Historical use of PFAS in AFFF applications at EAFB has resulted in their release to environmental media. PFAS-impacted groundwater has migrated to downgradient drinking water supplies off EAFB. As a result of impacts observed downgradient of EAFB, a pilot study is being conducted near the downgradient property boundary of EAFB to evaluate the efficacy of using colloidal activated carbon (CAC) injection to reduce the mass flux of PFAS contaminants migrating off EAFB in groundwater. This report discusses the results of the DGI.

The DGI was conducted during the 2024 field season in accordance with the Final Quality Assurance Project Plan (QAPP) for Remediation Services to Conduct Data Gap Investigation and Groundwater Pilot Study Construction in Support of Response Action for PFAS Treatment at FT009P (AFCEC 2024a). This report presents a brief project background, data quality objectives, field activities and methods, results, discussion of results, and summary and conclusions related to the DGI effort. Details pertaining to injection well design and installation will be detailed in a QAPP Addendum. CAC injection design will be the subject of a future contract following the PSC and will involve an additional QAPP Addendum.

1.1 Project Background

EAFB is located within Fairbanks North Star Borough, approximately 25 miles southeast of Fairbanks and approximately 1 mile southeast of Moose Creek, Alaska (**Figure 1**). EAFB encompasses an area of approximately 19,700 acres and current operations include industrial areas, aircraft maintenance and operations, an active runway and associated facilities, administrative offices, and residential and recreational facilities. EAFB has approximately 3,651 acres of improved or partially improved land and 16,139 acres of undeveloped land including forests, wetlands, lakes, and ponds. EAFB is in a relatively undeveloped area and is bordered on the northwest by the Moose Creek community, and east and west by undeveloped military reservation lands. The Salcha area community lies a few miles to the south. Commercial, light industrial, and residential areas, as well as recreational areas, have been developed in a narrow corridor along the Richardson Highway between EAFB and Fairbanks (AECOM 2013).

There have been ongoing PFAS-specific environmental investigations related to AFFF usage at EAFB since 2014, specifically for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). Potential source areas on Base include fire training areas, hangars, fire stations, emergency response areas, AFFF spray test areas, AFFF spill areas, and releases from suppression systems and storage tanks (AFCEC 2021). Site-wide and off-Base groundwater has been characterized through multiple investigations, installation and sampling of

permanent and temporary monitoring wells, periodic sampling of production wells and off-Base private water supply wells, and the ongoing Phase I remedial investigation (RI) at EAFB, which will result in a refined conceptual site model. PFAS concentrations exceeding current screening levels have been detected in multiple media including soil, surface water, groundwater, porewater, and biota. Site-wide impacted areas and media are described in the Final QAPP for Remedial Investigation for PFAS at Various Sites (AFCEC 2021).

As a part of the Phase I RI, transects of vertical aquifer profile (VAP) borings installed perpendicular to groundwater flow have been completed for groundwater PFAS characterization. The VAP transect located at the northern end of the Base (Phase I RI VAP Transect 2, **Figure 1**) and in the off-Base community of Moose Creek (Phase I RI VAP Transect 6, **Figure 1**) indicate that elevated PFAS concentrations exceeding current project screening levels (PSLs) are present in shallow and deep groundwater and are migrating off-Base to the Moose Creek community and Chena Floodplain (AFCEC 2024a). Due to off-Base plume migration, the location of the pilot study area was selected on the northwest portion of EAFB, approximately 1,200 feet from the northern EAFB boundary and less than 1-mile upgradient of the Moose Creek community (**Figure 1**). The site consists of an area of approximately 4 acres east of Old Richardson Highway and north of Transmitter Road.

1.2 Project/Data Quality Objectives

The overarching goal of the DGI was to provide the data required to effectively make injection well design decisions for the pilot study and to support implementation of the pilot study with respect to injection planning and CAC loading. Individual data quality objectives (DQOs) were to investigate PFAS concentrations in both soil and groundwater, understand PFAS mass flux, evaluate general physical and chemical aquifer characteristics, and construct a monitoring well network to support the pilot study.

The site layout is included on **Figure 2**. The DQOs of the DGI and the data collected to accomplish each of the DQOs are as follows:

- Understand the lateral and vertical distribution of PFAS concentrations within saturated soil and groundwater at the site.
    - Soil sampling within the saturated zone from each deep performance monitoring well boring to provide definitive soil analytical data for PFAS
    - Installation and groundwater sampling of eight clusters of performance monitoring wells within the shallow, intermediate, and deep aquifer zones to provide baseline groundwater analytical data for PFAS
- Understand geochemical properties of groundwater at the site.
    - Groundwater sampling of geochemical parameters from each performance monitoring well to establish baseline geochemical conditions in groundwater
- Understand geotechnical properties of soils within the saturated zone at the site.
    - Soil sampling within the saturated zone from each deep performance monitoring well boring to provide geotechnical information including bulk density and porosity
- Provide data to understand the magnitude and distribution of hydraulic conductivity, discrete PFAS mass flux, and groundwater flux at each performance monitoring well to support injection strategy and design.
    - Slug testing at each performance monitoring well to provide hydraulic conductivity data

    - Soil sampling at each deep performance monitoring well boring for grain-size distribution to support injection well screen design decisions and provide supplemental hydraulic conductivity data
    - Deployment and sampling of passive flux meters (PFMs) to provide screening level data for quantitative estimates of groundwater velocities and PFAS mass flux
- Understand potential CAC interferences and competitors for binding sites.
    - A review of existing monitoring data collected in the vicinity of the site to evaluate the potential for competing constituents

As described, the analytical approach includes the use of both definitive and screening-level data. Screening-level data are associated with the analytical testing of the alcohol tracer and PFAS for the PFMs, which provide a high-resolution quantitative estimation of mass flux that will be used to make decisions regarding CAC injection loading. Definitive-level data are associated with samples collected from soil borings and monitoring wells, which will be used to provide baseline data in support of the pilot study performance monitoring.

1.3 Project Screening Levels

For PFAS in soil, analytical results are compared to the lowest values published as the most conservative values of either the Title 18 Alaska Administrative Code (AAC) Chapter 75.341 (18 AAC 75) Table B1 Method Two migration-to-groundwater soil cleanup levels (Alaska Department of Environmental Conservation [DEC] 2023) or the United States (U.S.) Department of Defense (DoD) risk screening levels published in the DoD Memorandum: *Investigating Per- and Polyfluoroalkyl Substances within the Department of Defense Cleanup Program* (DoD 2025), which lowered the soil screening levels for PFOS and PFOA compared to the DGI QAPP (AFCEC 2024a).

For PFAS in groundwater, analytical results are compared to the DoD risk screening levels published in the DoD Memorandum: *Investigating Per- and Polyfluoroalkyl Substances within the Department of Defense Cleanup Program* (DoD 2025), which set groundwater screening levels for groundwater used as drinking water based on the following hierarchy:

- November 2024 EPA Regional Screening Levels (RSLs), using a hazard quotient of 0.1 (i.e., assuming multiple PFAS are present) and a residential scenario, are used as the baseline for establishing DoD screening levels.
- MCLs are used as DoD screening levels where the RSL is less than the pooled method detection limit (MDL) identified in EPA Method 1633 (DoD 2025).
- The pooled MDL for EPA Method 1633 is used as the DoD screening level where a PFAS compound has an RSL that is less than the MDL and for which no MCL exists.

The 2025 update established DoD screening levels for 11 PFAS compounds in water: perfluorobutanoic acid (PFBA), perfluorohexanoic acid (PFHxA), PFOA, PFNA, PFBS, PFHxS, PFOS, HFPO-DA, bis(trifluoromethylsulfonyl)amine (TFSI), perfluoropropanoic acid (PFPrA), and perfluorodecanoic acid (PFDA). Prior to 2025, TFSI and PFPrA were not available for analysis in a DoD Environmental Laboratory Accreditation Program-accredited method, so they were not included in the DGI QAPP (AFCEC 2024a) and were not analyzed during the DGI. The DoD screening level for PFDA was new in the 2025 DoD memorandum (DoD 2025), so it was not included in the DGI QAPP, but PFDA was included in the Draft Method 1633 analyte list used for the DGI so the updated PFDA screening level is presented in this report. Inorganic analytes (non-PFAS) in groundwater are compared to the November 2024 MCLs (EPA 2024). **Exhibit 1** summarizes the PSLs for soil and groundwater.

Exhibit 1: Summary of Project Screening Levels for Soil and Groundwater

Analyte	Soil PSL (µg/kg)	Soil PSL Source	Groundwater PSL	Groundwater PSL Source
PFBA	7,800	Resident Soil RSL	1,800 ng/L	Tap Water RSL
PFDoA	320	Resident Soil RSL	-	-
PFHxA	3,200	Resident Soil RSL	990 ng/L	Tap Water RSL
PFNA	19	Resident Soil RSL	5.9 ng/L	Tap Water RSL
PFOA	0.070	MDL	4.0 ng/L	MCL
PFTeDA	6,300	Resident Soil RSL	-	-
PFUdA	1,900	Resident Soil RSL	-	-
PFBS	1,900	Resident Soil RSL	600 ng/L	Tap Water RSL
PFHxS	130	Resident Soil RSL	10 ng/L	MCL
PFOS	0.63	Resident Soil RSL	4.0 ng/L	MCL & Tap Water RSL
HFPO-DA	23	Resident Soil RSL	1.5 ng/L	Tap Water RSL
PFDA	0.06	MDL	0.52 ng/L	MDL
Arsenic	-	-	10 µg/L	MCL
Barium	-	-	2,000 µg/L	MCL
Cadmium	-	-	5 µg/L	MCL
Chromium	-	-	100 µg/L	MCL
Mercury	-	-	2 µg/L	MCL
Selenium	-	-	50 µg/L	MCL
Nitrate/Nitrite	-	-	10 mg/L / 1 mg/L	MCL

Notes:
For acronym definitions, please refer to the list of Acronym and Abbreviations at the front of the document.
- = not applicable to this project or not available as a screening level
Soil PSLs are either the 18 AAC 75.341 DEC Table B1 Method Two migration-to-groundwater soil cleanup levels (DEC 2023) or DoD Resident Scenario RSLs for soil (HQ =0.1) based on the November 2024 EPA RSL update (DoD 2025), whichever is lower.
Groundwater PSLs are the MCL, the Tap Water RSLs for groundwater (HQ = 0.1) based on the November 2024 EPA RSL update, or the MDL, based on the DoD risk screening levels hierarchy (DoD 2025).

2 Field Activities and Methods

The DGI investigation activities were completed between 8 May 2024 and 6 September 2024, and included site preparation, performance monitoring well installation, soil sampling, groundwater sampling, slug testing, and PFM sampling at the DGI cluster locations. A table summarizing the sampling and analyses described in the following sections is provided as **Table 1.** The field methods used for completion of each of these activities were performed in accordance with standard operating procedures (SOPs) and technical guidance instructions included in the Final QAPP (AFCEC 2024a) and DEC Field Sampling Guidance (DEC 2024). Field documentation was recorded using electronic field devices (iPads) and paper field logs. Field sampling logs are included as **Appendix A**. A photograph log of the various field activities described in this section and the Weekly Field Reports are included as **Appendices A1 and A2**, respectively.

2.1 Permitting and Site Preparation

Permitting and site preparation activities were conducted between 8 May 2024 and 10 June 2024 and consisted of removing vegetation, conducting utility locates including a ground penetrating radar (GPR) survey, constructing temporary onsite secondary containment, and erecting a soil logging and sampling shelter.

On 8 May 2024, A-A 8(a) JV field personnel located the approximate center of each proposed monitoring well cluster location using a handheld Global Positioning System (GPS) and Eos Arrow 100® global navigation satellite system receiver and marked each location with wooden laths. The endpoints of the proposed 500-foot-long injection well transect were also located and marked. A Base Civil Engineering Work Clearance Request, Air Force Form 103, was initiated on 10 May 2024. On 15 May 2024, A-A 8(a) JV field personnel cleared vegetation in preparation for the GPR survey; 15-foot by 15-foot squares were cleared around each cluster center and an 8-foot-wide swath was cleared along the potential 500-foot-long injection well transect. On 25 May 2024, Northern Land Use Research Alaska, LLC, conducted a GPR survey, serving as a third-party utility locating contractor. Field data were collected using a Leica DS9000 GPR. On 29 May 2024, A-A 8(a) JV field personnel submitted a public utility locate request with the Alaska Digline.

On 10 June 2024, A-A 8(a) JV field personnel performed a site-wide vegetation clearing effort in preparation for monitoring well installation at the eight well-cluster locations. An onsite secondary containment cell was constructed using timbers and 12-mil impermeable liner for staging containerized investigation-derived waste (IDW) solids and liquids prior to transport to the EAFB IDW holding cells at LF003. A 20-foot by 13-foot ShelterLogic® was erected to provide shade and protection from precipitation while soil sampling and for general storage space for field equipment and materials.

2.2 Performance Monitoring Well Installation

Between 10 and 22 June 2024, the A-A 8(a) JV team and drilling subcontractor, Northern Sonic, installed eight monitoring-well clusters of three wells per cluster to be used for baseline groundwater characterization, mass flux analysis, and evaluation of aquifer hydraulics in the study area. Monitoring well drilling and field sampling was conducted in accordance with DEC Field Sampling Guidance (DEC 2024), DEC Monitoring Well Guidance (DEC 2013), and SOPs P-04, P-05, P-06, and P-07 (AFCEC 2024a). Three monitoring well clusters were installed approximately 60 feet upgradient of the proposed injection transect (CACMW-001, CACMW-002, and CACMW-003); one cluster was installed approximately 30 feet downgradient of the transect (CACMW-004); three clusters were installed approximately 60 feet downgradient of the transect (CACMW-005, CACMW-006, and CACMW-

007); and one cluster was installed approximately 90 feet downgradient of the transect (CACMW-008) (**Figure 2**). Each well cluster consisted of one well screened from the interval of 10–60 feet below ground surface (bgs), one well screened from the interval of 60–110 feet bgs, and one well screened from the interval of 110–160 feet bgs. Well construction details are provided in **Table 2** and boring and monitoring well construction logs are attached in **Appendix A3**.

During drilling of the 160-foot well borings in each well cluster, continuous soil core logging was completed to understand soil lithology following the procedures in SOP P-03 (AFCEC 2024a). Grab soil samples were collected from the saturated zone and analyzed for PFAS and geotechnical analyses (soil classification, grain size distribution, bulk density, moisture content, porosity, and organic carbon fractionation). Three soil samples were collected within 5-foot intervals where PFMs were planned to be deployed in the 50-foot screens: one sample corresponding to each depth interval of the planned wells (shallow, intermediate, and deep) (**Table 1**). Additional soil samples were collected from the 160-foot borings at clusters CACMW-005, CACMW-006, and CACMW-007, with a focus on lithologic variation and vertical depth distribution. A total of 32 primary PFAS samples and 40 primary geotechnical samples were collected. Four field duplicate samples, one matrix spike/matrix spike duplicate, two field blanks, and one equipment blank were also collected and analyzed for PFAS.

Following logging and sampling of the 160-foot borings, the 160-foot monitoring well was installed in the boring. The remaining two wells (110-foot and 60-foot) were installed in separate boreholes. Each monitoring well was constructed with 50 feet of 2-inch, 0.010-slot, stainless steel wire-wrapped screen and 2-inch, Schedule 40 polyvinyl chloride (PVC) risers, with a 2-foot sump, bottom cap, and plug (**Table 2**). Centralizers were initially planned every 30 feet to center the wells in the boreholes, but bridging of bentonite occurred at the initial installation of CACMW-001-160, causing the well to lift 7 feet when attempting to release it. This installation attempt was abandoned in accordance with DEC's Monitoring Well Guidance (DEC 2013). Going forward, centralizers were installed approximately 10 feet below the top of each well screen within the filter pack and at the bottom of the screen at the sump. The wells in each cluster were placed approximately 5 feet apart in a line parallel to the proposed injection transect and perpendicular to the generalized groundwater flow direction. The shallow and intermediate wells were installed on either side of the deep well (west and east, respectively) with the exception of CACMW-001 (**Figure 2**). Well stick-ups, completed at the surface within aluminum monument vaults, were kept to less than 1 foot above ground surface to allow for easier PFM deployment and retrieval. Protective bollards were installed around each well cluster, and wells were locked with a combination lock provided by AFCEC.

Monitoring wells were developed between 28 June 2024 and 3 July 2024 in accordance with DEC's Monitoring Well Guidance (DEC 2013) and SOP P-10 (AFCEC 2024a). Well development consisted of surging the entire length of each well screen in 2-foot intervals twice with a weighted surge block attached to a tether. Pumping was completed with a Mega-Monsoon® submersible pump after each round of surging until field parameters stabilized and turbidity was less than 50 nephelometric turbidity units. Well development logs are included as **Appendix A4**.

A monitoring well top-of-casing survey was performed by a licensed professional land surveyor, Design Alaska, on 25 July 2024. The 24 monitoring wells were surveyed using Leica GS16 dual-frequency GPS receivers with fixed height rods for the base station and rover. Elevations were established using a Leica NA2 automatic level.

Horizontal X and Y coordinates, ground surface elevation, and top-of-casing elevation were recorded for each well location. Coordinates were collected in Alaska State Plane, Zone 3, North American Datum of 1983, U.S. feet. Elevations were collected referencing the North American Vertical Datum of 1988, U.S. feet, using

differential leveling techniques to the nearest 0.01 foot. The survey report is included in **Appendix B**.

2.3 Groundwater Gauging and Sample Collection

Groundwater gauging and sample collection was conducted at the 24 monitoring wells following well development. A synoptic groundwater level gauging event was conducted on 9 July 2024 and groundwater sample collection was conducted between 9 and 16 July 2024. Groundwater gauging and sample collection was conducted in accordance with the DEC Field Sampling Guidance (DEC 2024) and SOPs P-04, P-06, P-07, P-12, and P-13 (AFCEC 2024a). Groundwater gauging and sampling logs are provided in **Appendix A5**.

The synoptic groundwater level gauging event was performed for all 24 monitoring wells in a two-hour period using a Solinst® oil-water interface meter with a 300-foot measurement tape reel. Total well depth and depth to water measurements were recorded at each well and are included in **Table 3**. Depths were measured from an established reference point on the top of the well casing at each well. Measurements were recorded to the nearest 0.01 foot. The interface meter was decontaminated between wells using Alconox® solution and PFAS-free rinse water.

Groundwater sample collection was initiated following the synoptic groundwater level gauging event. Groundwater purging and sampling were performed using low-flow sampling techniques with peristaltic pumps and high-density polyethylene (HDPE) tubing. Groundwater sample collection depth at each well coincided with the depth that a geotechnical soil sample was collected and slug testing was planned (**Table 1**). Pump intake depths varied by well cluster and were selected to provide vertical depth distribution within all well screen depths; intake depths coincided with the approximate center of the corresponding 5-foot PFM deployment interval. The sample tubing was zip-tied to a water level indicator so that the tubing intake could be deployed at the specified sample collection depth. Groundwater quality parameters including potential of hydrogen, temperature, specific conductivity, dissolved oxygen, and oxidation-reduction potential were monitored while purging using a YSI multi-parameter water-quality meter and flow-through cell, and turbidity using a turbidimeter. Groundwater parameters were recorded at a rate of approximately one reading every three to five minutes. Purging continued until the groundwater-quality parameters met stabilization criteria for three consecutive readings.

Following groundwater-quality parameters stabilization, monitoring wells were sampled for PFAS, total organic carbon (TOC), total suspended solids (TSS), total dissolved solids (TDS), alkalinity, hardness, anions (fluoride, chloride, and sulfate), nitrate-nitrite as nitrogen, total and dissolved metals (calcium, iron, manganese, magnesium) and total Resource Conservation and Recovery Act (RCRA) metals for laboratory analysis. Dissolved metals samples were field filtered using 0.45 µM field filters. Hach® in-field test kits were used to assess groundwater samples for ferrous iron (Method 8146) and sulfide (Method 8131) using a DR900 Multiparameter Portable Colorimeter. Twenty-four primary samples, three duplicate samples, two matrix spike/matrix spike duplicate samples, two equipment blank samples, two field blank samples, and one source blank sample were collected. Groundwater samples were collected in laboratory-supplied containers and packaged in coolers with ice for shipment to Pace Analytical Services in Mt. Juliet, Tennessee, for non-PFAS samples and with gel ice for shipment to Pace Laboratory Services in West Columbia, South Carolina, for PFAS samples.

2.4 Slug Testing

Between 22 and 27 July 2024, pneumatic rising head slug tests were conducted in each of the 24 newly installed monitoring wells to provide an estimate of hydraulic conductivity at targeted intervals within the well screen. Slug test intervals were selected to correspond with the approximate midpoint of a corresponding PFM deployment

depth where soil and groundwater samples were also collected (**Table 1**). Slug testing was completed with an inflatable straddle packer setup connected to PVC drop pipe, which was used to isolate each test to a discrete, 3-foot, pre-determined interval within each well screen, in accordance with SOP P-15 (AFCEC 2024a). Three slug tests were conducted per interval using the air compressor and pressure gauges to pressurize the manifold and depress the water column: two tests at approximately 0.5 pound per square inch (psi), and one test at approximately 1.0 psi. The decrease in water level following the application of pressure and return to static conditions after the release of pressure, were continuously monitored using a submerged pressure transducer connected to a laptop by a direct-read cable. Field parameters recorded; specifications used during slug testing and for subsequent analysis are included as **Appendix A6.**

2.5 Passive Flux Meter Deployment and Sampling

PFMs are self-contained permeable devices that are deployed into monitoring wells to measure groundwater and contaminant flux. The PFMs used in this study contained permeable sorbents of granulated activated carbon (GAC) and resin. After a specified time of exposure to groundwater flow, PFMs can be retrieved and sorbents extracted to estimate groundwater and contaminant flux. PFMs are a useful tool for measuring vertical variability in flux.

Passive flux meters were deployed along the length of the screen in each monitoring well to provide a discrete understanding of PFAS and groundwater flux across the vertical extent of the planned treatment zone and upgradient and downgradient of the planned CAC injection transect. A total of 216 5-foot PFMs (nine per well) were deployed and later sampled in the newly installed monitoring wells in accordance with PFM SOPs P-16 and P-17 (AFCEC 2024a). PFMs were constructed by Enviroflux, LLC, (Enviroflux) and consisted of four alternating sections of mesh sock: two containing nonionic resin (sorbent) for PFAS sampling, and two containing GAC with multiple soluble tracers for measuring groundwater flux over the deployment period. Photographic logs 08–11 contain photographs of PFMs during deployment and sampling (**Appendix A1**).

PFMs were deployed in two phases and deployment depths for each well screen interval are detailed in **Table 1**. Between 31 July 2024 and 3 August 2024, a series of five PFMs were deployed in approximately the bottom 30 feet of each well screen and suspended with Kevlar rope. Per the recommendation of Enviroflux, PFMs were deployed in the wells for approximately two weeks, then retrieved and their media sampled for laboratory analysis between 14 and 17 August 2024. After cutting the PFM mesh open with scissors, the two corresponding GAC and resin layers in each PFM were captured in zip-lock bags and composited into one sample for each type of medium (Photographs 2 and 3, Photographic Log 09, **Appendix A1**). Resin samples were sent to Pace Laboratory Services in West Columbia, South Carolina, and analyzed for PFAS by EPA Final Method 1633. GAC samples were sent to Enviroflux in Gainesville, Florida, for tracer analysis by modified Method 8015.

During the second deployment event from 21 to 23 August 2024, a series of four 5-foot PFMs were deployed in each well in approximately the upper 20 feet of the screen and suspended with Kevlar rope. PFMs were retrieved and their media sampled for laboratory analysis between 4 and 6 September 2024.

A total of 216 primary samples, 10 field duplicates, and two matrix spike/matrix spike duplicate samples (one per deployment event) were collected per sampling medium. Additionally, three resin sample blanks and eight resin batch samples were provided to the A-A 8(a) JV by Enviroflux; these samples were submitted to Pace Laboratory Services for analysis by EPA Method 1633 alongside the PFM samples. The resin sample blanks were collected from each resin container used in the construction of the PFMs; resin batch samples were spiked with a known quantity of PFAS to assess PFAS recovery by the laboratory. PFM sampling logs are included in **Appendix A7**.

2.6 Investigation-Derived Waste Management and Sampling

IDW generated during the DGI field effort included drill cuttings (soil), water recovered while drilling, monitoring well development and sampling purge water, equipment decontamination water, unused portions of PFM media, disposable sampling supplies, and disposable personal protective equipment (PPE). Republic Services, Inc., (Republic) assisted with IDW manifesting, transport, and disposal services. IDW disposal documentation is provided in **Appendix C**; IDW sample analytical results can be found in **Appendix D**.

Drill cuttings were accumulated in 1-cubic-yard bulk bags equipped with polyethylene liners. Bulk bags were staged in onsite secondary containment, constructed with 12-mil liner and timbers during site preparation activities. At the conclusion of the drilling effort, one composite waste characterization sample was collected from the 14 bulk bags. The waste characterization sample was analyzed for PFAS, toxicity characteristic leaching procedure (TCLP) volatile organic compounds, TCLP RCRA metals, ignitability, corrosivity, reactivity – cyanide, and reactivity – sulfide. Bulk bags were loaded into a lined, 20-ton, open-top shipping container after the waste characterization sample was collected. The 20-ton container was trailered to EAFB's IDW holding cells at LF003 to await receipt of waste characterization sample results required prior to manifesting, transport, and disposal. Following receipt of waste characterization sample results, the A-A 8(a) JV completed a DEC Contaminated Media Transport and Treatment or Disposal Approval Form for review and approval (**Appendix C**). Republic generated a manifest and transported the 20-ton container off site for disposal at the Republic Services Subtitle D Roosevelt Landfill in Roosevelt, Washington.

Liquid IDW including water recovered while drilling, monitoring well development and sampling purge water, and equipment decontamination water was accumulated in an intermediate bulk container staged in the onsite secondary containment described previously. Liquid IDW was periodically transferred from the site to the EAFB Wastewater Treatment System for treatment and discharge. The liquid was treated in accordance with the 2024 Operation and Maintenance Work Plan, Eielson Air Force Base, Alaska (AFCEC 2024b) and discharged in accordance with DEC Division of Water Authorization Number AKG003059 (**Appendix C)** under the AKG0030000 Hydrostatic and Aquifer Pump Testing General Permit. The EAFB Wastewater Treatment System consists of three 10,000-gallon uninsulated influent holding tanks, a pretreatment system, a treatment system, and a 14,000-gallon uninsulated effluent holding tank. The pretreatment system consists of an oil/water separator, an ozone generator and injector to disinfect and precipitate dissolved metals, a 3-cubic foot vessel containing adsorbent cellulose, a 3-cubic foot vessel containing filter sand, a 3-cubic ft vessel containing organoclay, and a 3-cubic foot vessel containing GAC. The treatment system contains a bag filter, two 4.5-cubic foot vessels containing GAC, two 5-cubic foot vessels containing PT1 ion exchange resin primarily for metals removal, four cartridge filters, two 3-cubic foot vessels containing A3F ion exchange resin, and two 3- cubic foot vessels containing LC1 ion exchange polishing resin. Flow diagrams of the pretreatment and treatment modules are attached to authorization AKG003059.

Prior to treatment and discharge, an Eielson AFB Wastewater Profile was developed for the liquid IDW using generator knowledge. The highest PFAS concentrations observed during the Eielson PFAS Remedial Investigation at Transect 02, approximately 600 feet upgradient of the DGI project location, were used as a conservative proxy for treatment and disposal. The wastewater profiling documents are included in the Permit Authorization AKG003059 - 2024 Annual Discharge Report (AFCEC, 2024c)

Unused portions of PFM media generated during PFM sampling activities, including GAC and resin, were accumulated on site in two steel, open-top, 55-gallon drums. At the conclusion of the PFM sampling effort, one

composite waste characterization sample was collected from the two drums. The waste characterization sample was analyzed for the same suite of analyses listed for the drill cuttings. Similar to the drill cuttings, the PFM IDW drums were transported to LF003 to await waste characterization sample results and receipt of necessary approvals for subsequent transport by Republic. However, the drums were transported off site to Republic's Subtitle C Grand View Facility in Grand View, Idaho (**Appendix C**).

Disposable sampling supplies and PPE included HDPE tubing, stainless-steel spoons, plastic sheeting used for lining ground and table surfaces, emptied PFM carcasses, and nitrile gloves. Disposable sampling supplies and PPE were collected in garbage bags and transported to the Fairbanks North Star Borough Landfill for disposal.

2.7 QAPP Deviations

The following deviations from the approved QAPP (AFCEC 2024a) occurred during execution of the DGI field activities.

1. Site Preparation - In QAPP Worksheet #17: Site Preparation, the buried utility clearance process indicates that A-A 8(a) JV personnel would review base buried utility schematics as they visited the various utility departments listed on the Base Civil Engineering Work Clearance Request or AF Form 103. Physical visitation at the utility departments was not required as the AF Form 103 was completed electronically and no site visits or as-built diagram reviews were required for the project location.
2. Performance Monitoring Well Installation - In QAPP Worksheet #17: Permanent Monitoring Well Installation and Soil Sampling, pre-development was specified during monitoring well installation for mitigating potential bridging when installing the sand filter pack. After installing several wells, pre-development surging was deemed unnecessary for settling the sand filter pack because the sonic vibration from the drill rig during casing removal appeared to accomplish this adequately. Pre-development was excluded from the monitoring well installation task.
3. Passive Flux Meter Deployment and Sampling - The bottom three PFMs in CACMW-001-060 became lodged above their deployment interval during retrieval on 14 August 2024. The uppermost PFM was recovered within several hours, but the two lower PFMs remained stuck in the well until their retrieval times on 15 August 2024 (**Appendix A7**). This may have a modest impact on the results by exposing these PFMs to different, shallower intervals in the well, but only for approximately one day compared to their two-week deployment period. During PFM retrieval at CACMW-002-160, the top resin section of the bottom-most PFM (132.5–137.5 feet bgs) was damaged, with approximately 10 percent resin volume remaining; the resin sample for this PFM was collected exclusively from the lower resin section (Photograph 4, Photographic Log 09, **Appendix A1**).
4. IDW Management - In QAPP Worksheet #17: Investigation Derived Waste Management, soil cuttings generated while drilling were to be placed directly into a lined, 20-ton shipping container.by the drilling subcontractor. The 20-ton container arrived on a trailer and the top of the container was too high off the ground for soil cuttings to be feasibly loaded into the container with equipment the drilling subcontractor mobilized to the project location. As a workaround, a lined, bermed, containment cell was constructed, and soil cuttings were loaded into one-yard bulk bags and staged in the containment cell. When drilling activities were complete, a telehandler was mobilized to the site and the bulk bags were loaded into the 20-ton container.

3 Data Evaluation Methods

Hydraulic conductivity data were collected through slug-testing and sieve analysis of grain-size samples. The tools and processes used to analyze the slug test and grain-size data for the estimation of hydraulic conductivity are summarized in the following sections. Groundwater and PFAS flux data were collected using PFMs. A description of flux as discussed in this report, as well as the PFM approach to quantifying groundwater and contaminant flux, are also provided in the following sections.

3.1 Slug Testing

During slug test analysis, the most complete dataset with the least noise was used in the analysis for each well. Prior to analysis, several input parameters were modified from the monitoring well construction and water column to adjust for the straddle packer. The water column was adjusted to encompass the static water level down to the bottom of the 3-foot interval tested rather than the entire water column of the well because the bottom packer cut off access to deeper portions of the well. In addition, the drop pipe connecting the top of the straddle packer to the surface was 1 inch in diameter, therefore calculations were completed based on the water column contained in the 1-inch drop pipe versus the 2-inch well casing. This result represented the “well casing” for each test.

All slug testing data were processed into displacement-time data and analyzed using AQTESOLV™ for Windows Pro 4.5 (Duffield 2007). While appropriate and applicable analytical solutions and corrections were applied following guidelines presented in The Design, Performance, and Analysis of Slug Tests – 2nd Edition (Butler 2019), the results yielded the need for multiple solutions. The majority of the slug tests showed a slight oscillatory response superimposed over an overdamped response. An inertial solution could not be utilized for the packer slug tests due to poor fit and anomalous parameters (effective water column length, damping factor, etc.). Multiple solutions including the KGS Model (Hyder et. al.,1994) and Bouwer & Rice (Bouwer & Rice 1976; Bouwer 1989) were used to analyze the center of data (KGS) and the initial test response (B&R) and an average hydraulic conductivity result was calculated. The complexity in matching the full data responses with one solution potentially stemmed from vertical influence of the sand pack. While the straddle packers isolated a single, 3-foot portion of the screened interval, the sand pack, which extends over 50 feet in each well, could not be isolated, and therefore introduced a level of uncertainty in analysis. AQTESOLV™ output files for each slug test are included in **Appendix E**. Slug testing results are discussed in Section 4.2.2.

3.2 Grain Size

The sieve data collected from grain-size samples were analyzed using a modified version of HydroGeoSieveXL (Devlin 2015) in the R program (statistical computing) to assist with processing the sieve data, generating grain-size distribution curves, and estimating hydraulic conductivity according to 15 different analytical methods. Then, a logic matrix was implemented to determine which of the 15 analytical solutions met criteria for selection for a given sample and ruled out anomalies based on a statistical analysis. Finally, a decision matrix was then implemented to provide an automated recommendation for selecting the arithmetic mean or the geometric mean as an expression of the central tendency for sieve datasets of varying sizes based on the statistical normality of the distribution. The R program produces a grain-size distribution curve with extrapolation to the theoretical 0-percent passing, a list of input parameters, a histogram of grain-size distribution (e.g., clay, sand, gravel), and a summary of calculated hydraulic conductivity for each method. Grain-size analysis exports are provided in **Appendix F**.

3.3 Passive Flux Meters

PFMs were used to measure the ambient groundwater flux and PFAS mass flux at the site. Flux refers to the mass of water and/or contaminants flowing per unit area at a measured point in a well screen averaged over a given period of time. Based upon this general definition, the units associated with mass flux are determined using the following equation:

$$flux = \frac{mass}{area \cdot time} = \frac{M}{L^2 \cdot T}$$

where: M = mass; L = length; and T = time

For consistency with common practice, the ambient groundwater flux will be discussed in terms of the specific discharge or Darcy velocity, which is the volumetric water flux (or flowrate) through a specified cross-sectional area. The resulting units are L/T and for this report the Darcy velocity will be represented with the units of centimeters per day (cm/day). For this report, the PFAS flux will be discussed in terms of mass flux ($M/L^2/T$) and represented with the units of micrograms per square meter per day (µg/m^2/day).

The PFM approach to measuring groundwater and contaminant flux is based on the use of a permeable sorptive medium that retains contaminants present in groundwater and releases pre-loaded tracers as groundwater flows through the medium. The sorptive media used for this project were GAC for measuring groundwater flux and resin for PFAS accumulation. The GAC was preloaded with a suite of five resident tracers (methanol, ethanol, iso-propanol, t-butanol, and 2,4-dimethyl-3-pentanol) containing a wide range of partitioning behavior with the GAC. The loss of tracer from the GAC when exposed to groundwater is directly related to groundwater flow velocity and the duration of device deployment in the well. GAC can be used as a sorptive medium for common organic contaminants such as chlorinated solvents (trichloroethene, tetrachloroethene, etc.), but is not a suitable medium for PFAS sorption. For PFAS, a sorptive resin is used, which can be sampled and analyzed by EPA Method 1633 for 40 PFAS.

The sorptive medium is placed into a permeable sock (i.e., the PFM) and deployed into a monitoring well (or borehole). Vertical profiles of groundwater and contaminant flux with depth can be measured by a single PFM by packing sorbent in vertical segments along the PFM. Once deployed, the PFM remains in the well for a specified amount of time before being removed. Upon retrieval, the sorbent material within the PFM is sampled for analysis of contaminant mass sorbed and tracers lost. The contaminant masses are used to calculate time-averaged contaminant fluxes, while residual resident tracer masses are used to calculate cumulative groundwater flux. An in-depth description of PFM fundamentals is provided by Hatfield et al., 2004 and field implementation by Annable et al., 2005.

4 Results and Discussion

The following results and discussion provide the data required to inform injection well design for the pilot study, to support implementation with respect to injection planning and CAC loading, and to provide baseline groundwater conditions for barrier performance monitoring. Analytical data packages for the data presented are included as **Appendix D.** Analytical data were validated by a third-party data validation firm, Arctic Data Services of Fairbanks, Alaska. Detailed Data Quality Assessments and Data Validation checklists are included in **Appendix G.**

4.1 Soil

The following sections summarize the soil results collected during the DGI, including results from PFAS and geotechnical analyses. The discussion of results focuses on understanding physical soil properties and PFAS distribution in soil at the site. The Data Quality Assessment for soil laboratory analytical data covered the 35 soil samples analyzed for PFAS and found that sensitivity, precision, accuracy, representativeness, comparability, and completeness were acceptable, and the data are usable for the purposes of this project. The data validator noted that there was an unusual frequency of manual integrations, but they appeared to have been appropriately and consistently performed. A total of 38 results were qualified due to quality control (QC) anomalies and no results were recommended for rejection (**Appendix G**).

4.1.1 PFAS Concentration and Distribution

A total of 32 primary soil samples were collected and analyzed for PFAS from the deep well soil borings at each monitoring well cluster (**Table 1**). Only ten of the 40 PFAS analyzed were detected and all but one detection of PFAS with associated PSLs were less than the associated PSL for soil (**Table 4**). Of the ten compounds detected, PFOS made up over 86 percent of the total PFAS mass detected in soil. The maximum PFOS concentration of 9.1 micrograms per kilogram (µg/kg) was detected at the CACMW-002-160 boring between approximately 77 and 82 feet bgs and exceeded the PFOS PSL of 0.63 µg/kg (**Exhibit 1**). This sample result was approximately two orders of magnitude greater than all other PFOS detections and occurred in a sample interval that had the second highest silt content (13.4 percent; **Table 5**) and highest organic content (2.55 percent, while most samples were less than 0.35 percent; **Table 6**). With the exception of this sample result, PFOS concentrations ranged from 0.03 µg/kg (CACMW-007-160 from 148.25 to 153.25 feet bgs) to 0.63 µg/kg (CACMW-005-160 from 16.75 to 21.75 feet bgs). The other PFAS detected in soil were PFHxA, PFNA, PFOA, PFHpS, PFHxS, 8:2 FTSA, PFOSA, MeFOSAA, N-EtFOSAA, results for these detections can be found in Table 4.

The greatest detection of PFAS in soil at the DGI site was PFOS at 9.1 µg/kg (CACMW-002-160, 77-82 ft bgs). This result is approximately two orders of magnitude greater than all other PFOS detections in soil, which were between 0.03 and 0.63 µg/kg (**Table 4**). The geotechnical data in **Tables 5 and 6** demonstrate that the soil at this interval has higher silt and organic content; therefore, it has a relatively high sorption capacity compared to the sand and gravel lithologies that comprise much of the targeted treatment zone.

Saturated soil samples collected in groundwater below the water table contain both groundwater (as porewater) and soil. The total concentration in soil is the sum of the PFAS mass in soil and porewater, which are expected to be in approximate equilibrium based on the project conceptual site model that the DGI study area is not a source area for PFAS.

The total concentration of PFAS sorbed to soil can be estimated using the standard equation (EPA 1994) below:

$$C_t\left(\frac{ug}{Kg}\right) = C_w \cdot \left(K_d + \left(\frac{\theta_w + \theta_a \cdot H'}{\rho_b}\right)\right)$$

Where, C_t = total soil concentration in µg/kg; C_w = porewater concentration in µg/L (from the groundwater concentration at the nearest corresponding low-flow groundwater sample); K_d = soil-water partitioning coefficient in liters per kilogram (L/kg) (from EPA 2024, 7.42 L/kg for PFOS, evaluated using a K_d range of +/- 50% [3.71 – 11.1 L/kg]); Θ_w = water-filled porosity (from **Table 6**); Θ_a = air-filled porosity (zero, since the samples are from the saturated zone); H' = Henry's Law constant (from EPA 2024), and ρ_b = bulk density (dry) in kilograms per liter (kg/L) (from **Table 6)**.

Where concentrations of PFAS in soil and porewater are in approximate equilibrium, the concentration in each respective media is governed by K_d. A representative evaluation was performed to calculate the predicted equilibrium soil concentrations based on the groundwater concentrations at the sample locations corresponding to the upper and lower ends of the observed range of PFOS detections in soil:

- The lowest PFOS detection in soil (0.03 µg/kg, at CACMW-007-160, 148.25-153.25 ft bgs).
- The highest representative PFOS detection in soil (0.63 µg/kg, at CACMW-005-160, 16.75-21.75 ft bgs). This represents the upper end of the typical range, excluding the outlier 9.1 µg/kg PFOS detection discussed above.

Groundwater data from the low-flow samples corresponding to the nearest depth of the associated soil sample at the same well cluster was used for C_w:

- 350 ng/L (0.35 µg/L) PFOS at CACMW-007-160 at 151 ft bgs.
- 1,400 ng/L (1.4 µg/L) PFOS at CACMW-005-060 at 19.6 ft bgs.

For each sample, corresponding geotechnical data presented in **Table 6** provided the remaining soil data inputs:

- Porosity (assumed to be all water-filled porosity as the samples were in the saturated zone).
  - 0.226 at CACMW-007-160, 148.25-153.25 ft bgs
  - 0.278 at CACMW-005-160, 16.75-21.75 ft bgs
- Dry bulk density (converted from pounds per cubic foot to kg/L)
  - 127.9 pounds per cubic foot (2.049 kg/L) at CACMW-007-160, 148.25-153.25 ft bgs
  - 119.6 pounds per cubic foot (1.916 kg/L) at CACMW-005-160, 16.75-21.75 ft bgs

The results of this calculation estimate the following equilibrium PFOS concentrations in soil at these locations:

- A range of 1.34 – 3.93 µg/kg PFOS at CACMW-007-160, 148.25-153.25 ft bgs vs. measured 0.03 µg/kg PFOS.
- A range of 5.40 – 15.8 µg/kg PFOS at CACMW-005-160, 16.75-21.75 ft bgs vs. measured 0.63 µg/kg PFOS.

The observed PFOS soil concentrations at these specific locations and across the DGI dataset (**Table 4**) are generally an order of magnitude lower than the range of predicted equilibrium concentrations, suggesting that soil concentrations are not equilibrated with groundwater. Since the measured soil concentrations are significantly less than predicted based on equilibrium partitioning, groundwater is the likely source of the PFOS in soil and soil

local to the DGI study area is not an ongoing source of PFOS. Since PFOS is the most prevalent PFAS constituent detected during the DGI, these results are expected to be similar for the various PFAS compounds.

The depths at which PFAS concentrations were detected varied from as shallow as 15 feet bgs to as deep as 148 feet bgs. Most of the encountered lithology was a mix of sands and gravels with limited intervals containing greater than 5 percent silts and clays based on geotechnical sample results (**Table 5**). PFAS concentrations in soil and the potential for PFAS to desorb from soil and partition back into the dissolved phase will be accounted for during injection design.

4.1.2 Geotechnical Properties

A total of 40 samples were collected for geotechnical analyses from the deep well soil borings at each monitoring well cluster (**Table 1**). Samples were analyzed for grain size, moisture content, TOC, bulk density, and porosity. Results are summarized in **Tables 5 and 6**. Sieve results from the grain-size analyses were used to estimate hydraulic conductivity with the HydroGeoSieveXL tool, as described in Section 3.2.

Grain size results indicated that the soil samples consisted of greater than 95 percent sand and gravel, which was consistent with field observations during field logging (**Appendix A3**). Fines (silt and clay) were only identified at greater than trace amounts (greater than 10 percent) in two of 40 samples (**Table 5**).

During field soil logging, several intervals of silty sand or sandy silt up to 4 feet thick were identified at each of the three upgradient well clusters CACMW-001 (0–4 feet bgs and 135–136 feet bgs), CACMW-002 (0–2 feet bgs and 4–7 feet bgs), and CACMW-003 (129–131 feet bgs); however, no large scale or laterally continuous units of fines were observed (**Appendix A3**). Silty soils were not identified at any of the downgradient well clusters.

Ranges for the remaining soil properties are as follows (**Table 6**):

- Moisture content: 0.4 to 16.1 percent
- TOC: 0.08 to 0.46 percent (0.0008–0.0046 fraction of organic carbon [Foc]), with two outliers at 1.24 percent (0.0124 Foc at CACMW-006, 21–26 feet bgs) and 2.55 percent (0.0255 Foc at CACMW-002, 77.25–88.25 feet bgs)
- Specific gravity: 2.65 to 2.69
- Bulk density (wet): 120.2 to 137.4 pounds per cubic foot
- Bulk density (dry): 103.5 to 132.2 pounds per cubic foot
- Porosity: 20.3 to 38.3 percent

Geotechnical results will be used to inform the CAC injection design and implementation during the future injection phase of the project.

4.2 Groundwater

The following sections present the groundwater results of the DGI, including results from the synoptic well gauging event, groundwater sampling, hydraulic conductivity analyses, and PFM deployment. The discussion of results focuses on understanding groundwater hydraulics, groundwater geochemistry, PFAS distribution, and PFAS mass flux at the site.

4.2.1 Groundwater Elevation and Hydraulic Gradient

The groundwater elevation map from the synoptic groundwater gauging event is presented on **Figure 3**. The horizontal hydraulic gradient was approximately 0.00043 foot per foot (ft/ft) in the shallow zone, 0.0011 ft/ft in the intermediate zone, and 0.0010 ft/ft in the deep zone. The average hydraulic gradient of the three zones is 0.00084 ft/ft, toward the north-northwest. This flow direction is consistent with general basewide groundwater flow to the north-northwest understood from previous studies.

Vertical hydraulic gradients calculated at each monitoring well cluster suggested no consistent upward or downward groundwater gradient. Upward gradients (CACMW-001, CACMW-004, and CACMW-005) ranged from 0.0002 to 0.0005 ft/ft, and downward gradients (CACMW-002, CACMW-003, CACMW-006, CACMW-007, and CACMW-008) ranged from 0.0003 to 0.001 ft/ft. Groundwater elevations from the 9 July 2024 gauging event are presented in **Table 3**.

4.2.2 Hydraulic Conductivity

Hydraulic conductivity was estimated using various methods during the DGI. The methods include: 1) slug testing using inflatable packers with analysis in AQTESOLV™ (**Table 7 and Appendix E**); 2) grain size analysis using a modified version of the HydroGeoSieveXL Tool (**Table 8 and Appendix F**); and 3) PFM results (calculated by using the Darcy velocity and dividing by the groundwater hydraulic gradient at the site, **Table 9 and Appendix H**).

Summary statistics of these results are shown in **Exhibit 2**. **Exhibit 2** also includes the Transect 02 VAP borings/slug tests from the EAFB Phase I RI (**Figure 1**) for comparison (AFCEC 2024a).

Exhibit 2: Summary and Comparison of Hydraulic Conductivity Results

Statistic	Darcy Velocity (*q*) from PFMs	Hydraulic Conductivity (*K*)			
		PFM[1]	Slug Testing	HydroGeoSieveXL Tool Using Grain Size	Eielson RI TR02 Slug Tests
feet/day					
Average	0.3	371	59	1,320	239
Minimum	0.04	45	34	0.2	27.2
Maximum	0.8	932	116	19,480	765

Notes:
For acronym definitions, please refer to the list of Acronym and Abbreviations at the front of the document.
RI TR02 represents RI Transect 02 (AFCEC 2024a).
RI TR02 is located approximately 500 feet southeast (upgradient) of the project site.
[1]Hydraulic conductivity was calculated using the equation $K = q/i$
K = hydraulic conductivity
q = Darcy velocity
i = hydraulic gradient (0.00084), calculated as an average gradient from the shallow, intermediate, and deep zones

Key observations from the comparison presented in **Exhibit 2** are as follows:

- The three methods used to estimate hydraulic conductivity in this study (slug test, grain-size analysis, and PFMs) reveal ranges and averages that span three orders of magnitude.
- Hydraulic conductivity results from the PFMs are in good agreement with the EAFB Phase I RI Transect 02 slug test results, which were conducted using pneumatic slug test methods with 2 to 3-

foot well screens during VAP drilling activities. The overall range and magnitude between the two datasets are similar.

- Hydraulic conductivity results from the DGI slug testing may underestimate hydraulic conductivity when compared to other methods. The disagreement of the slug testing results with other methods is attributed to the vertical influence of the over 50-foot sand pack at each well, as the sand pack could not be isolated during packer testing.
- Hydraulic conductivity results from grain-size analyses likely overestimate hydraulic conductivity when compared to other methods and the Eielson Phase I RI results at Transect 02. The disagreement between the grain-size analysis results and the other datasets is likely due to the unreliability of the HydroGeoSieveXL tool to estimate hydraulic conductivity from coarse-grained soil samples (Payne et al., 2008). Grain-size analysis for estimating hydraulic conductivity is not suitable for soils with cobble-sized distributions. Cobble-sized soils (greater than 64 millimeters) were not included in the samples submitted for grain-size analysis; however, several samples contained coarse gravel (16–64 millimeters) as the primary or secondary component. The range in hydraulic conductivity determined by the grain-size analysis method suggests this method may be unreliable for the gravelly soil type at EAFB.

Based on the extended time-averaged nature of the PFM data and the consistency of the PFM hydraulic conductivity results with the nearby RI slug tests, which were conducted under more optimal conditions than the DGI slug tests, the PFM hydraulic conductivity data are likely the most representative of the pilot study area.

4.2.3 Groundwater Analytical Results

Groundwater samples were collected for PFAS and geochemical analyses (TOC, total and dissolved metals, anions, and general chemistry) during low-flow sampling at each of the 24 monitoring wells (**Table 1**). Geochemical analytical results in groundwater are presented in **Table 10** and groundwater PFAS analytical results are presented in **Table 11**. The Data Quality Assessment for groundwater laboratory analytical data covered the 27 groundwater samples (24 primary and three duplicate samples) analyzed for PFAS and found that sensitivity, precision, accuracy, representativeness, comparability, and completeness were acceptable, and the data are usable for the purposes of this project. A total of 260 results were qualified due to QC anomalies and 17 results were recommended for rejection (**Appendix G**). The results recommended for rejection by the data validator were reviewed by the A-A 8(a) JV Project Chemist and rejected; these results are represented by an “R” in **Table 11**. All the rejected results were for PFAS constituents for which a PSL does not exist, and the resulting dataset is 99.1 percent complete.

4.2.3.1 Geochemical Results

The groundwater analytical data provide baseline groundwater geochemistry and will inform the injection design for the purpose of mitigating potential interferences of non-PFAS analytes with PFAS CAC adsorption. The potential for CAC binding site competition by other contaminants potentially present in the aquifer is also discussed in the following sections. TOC concentrations ranged from 2,000 to 5,270 micrograms per liter (µg/L) and were generally lowest in the deepest wells. TOC was greater than 4,000 µg/L in samples from the shallow and intermediate wells but less than 2,500 µg/L in deep wells, except for CACMW-005-160 where TOC was 3,940 µg/L.

Concentrations of total and dissolved metals generally decrease with depth except for iron, which fluctuated in the shallow and intermediate well samples before decreasing in the deep well samples. Total and dissolved metals observations are as follows:

- Arsenic (total): 2.45 to 69.8 µg/L
- Barium (total): 104 to 225 µg/L
- Cadmium (total): all results non-detect (ND)
- Calcium: 35,900 to 59,900 µg/L (total), 35,200 to 60,600 µg/L (dissolved)
- Chromium (total): all results ND
- Iron: 2,400 to 5,470 µg/L (total), 2,300 to 5,390 µg/L (dissolved)
- Lead (total): all results ND except for CACMW-001-060 and CACMW-007-160 (0.532 and 0.515 µg/L, respectively)
- Magnesium: 9,360 to 12,700 µg/L (total), 9,490 to 12,400 µg/L (dissolved)
- Manganese: 199 to 4,160 µg/L (total), 204 to 4,060 µg/L (dissolved)
- Mercury (total): all results ND
- Selenium (total): all results ND
- Silver (total): all results ND

Results of ferrous iron and sulfide field test kits did not indicate discernible trends with depth. Ferrous iron and sulfide concentration ranges were as follows:

- Ferrous iron: 1.96 to 3.24 milligrams per liter (mg/L) (eight samples exceeded the maximum Hach test kit value of 3.30 mg/L)
- Sulfide: 0.00 to 0.10 mg/L

Trends in anion results vary by analyte. Chloride and fluoride generally decrease with depth, but sulfate fluctuates between relatively low concentrations and ND in shallow and intermediate well samples and increases in deep well samples. Ranges in concentration for each anion are as follows:

- Chloride: 3,950 to 62,500 µg/L
- Fluoride: 202 to 552 µg/L
- Sulfate: ND to 13,200 µg/L
- Nitrate-nitrite results: all results ND

Trends in general chemistry results vary by analyte. TSS do not have a discernible trend with depth; alkalinity, hardness, and TDS all exhibited a decrease in concentration in deep well samples compared to shallow and intermediate samples. Ranges for each general chemistry analyte are as follows:

- Alkalinity: 138,000 to 254,000 µg/L
- Hardness: 128,00 to 214,000 µg/L
- TDS: 197,000 to 343,000 µg/L
- TSS: ND to 51,600 µg/L

In summary, notable changes in geochemical results in groundwater were observed between the shallow/intermediate wells and the deep wells, with TOC, total and dissolved metals, chloride, fluoride, alkalinity,

hardness, and TDS all showing a decrease in concentration in the deep wells. These changes in geochemistry coincide with a decrease in PFAS concentrations in groundwater in the deep wells. Ferrous iron, sulfide, and TSS had no discernable trend with depth, and sulfate was the only analyte to increase with depth.

4.2.3.2 Other Non-PFAS Colloidal Activated Carbon Competitors

Competition for binding sites can occur when other analytes with an affinity for CAC (e.g., TOC, chlorinated solvents, petroleum hydrocarbons) are present as co-contaminants within groundwater. To understand what other competitors may be present, existing monitoring data collected in the vicinity of the site were evaluated.

In the area of the site, which is near the Base boundary, the closest known source area is WP033 (OU4), and it is approximately 2,700 feet away. The closest monitoring well (51MB1) to the planned location of the CAC barrier is approximately 350 feet downgradient. Monitoring well 51MB1 is sampled annually during the installation-wide monitoring program (IWMP) and is classified as a downgradient sentry well to assess whether groundwater contamination is migrating off the Base (EA Engineering, Science, and Technology, Inc. [EA Engineering] 2024). This well is sampled for gasoline range organics, diesel range organics, residual range organics, volatile organic compounds, semivolatile organic compounds, polyaromatic hydrocarbons, ethylene dibromide, and metals.

Only background metals (arsenic, manganese, and thallium), bis(2-ethylhexyl) phthalate, and naphthalene have been detected in monitoring well 51MB1 at concentrations at or exceeding the project action levels (PALs) of the IWMP. Analytical results and PALs for these compounds from the last eight sampling events (2015–2021) are included in **Appendix I** (EA Engineering 2024). Bis(2-ethylhexyl) phthalate has only been detected once (fall 2016) between 2012 and 2021 and is not considered to be present in groundwater at the well, but rather introduced during sampling or laboratory analysis during the fall 2016 event. Naphthalene was detected in exceedance of the PAL (0.12 µg/L) in two of the most recent nine events with results of 0.18 µg/L and 0.12 µg/L in the spring and fall of 2015, respectively. Although naphthalene concentrations were at or exceeding the PAL in two of the most recent eight events, concentrations are generally low or ND suggesting the competition between naphthalene and PFAS for CAC binding sites should be minimal.

In addition to groundwater contaminants, naturally occurring TOC can interfere with PFAS adsorption to CAC. The greatest concentrations of TOC in groundwater samples collected during the DGI occurred in samples above 106 feet bgs, and ranged from 4.07 to 5.27 mg/L. In contrast, TOC in deeper samples (114–156 feet bgs) ranged from 2.00 to 3.94 mg/L. Given TOC will compete with PFAS for CAC binding, competitive sorption may occur during injection of CAC, which will be considered during CAC injection loading design. CAC vendors will be engaged in the design process to understand potential CAC interferences and competitors for binding sites and optimize the CAC loading as needed.

4.2.3.3 PFAS Results

Groundwater samples for PFAS analysis were collected during low-flow sampling at each of the 24 monitoring wells (**Table 1**). A total of 24 PFAS analytes out of the 40 compounds analyzed were detected in groundwater. Of the 24 compounds detected in groundwater, five of the analytes had a screening level in which samples were detected at concentrations greater than the PSL. Compounds detected in groundwater exceeding their PSL include PFDA, PFNA, PFOA, PFHxS, and PFOS. The list of other compounds detected at a concentration less than their PSL or compounds without an established PSL include PFBA, PFHpA, PFHxA, PFPeA, PFUdA, PFBS, PFHpS, PFNS, PFPeS, 4:2 FTS, 6:2 FTSA, 8:2 FTSA, PFOSA, N-MeFOSA, MeFOSAA, EtFOSAA, N-MeFOSE, PFMPA, 5:3 FTCA. PFAS analytical results are presented in **Table 11**. These results will be used to understand

baseline groundwater PFAS concentrations and distribution with the aquifer and to inform the injection design for the purpose of understanding preferential PFAS sorption.

4.2.3.3.1 PFAS Composition

Groundwater sampling results indicate that greater than 85 percent of the PFAS mass in groundwater is composed of five PFAS, as shown in **Exhibit 3**. The composition of PFAS is similar between the shallow, intermediate, and deep zones. Making up between 45 and 62 percent of the total PFAS mass in groundwater, PFOS is the primary constituent in all depth zones, followed by PFHxS, 6:2 FTSA, PFHxA, and PFOA. Further discussion of PFAS concentration and distribution will focus on these five most-prevalent PFAS. Groundwater results for these PFAS are shown for the shallow, intermediate, and deep wells on **Figures 4 through 6,** respectively**.**

Exhibit 3. Summary of PFAS Composition in Low-Flow Groundwater Samples

PFAS	Percentage of Total PFAS Concentration		
	Shallow Wells	Intermediate Wells	Deep Wells
PFOS	58%	62%	45%
PFHxS	11%	11%	13%
6:2 FTSA	6%	5%	7%
PFHxA	4%	4%	4%
PFOA	5%	4%	4%
Other (34 compounds)	16%	14%	27%

Notes:
For acronym definitions, please refer to the list of Acronym and Abbreviations at the front of the document.
The limit of detection was used for calculation purposes for non-detect values.

One factor affecting the adsorption of PFAS to CAC and the potential for barrier breakthrough is the structure of PFAS present and their respective binding affinity to CAC. Specific PFAS constituents have greater sorption affinities to CAC binding sites over others, namely perfluorosulfonic acids (PFSAs), which have a greater affinity for CAC than perfluoroalkyl carboxylic acids (PFCAs), which is attributed to the higher hydrophobicity of the sulfonate functional group relative to the carboxylate functional group. The primary PFSAs detected in groundwater include PFOS and PFHxS, which make up 59 percent and 11 percent of the PFAS mass in groundwater, respectively. The primary PFCAs detected in groundwater include PFHxA and PFOA, which both make up 4 percent of the PFAS mass in groundwater. Based on this distribution, PFSAs, which have a high affinity for CAC, make up the majority of PFAS mass at the site.

Similar to the hydrophobicity of PFAS compounds, fluorocarbon chain length exhibits a similar effect with long-chain PFAS compounds preferentially binding, and potentially displacing, shorter-chain compounds. The top four PFAS compounds, which collectively make up approximately 80 percent of the PFAS mass at the site, are long-chain compounds (**Exhibit 4**).

Exhibit 4. PFAS Classification and Chain-Length in Low-Flow Groundwater Samples

Compound	Classification	Chain-Length	Percentage of Groundwater Composition
PFOS	PFSA	Long-chain	59%
PFHxS	PFSA	Long-chain	11%
PFOA	PFCA	Long-chain	4%
6:2 FTSA	Fluorotelomer	Long-chain	6%
PFHxA	PFCA	Short-chain	4%

Notes:
For acronym definitions, please refer to the list of Acronym and Abbreviations at the front of the document.
The limit of detection was used for calculation purposes for non-detect values.

4.2.3.3.2 PFAS Concentrations

Of the five most prevalent compounds, all but 6:2 FTSA have associated PSLs as shown in **Exhibit 5**. PFOS, PFOA, and PFHxS had PSL exceedances as indicated by the concentration ranges provided in **Exhibit 5**. The greatest concentrations of PFOS and PFOA were detected in CACMW-007-110 and the greatest concentration of PFHxS was detected in CACMW-008-110. Overall, the greatest total PFAS concentration was detected at CACMW-007-110 at 3,482.6 ng/L (**Table 11**).

Exhibit 5. Summary of PFAS Concentrations in Low-Flow Groundwater Samples

PFAS	PSL (ng/L)	Concentration Range Detected in Groundwater (ng/L)	Location and Depth of Maximum Concentration[2]
PFOS	4	190 to 2,200	CACMW-007-110 (101 feet bgs)
PFHxS	10	64 to 340	CACMW-008-110 (74 feet bgs)
6:2 FTSA	--	38 to 160	CACMW-007-110 (101 feet bgs)
PFHxA	990	18 to 120	CACMW-007-060 (51 feet bgs) CACMW-007-110 (101 feet bgs) CACMW-008-110 (74 feet bgs)
PFOA	4	17 to 120	CACMW-007-110 (101 feet bgs)
Total[1]	--	449.8 to 3,482.6	CACMW-007-110 (101 feet bgs)

Notes:
For acronym definitions, please refer to the list of Acronym and Abbreviations at the front of the document.
-- = not available
[1] The limit of detection was used for NDs when calculating total PFAS.
[2] Three wells indicate the same maximum concentration (120 ng/L) for PFHxA.

Other compounds with PSLs that are minor components of the total PFAS in groundwater include PFBA, PFBS, HFPO-DA, and PFNA. Of these four PFAS, only PFNA was detected at concentrations greater than the PSL (5.9 ng/L). Detections of PFNA ranged from 1.0 to 16 ng/L. PFBA and PFBS were not detected above the PSL and HFPO-DA was ND in all samples.

4.2.3.3.3 PFAS Distribution

Figure 7 graphically illustrates the range in concentration of the top five PFAS in each of the shallow, intermediate, and deep wells. The narrow range in concentrations within each well interval demonstrates that

PFAS concentrations are relatively consistent laterally across the site. However, when comparing concentrations between depths, PFAS concentrations are more variable and significantly less in deep wells. PFAS concentrations within the intermediate wells are generally slightly greater than concentrations within the shallow wells, but both intervals (shallow and intermediate) contain PFAS at concentrations approximately three to four times greater on average than PFAS concentrations in the deep wells. Groundwater results for PFOS, the predominant constituent within the study-area groundwater, are shown on **Figure 8**, which illustrates the relationship between PFOS concentration and depth at upgradient and downgradient transects.

4.2.4 Passive Flux Meter Results

PFMs were used to measure the ambient groundwater flux and PFAS mass flux at nine intervals at each of the 24 newly installed monitoring wells (216 PFMs). **Table 12** provides a summary of the time-averaged PFAS mass flux measured directly from the PFM deployments. **Appendix H** is a complete summary report of the results from Enviroflux. The Data Quality Assessment for groundwater laboratory analytical data covered the 226 PFM resin samples analyzed for PFAS and found that sensitivity, precision, accuracy, representativeness, comparability, and completeness were acceptable, and the data are usable for the purposes of this project. A total of 1,108 results were qualified due to QC anomalies and two results were recommended for rejection (Appendix G). The results recommended for rejection by the data validator were reviewed by the A-A 8(a) JV Project Chemist and rejected. Both of the rejected results were for PFAS constituents for which a PSL does not exist (2-N-ethylperfluoro-1-octanesulfonamido-ethanol [EtFOSE] and 2-N-methylperfluoro-1-octanesulfonamido-ethanol [MeFOSE] in the sample CACMW-003-160-153.25-081524-FM-R) and the resulting dataset is over 99.9 percent complete.

Mass flux results from the PFMs were validated against other mass flux estimates that could be calculated for the study site and nearby vicinity and compared to the PFM results. Mass flux was calculated using the following equation:

$$J = K\ i\ C$$

where: J = mass flux; K = hydraulic conductivity; i = hydraulic gradient; C = concentration; and Darcy Velocity = Ki

Mass flux was calculated using the following two data sets for comparison to the PFM results:

1. Low-flow sample groundwater concentrations from study area monitoring wells (**Table 11**) and the PFM Darcy velocity (see Section 4.2.2), measured at the depth interval corresponding to the low-flow sample intake. It was established in Section 4.2.2 that hydraulic conductivity results from the DGI slug testing may underestimate hydraulic conductivity; therefore, these data were not used.
2. Vertical aquifer profile (VAP) groundwater concentrations and hydraulic conductivity estimates from the Eielson RI Transect 02 (**Figure 1**). At Transect 02, groundwater samples were collected using low-flow sampling techniques at isolated intervals during VAP boring installation. Hydraulic conductivity was measured via slug testing at the same interval where low-flow samples were collected. The gradient used was the horizontal hydraulic gradient calculated in the vicinity of Transect 02 (0.0012 ft/ft) based on potentiometric data obtained during the Eielson RI. The Eielson RI Transect 02 data used in this calculation are included as **Appendix J**.

Summary statistics of the PFOS mass flux results from each data set (PFM, low-flow, and Eielson RI TR02) are shown in **Exhibit 6** below. Mass flux was calculated for PFOS as it is the predominant PFAS compound in

groundwater (**Exhibit 3**) and was the most easily compared to RI Transect 02 data, since some RI samples were analyzed by methods other than EPA Method 1633 and the lists of PFAS compounds and laboratory detection limits varied between samples.

Exhibit 6. Summary and Comparison of Mass Flux Results for PFOS

Statistic	Mass Flux (µg/m²/day)		
	PFM	Low-Flow	Eielson RI TR02[1]
Average	174	82	47
Minimum	5	7	0.22
Maximum	833	388	286

Notes:
[1]RI TR02 represents RI Transect 02 (AFCEC 2024a).

The PFOS mass flux comparison indicates the PFM results are within one order of magnitude of the mass flux calculated using low-flow analytical results and from Transect 02. The PFM results are higher than the other estimates, however, the PFM data set is considerably larger than the low-flow or Transect 02 data sets and may have captured a wider range of hydraulic conditions.

It was established in Section 4.2.2 that the hydraulic conductivity calculated from the PFM Darcy velocity was in good agreement with hydraulic conductivity estimates from Transect 02. To validate the other component of mass flux, contaminant concentration, the flux averaged contaminant concentration calculated from the PFM mass flux were compared to low-flow results. The PFM flux averaged contaminant concentration was calculated by dividing the mass flux result by the Darcy velocity. The PFM flux averaged contaminant concentrations are summarized in **Table 2 of Appendix H**.

Contaminant concentrations for PFOS and PFHxS (the two most prevalent PFAS at the site) from low-flow samples and PFMs were compared by calculating the relative percent difference (RPD) between the two concentrations and plotting it against the average of the two concentrations (**Figure 9**). RPD was calculated using the following equation:

$$RPD = \frac{C_{LF} - C_{PFM}}{(\frac{C_{LF} + C_{PFM}}{2})}$$

where: C_{LF} = low-flow concentration; C_{PFM} = PFM concentration (either the PFM concentration at the low-flow interval or the average concentration for the well was used)

When the RPD is calculated between the low-flow result and the PFM result at the same depth interval, most RPDs for PFOS (71 percent) and PFHxS (75 percent) are ±100 percent, which is an acceptable tolerance for determining the magnitude of PFAS concentrations in groundwater for the purpose of determining CAC loading in the future injection design. When the RPD is calculated between the low-flow result and the average PFM result for the well, there is even better agreement with the majority of RPDs for PFOS (83 percent) and PFHxS (83 percent) between 0 and -100 percent. All low flow vs. well-average PFM result RPDs being negative for PFOS and PFHxS indicate the low-flow sample concentration is generally lower than the average PFM concentration for the well, suggesting PFMs provide a more conservative (i.e., higher) estimate of contaminant concentration. Although the low-flow concentrations are lower, all 24 low-flow sample results for PFOS and 22 of 24 low flow sample results for PFHxS are within the range of results provided by the PFMs, which span approximately one order of magnitude (**Figure 10**).

In summary, PFM mass flux results are reasonably close to other estimates calculated for the study site (low-flow) and nearby vicinity (Transect 02). The Darcy velocity provided from the PFMs was demonstrated as valid in Section 4.2.2 and the contaminant concentrations are shown to be more conservative, but within an acceptable range for meeting project goals. Thus, the PFM method of estimating mass flux is considered valid and the resultant data usable for supporting the pilot test injection design.

Key findings of the PFM results include the following:

- Groundwater flux (measured Darcy velocity) ranged from 1.1 to 24.0 cm/day with an average of 9.5 cm/day.
- An interpolation of groundwater flux results along two main transects is shown on **Figure 11.** The two transects shown include an upgradient transect (CACMW-001/CACMW-002/CACMW-003) and a downgradient transect (CACMW-005/CACMW-006/CACMW-007). Groundwater flux is generally greater at the downgradient transect. The zones of greatest groundwater flux at the upgradient transect are generally observed in the shallow zone at CACMW-002 and CACMW-003 (between 50 to 55 feet bgs) and in the deep zone at CACMW-001 (between 125 and 155 feet bgs). At the downgradient transect, the zones of greatest groundwater flux are less isolated, spanning the width of the transect, and are generally observed in the shallow zone (between 30 and 60 feet bgs) and intermediate zone (between 70 and 120 feet bgs). Overall, groundwater flux is greater downgradient and is less within the deep zone, with the exception of the elevated flux zone at CACMW-001-160 between 127 and 154 feet bgs.
- The primary PFAS components reported in the mass flux results are consistent with the low-flow groundwater sampling results discussed in Section 4.2.3. PFOS is the primary constituent in all depth zones, followed by PFHxS, 6:2 FTSA, PFHxA, and PFOA. These five PFAS make up approximately 47 to 72 percent of the PFAS mass flux (**Exhibit 7**). If compounds detected in less than five percent of samples were excluded from the calculation, these five PFAS would make up approximately 84 to 90 percent of the PFAS mass flux.

Exhibit 7. Summary of PFAS Composition in PFM Mass Flux Results

PFAS	Percentage of Total PFAS Mass Flux		
	Shallow Wells	Intermediate Wells	Deep Wells
PFOS	47%	52%	30%
PFHxS	10%	10%	8%
6:2 FTSA	5%	4%	5%
PFHxA	3%	3%	2%
PFOA	3%	3%	2%
Other compounds with >5% detections (18 compounds)	9%	8%	9%
Compounds with <5% detections (17 compounds)	23%	20%	44%

Notes:

1. For acronym definitions, please refer to the list of Acronym and Abbreviations at the front of the document.
2. Total mass flux was calculated as the sum of mass flux for all PFAS analyzed. Where the result was ND, the LOD was used.

- The greatest measured PFOS mass flux was 832.9 µg/m^2/day at CACMW-005-110 between 72 and 77 feet bgs, as shown in **Table 12**. Overall, PFOS mass flux was measured between 5.1 and 832.9 ug/m^2/day, with an average mass flux of 172.5 µg/m^2/day.
- An interpolation of the PFOS mass flux results along the main two transects is shown on **Figure 12.** As with the groundwater flux, the two transects shown include an upgradient transect (CACMW-001/CACMW-002/CACMW-003) and a downgradient transect (CACMW-005/CACMW-006/CACMW-007). At both the upgradient and downgradient transects, the greatest mass flux zones are concentrated in the shallow and intermediate zones (10–110 ft bgs) (**Exhibit 8**), with a 10–15-foot-thick reduced flux zone present between approximately 60 and 75 feet bgs (**Figure 11**). A zone of greater flux also appears to be present at CACMW-001 along the upgradient transect between 130 and 155 feet bgs; however, mass flux is generally less below approximately 100 feet bgs based on the results observed at all deeper wells except CACMW-001. It is unclear why this deeper zone of greater flux is only observed at CACMW-001.

Exhibit 8. Average PFAS Mass Flux per Depth Interval

Shallow Zone	Average Mass Flux (µg/m^2/day)					
	PFOS	PFHxS	6:2 FTSA	PFHxA	PFOA	Total
Shallow	204.4	41.6	22.9	11.3	14.0	430.1
Intermediate	248.2	46.0	20.5	11.8	14.9	477.8
Deep	65.1	18.7	11.0	3.8	4.7	219.8

Notes:

1. For acronym definitions, please refer to the list of Acronym and Abbreviations at the front of the document.
2. Total mass flux was calculated as the sum of mass flux for all PFAS analyzed. Where the result was ND, the LOD was used.

- Darcy velocity and PFOS mass flux are well correlated and generally follow the same trends with depth where greater groundwater velocities and PFOS mass flux are both observed in the shallow and intermediate zones and fewer fluxes are observed in the deep zone. Additionally, the deep zone at CACMW-001 is observed to have greater groundwater flux and PFOS mass flux than the deep zone in other areas of the site. Groundwater flux and PFOS mass flux also correlate within transects, where both are observed to be greater downgradient than upgradient. These correlations suggest groundwater velocity is a significant driver to the overall PFAS mass flux at the site.
- Mass discharge was estimated for PFOS and total PFAS through the cross-sectional areas of both the upgradient and downgradient transects using the mass flux results and interpolations of the data. **Exhibit 9** summarizes the mass discharge estimates. Mass discharge for PFOS is approximately 45 percent of total PFAS mass discharge at each transect.

Exhibit 9. Mass Discharge Estimates

Transect	Cross-Sectional Area (ft^2)	PFOS Mass Discharge (µg/day)	Total PFAS Mass Discharge (µg/day)
Upgradient	14,738	200,000	439,000
Downgradient	13,326	213,000	477,000

Notes:

1. For acronym definitions, please refer to the list of Acronym and Abbreviations at the front of the document.
2. Total mass flux was calculated as the sum of mass flux for all PFAS analyzed. Where the result was ND, the LOD was used.

The data presented in this section will be used in the future injection design to determine CAC loading requirements, injection volumes, and whether a parking agent will be required.

5 Summary and Conclusions

The DGI investigation activities were completed between 8 May 2024 and 6 September 2024 and included site preparation, performance monitoring well installation, soil sampling, groundwater sampling, slug testing, and PFM sampling at the eight DGI well cluster locations.

The data collected to support the conceptual site model aligned well with previous site knowledge. From a groundwater hydraulics perspective, the groundwater gradient is fairly flat (0.00043 ft/ft in the shallow zone), groundwater flow direction is to the north/northwest, and there were no consistent vertical gradients observed at the well clusters at the time of measurement. Borehole logging during drilling activities indicated that the lithology in this area of the site consists primarily of sands and gravels with limited amounts of fines down to 160 feet bgs. Hydraulic conductivity measurements were variable between collection methods; however, based on PFM results, hydraulic conductivity ranges across approximately one order of magnitude in this area of the site, with an average hydraulic conductivity of 467.8 feet per day. These results were consistent with the results from pneumatic slug tests performed upgradient at Transect 02 during the Phase I RI.

In soil, 10 PFAS compounds were detected and PFAS concentrations are generally low and do not indicate source area concentrations. Only PFOS was detected at a concentration exceeding its PSL in soil, at a single sample location. The soil concentrations are less than would be expected based on equilibrium partitioning with groundwater and are therefore likely reflective of adsorption of PFAS to the soil matrix from groundwater. PFAS concentrations in soil and the potential for PFAS to desorb from soil and partition back into the dissolved phase will be accounted for during injection design.

In groundwater, the geochemistry indicated that TOC is present between approximately 2 and 5 mg/L and should be considered during CAC injection and loading design. 24 PFAS compounds were detected in groundwater and the majority of the PFAS mass in groundwater (at least 85 to 90 percent) is composed of five PFAS (PFOS, PFHxS, 6:2 FTSA, PFHxA, and PFOA), which is generally consistent between the low-flow sampling results and the PFM mass flux results. PFNA, PFOA, PFHxS, and PFOS were detected at concentrations exceeding their respective PSLs in most groundwater samples collected from the study area. Results indicate that PFOS is the primary constituent at all locations and depths, composing at least half of the total mass. PFAS composition and concentrations are relatively similar within depth intervals and across the study area, with PFAS concentrations within the shallow and intermediate zones being approximately three to four times greater than PFAS concentrations in the deep zone.

Mass flux results from the PFMs were validated against other mass flux estimates generated from DGI low-flow groundwater sampling data and RI Transect 02 groundwater data. The PFM results were determined to be valid and reasonably consistent with the other estimates and useable for supporting the pilot test injection design.

Mass flux results indicate that the greatest mass flux zones at both the upgradient and downgradient transects are generally concentrated in the shallow and intermediate zones (10 to 110 feet bgs), with a 10 to 15-foot-thick reduced flux zone present between approximately 60 and 75 feet bgs. The Darcy velocity and PFOS mass flux results are well correlated and generally follow the same trends with depth, where greater Darcy groundwater velocities and PFOS mass flux are both observed in the shallow and intermediate zones and reduced fluxes are observed in the deep zone. Mass discharge estimates for total PFAS are estimated at 439,000 µg/day and 477,000 µg/day for the upgradient and downgradient transects, respectively. These estimates suggest that mass discharge is relatively similar at each transect and will provide a helpful baseline for future performance monitoring evaluations and will inform future CAC injection design. Installation of injection wells for future CAC injections is planned as the next phase of this project.

Details of the injection well construction and layout will be presented in the forthcoming PSC QAPP Addendum. The details of the CAC injection design, including CAC loading requirements, injection volumes, and whether a parking agent will be required, will be informed by the data presented in this DGI Report and will follow the PSC phase of the project.

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Figures

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RI VAP Transect 6

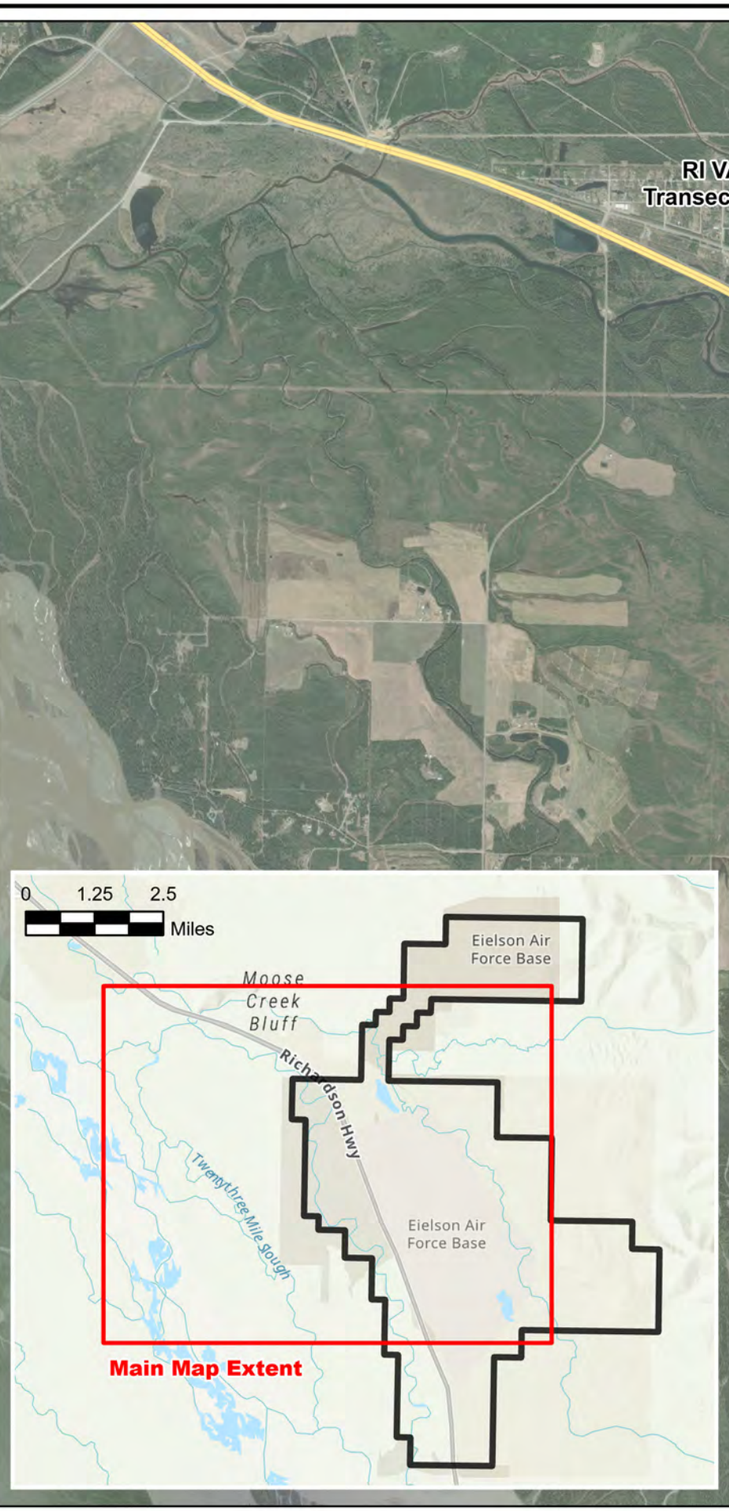
RI VAP Transect 2

Project Location

Eielson Air Force Base

Piledriver Slough

SS312P
SS302P
SS309P
SS314P
SS303P
SS311P
SS306P
SS313P
FT092P8
FT092P7
FT092P9
FT009
SS307P
SS305P
SS304P
SS310P



Legend

- Project Location
- RI VAP Transect
- Richardson Highway
- Validated PFAS Source Area
- Eielson Air Force Base Boundary

Notes:
1. Base map: World Imagery (30% transparency applied), ESRI.
2. Transect 2 and Transect 6 are VAP transect locations from the Phase 1 PFAS RI.
3. Acronyms:
   AFB = Air Force Base
   PFAS = per- and polyfluoroalkyl substances
   RI = remedial investigation
   VAP = vertical aquifer profile

0 1,750 3,500 7,000 Feet

N

Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P

Figure 1
Project Vicinity and Location Map
Eielson Air Force Base, Alaska

Drawn By:	Date:
J. Chen	12/17/2024
Checked By:	Contract No.:
A. Marchioni	FA8903-23-C-0037

Ahtna ARCADIS JV

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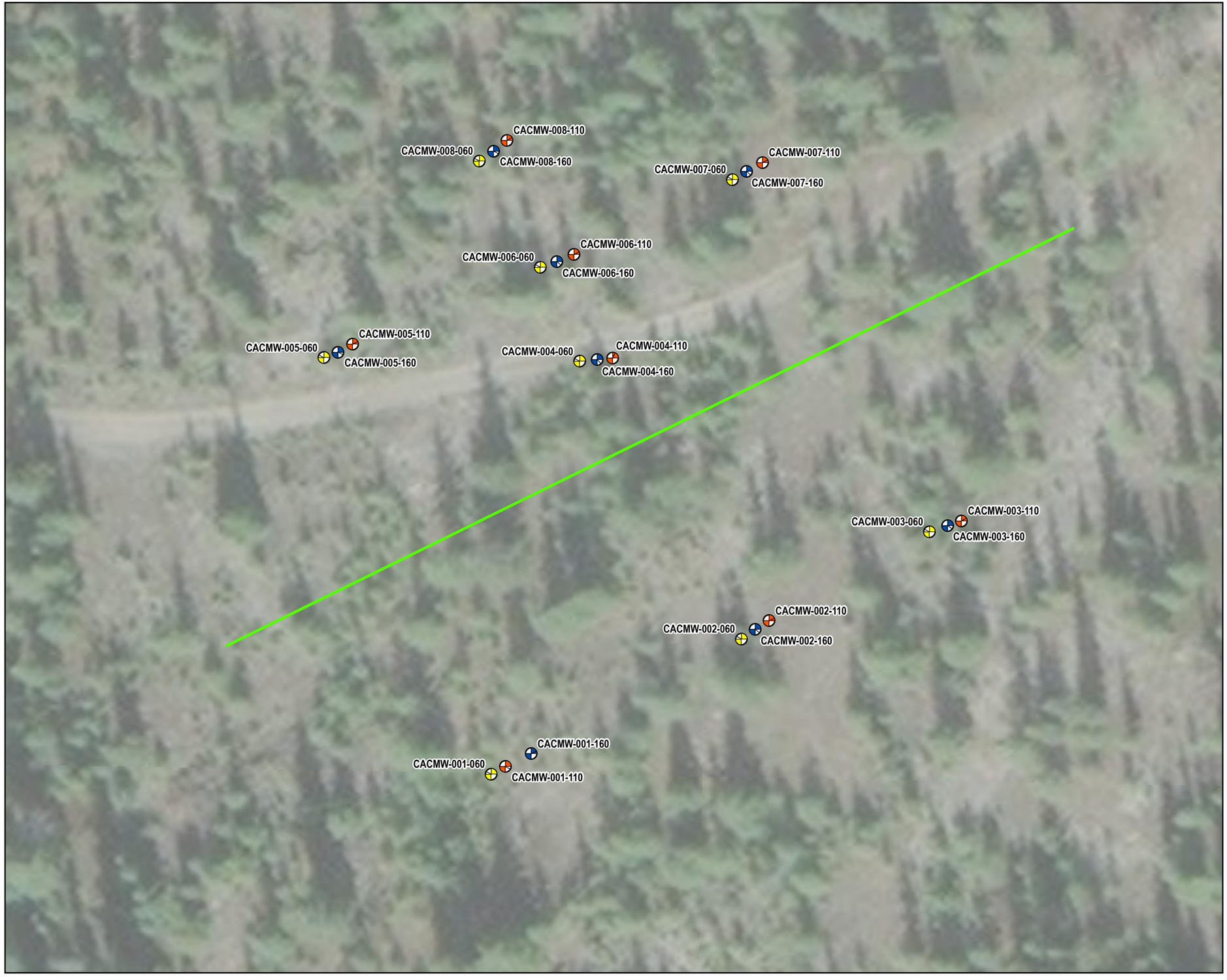

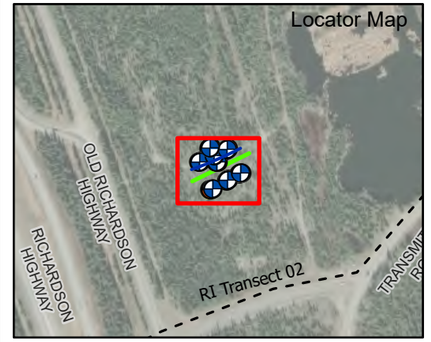

Legend

- Shallow Monitoring Well
- Intermediate Monitoring Well
- Deep Monitoring Well
- Approximate Location of Proposed CAC Injection Transect

Notes:

1. Base map: World Imagery (40% transparency applied), ESRI.
2. Each injection and monitoring well cluster consists of three separate wells screened from 10 to 60 ft bgs, 60 to 110 ft bgs, and 110 to 160 ft bgs.
3. Each injection well cluster is spaced 13 ft apart along the transect; Injection wells are spaced 5 ft apart in each cluster. In-barrier monitoring wells are spaced 5 ft from the CACIW-001 and CACIW-023 clusters.
4. RI Transect 02 is located approximately 500 feet southeast of the project site.
5. Acronyms:
   bgs = below ground surface
   CAC = colloidal activated carbon
   ft = feet

0 15 30 60 Feet

N

Data Gap Investigation Report for
PFAS Treatment Pilot Study at FT009P

Figure 2
Site Layout Plan
Eielson Air Force Base, Alaska

Drawn By:	Date:
J. Chen	2/7/2025
Checked By:	Contract No.:
A. Marchioni	FA8903-23-C-0037

Ahtna ARCADIS JV

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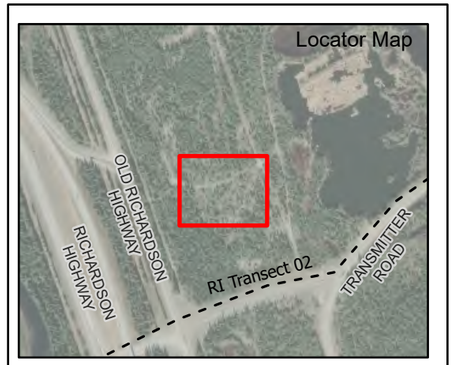
CACMW-008-110
523.00
CACMW-008-060
523.05
CACMW-008-160
522.97
CACMW-007-110
523.04
CACMW-007-060
523.08
CACMW-007-160
523.02
523.10
CACMW-006-110
523.09
CACMW-006-060 *
523.29
CACMW-006-160
523.01
CACMW-005-160
523.00
CACMW-005-110
523.08
CACMW-005-060
523.09
CACMW-004-110
523.15
CACMW-004-060
523.11
CACMW-004-160
523.02
523.10
0.00043 ft/ft hydraulic gradient
CACMW-003-060
523.19
CACMW-003-110
523.23
CACMW-003-160
523.10
CACMW-002-110
523.21
CACMW-002-060
523.17
CACMW-002-160
523.13
CACMW-001-160
523.18
CACMW-001-060
523.16
CACMW-001-110
523.18



Legend

- Shallow Well
- Intermediate Well
- Deep Well
- Approximate Location of Proposed CAC Injection Transect
- Groundwater Elevation Contour (dashed where inferred)
- Groundwater Flow Direction

CACMW-003-060 — Sample Location Identifier
523.19 — Groundwater Elevation (NAVD 88, feet)

Notes:
1. Base map: World Imagery (40% transparency applied), ESRI.
2. Each well cluster consists of three separate wells screened from 10 to 60 ft bgs, 60 to 110 ft bgs, and 110 to 160 ft bgs.
3. Groundwater elevations were measured 7/9/2024.
4. Groundwater elevations in grey (intermediate and deep wells) were not used in contouring.
5. * denotes elevation considered anomalous and not used in contouring
6. The hydraulic gradient shown for all other wells are, 0.0011 ft/ft in the intermediate zone, and 0.0010 ft/ft in the deep zone.
7. RI Transect 02 is located approximately 500 feet southeast of the project site.
8. Acronyms:
   bgs = below ground surface
   CAC = colloidal activated carbon
   ft = feet
   ft/ft = feet per feet
   NAVD 88 = North American Vertical Datum of 1988

0 20 40 80 Feet

N

Data Gap Investigation Report for
PFAS Treatment Pilot Study at FT009P

Figure 3
Groundwater Elevation Map
Eielson Air Force Base, Alaska

Drawn By:	Date:
J. Chen	2/7/2025
Checked By:	Contract No.:
A. Marchioni	FA8903-23-C-0037

Ahtna ARCADIS JV

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CACMW-008-060	
Sample Depth: 24	
Analyte	Results
PFOS	**1300 M**
PFHxS	**240**
6:2 FTSA	**120 M**
PFHxA	**97**
PFOA	**110 M**
Total PFAS	2381

CACMW-007-060	
Sample Depth: 51	
Analyte	Results
PFOS	**1200 (1500) M**
PFHxS	**250 (320) M**
6:2 FTSA	**110 (160) M**
PFHxA	**93 (120) M**
PFOA	**96 (120) M**
Total PFAS	2034 (2789)

CACMW-006-060	
Sample Depth: 36	
Analyte	Results
PFOS	**1300 M**
PFHxS	**280**
6:2 FTSA	**140**
PFHxA	**110**
PFOA	**120 M**
Total PFAS	2468

CACMW-005-060	
Sample Depth: 19.6	
Analyte	Results
PFOS	**1400 M**
PFHxS	**250**
6:2 FTSA	**150**
PFHxA	**92**
PFOA	**90 M**
Total PFAS	2264

CACMW-004-060	
Sample Depth: 40	
Analyte	Results
PFOS	**1200 M**
PFHxS	**250**
6:2 FTSA	**130**
PFHxA	**93**
PFOA	**99 M**
Total PFAS	2060

CACMW-003-060	
Sample Depth: 56	
Analyte	Results
PFOS	**1300**
PFHxS	**250**
6:2 FTSA	**110**
PFHxA	**97**
PFOA	**90 M**
Total PFAS	2128

CACMW-002-060	
Sample Depth: 30.5	
Analyte	Results
PFOS	**1400 M**
PFHxS	**250**
6:2 FTSA	**130**
PFHxA	**98**
PFOA	**97 M**
Total PFAS	2265

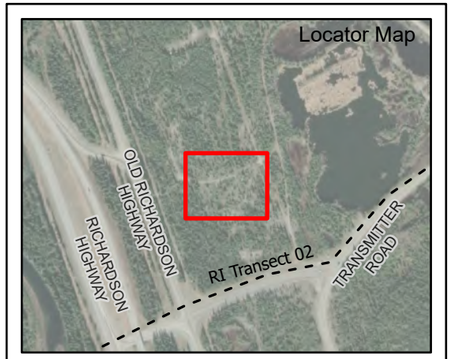
CACMW-001-060	
Sample Depth : 14	
Analyte	Results
PFOS	**1100 M**
PFHxS	**230**
6:2 FTSA	**120**
PFHxA	**93 M**
PFOA	**89 M**
Total PFAS	1915

CACMW-008-110
CACMW-008-160
CACMW-007-110
CACMW-007-160
CACMW-006-110
CACMW-006-160
CACMW-005-110
CACMW-005-160
CACMW-004-160
CACMW-004-110
CACMW-003-160
CACMW-003-110
CACMW-002-160
CACMW-002-110
CACMW-001-160
CACMW-001-110

Project Screening Levels

Analyte	PFOS	PFHxS	PFHxA	PFOA
PSL	4**	10**	990*	4**

* = PSL is the November 2023 Tap Water Regional Screening Level (ASD 2024).
** = PSL is the April 2024 Maximum Contaminant Level (USEPA 2024).



Legend
- Shallow Well
- Intermediate Well
- Deep Well
- Approximate Location of Proposed CAC Injection Transect

Notes:
1. Base map: World Imagery, ESRI.
2. Each well cluster consists of three separate wells screened from 10 to 60 ft bgs, 60 to 110 ft bgs, and 110 to 160 ft bgs.
3. Groundwater samples were collected between 7/10/24 and 7/15/2024 via low-flow sampling methods.
4. All results are displayed in ng/L.
5. Total PFAS was calculated as the sum of all 40 PFAS compounds analyzed by Method 1633, the limit of detection was used to represent non-detect results.
6. **Bolded** results are detected results.
7. **Bolded and shaded** results are greater than the applicable PSL.
8. Duplicate results are presented in ( ).
9. Sample depths presented are the pump intake depths in ft btoc.
10. Qualifiers:
    M = manual integration performed
11. Acronyms:
    CAC = colloidal activated carbon
    PSL = project screening level
    ft bgs = feet below ground surface
    ft btoc = feet below top of casing
    ng/L = nanograms per liter
    PFAS = per- and polyfluoroalkyl substances
    PFHxA = perfluorohexanoic acid
    PFHxS = perfluorohexane sulfonic acid
    PFOA = perfluorooctanoic acid
    PFOS = perfluorooctane sulfonic acid
    6:2 FTSA = 6:2 Fluorotelomer sulfonic acid

0 20 40 80 Feet

N

Data Gap Investigation Report for
PFAS Treatment Pilot Study at FT009P

Figure 4
Groundwater PFAS Concentrations in Monitoring Wells - Shallow Zone Wells
Eielson Air Force Base, Alaska

Drawn By:	Date:
J. Chen	6/12/2025
Checked By:	Contract No.:
A. Marchioni	FA8903-23-C-0037

Ahtna ARCADIS

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CACMW-008-110	
Sample Depth: 74	
Analyte	Results
PFOS	**1800 (1900) M**
PFHxS	**340 (320)**
6:2 FTSA	**130 (130) M**
PFHxA	**120 (120)**
PFOA	**110 (100)**
Total PFAS	3038 (3112)

CACMW-007-110	
Sample Depth: 101	
Analyte	Results
PFOS	**2200 M**
PFHxS	**320**
6:2 FTSA	**160**
PFHxA	**120**
PFOA	**120 M**
Total PFAS	3483

CACMW-006-110	
Sample Depth: 86	
Analyte	Results
PFOS	**1500 M**
PFHxS	**270 M**
6:2 FTSA	**110**
PFHxA	**93 M**
PFOA	**78**
Total PFAS	2324

CACMW-005-110	
Sample Depth: 70	
Analyte	Results
PFOS	**1400 M**
PFHxS	**250**
6:2 FTSA	**120**
PFHxA	**95 M**
PFOA	**90 M**
Total PFAS	2242

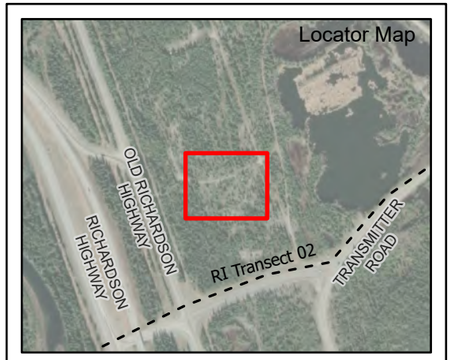
CACMW-004-110	
Sample Depth: 90	
Analyte	Results
PFOS	**1400 M**
PFHxS	**260 M**
6:2 FTSA	**100**
PFHxA	**100 M**
PFOA	**83**
Total PFAS	2220

CACMW-001-110	
Sample Depth : 65	
Analyte	Results
PFOS	**1500 M**
PFHxS	**280 M**
6:2 FTSA	**110**
PFHxA	**97**
PFOA	**86 M**
Total PFAS	2367

CACMW-002-110	
Sample Depth: 81	
Analyte	Results
PFOS	**1400**
PFHxS	**250**
6:2 FTSA	**120**
PFHxA	**98**
PFOA	**91 M**
Total PFAS	2249

CACMW-003-110	
Sample Depth: 106	
Analyte	Results
PFOS	**1400 M**
PFHxS	**240**
6:2 FTSA	**130**
PFHxA	**88**
PFOA	**83**
Total PFAS	2215

CACMW-008-060
CACMW-008-160
CACMW-007-160
CACMW-007-060
CACMW-006-060
CACMW-006-160
CACMW-005-160
CACMW-005-060
CACMW-004-160
CACMW-004-060
CACMW-003-160
CACMW-003-060
CACMW-002-160
CACMW-002-060
CACMW-001-060
CACMW-001-160



Legend

- Intermediate Well
- Shallow Well
- Deep Well
- Approximate Location of Proposed CAC Injection Transect

Notes:
1. Base map: World Imagery, ESRI.
2. Each well cluster consists of three separate wells screened from 10 to 60 ft bgs, 60 to 110 ft bgs, and 110 to 160 ft bgs.
3. Groundwater samples were collected between 7/10/24 and 7/15/2024 via low-flow sampling methods.
4. All results are displayed in ng/L.
5. Total PFAS was calculated as the sum of all 40 PFAS compounds analyzed by Method 1633, the limit of detection was used to represent non-detect results.
6. **Bolded** results are detected results.
7. **Bolded and shaded** results are greater than the applicable PSL.
8. Duplicate results are presented in ( ).
9. Sample depths presented are the pump intake depths in ft btoc.
10. Qualifiers:
    M = manual integration performed
11. Acronyms:
    CAC = colloidal activated carbon
    PSL = project screening level
    ft bgs = feet below ground surface
    ft btoc = feet below top of casing
    ng/L = nanograms per liter
    PFAS = per- and polyfluoroalkyl substances
    PFHxA = perfluorohexanoic acid
    PFHxS = perfluorohexane sulfonic acid
    PFOA = perfluorooctanoic acid
    PFOS = perfluorooctane sulfonic acid
    6:2 FTSA = 6:2 Fluorotelomer sulfonic acid

0 20 40 80 Feet

N

Project Screening Levels

Analyte	PFOS	PFHxS	PFHxA	PFOA
PSL	4**	10**	990*	4**

* = PSL is the November 2023 Tap Water Regional Screening Level (ASD 2024).
** = PSL is the April 2024 Maximum Contaminant Level (USEPA 2024).

Data Gap Investigation Report for
PFAS Treatment Pilot Study at FT009P

Figure 5
Groundwater PFAS Concentrations in Monitoring Wells - Intermediate Zone Wells
Eielson Air Force Base, Alaska

Drawn By:	Date:
J. Chen	6/12/2025
Checked By:	Contract No.:
A. Marchioni	FA8903-23-C-0037

Ahtna ARCADIS JV

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CACMW-008-160	
Sample Depth: 125	
Analyte	Results
PFOS	**350 M**
PFHxS	**89 M**
6:2 FTSA	**41**
PFHxA	**26**
PFOA	**29 M**
Total PFAS	854

CACMW-007-160	
Sample Depth: 151	
Analyte	Results
PFOS	**350 M**
PFHxS	**98 M**
6:2 FTSA	**54**
PFHxA	**27**
PFOA	**28**
Total PFAS	875

CACMW-006-160	
Sample Depth: 136	
Analyte	Results
PFOS	**260 M**
PFHxS	**69**
6:2 FTSA	**47**
PFHxA	**22 M**
PFOA	**19 M**
Total PFAS	526

CACMW-005-160	
Sample Depth: 120	
Analyte	Results
PFOS	**320 M**
PFHxS	**78**
6:2 FTSA	**51**
PFHxA	**23**
PFOA	**21 M**
Total PFAS	624

CACMW-004-160	
Sample Depth: 140	
Analyte	Results
PFOS	**260 (260) M**
PFHxS	**76 (68)**
6:2 FTSA	**38 (42)**
PFHxA	**22 (22)**
PFOA	**20 (18)**
Total PFAS	524 (535)

CACMW-001-160	
Sample Depth: 114	
Analyte	Results
PFOS	**230 M**
PFHxS	**64 M**
6:2 FTSA	**40**
PFHxA	**19**
PFOA	**20**
Total PFAS	477

CACMW-002-160	
Sample Depth: 130	
Analyte	Results
PFOS	**240**
PFHxS	**75**
6:2 FTSA	**39**
PFHxA	**22**
PFOA	**20 M**
Total PFAS	504

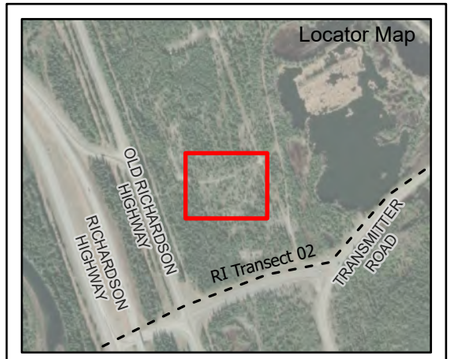
CACMW-003-160	
Sample Depth: 156	
Analyte	Results
PFOS	**190 M**
PFHxS	**66**
6:2 FTSA	**40**
PFHxA	**18**
PFOA	**17**
Total PFAS	450

CACMW-008-110
CACMW-008-060
CACMW-007-060
CACMW-007-110
CACMW-006-110
CACMW-006-060
CACMW-005-060
CACMW-005-110
CACMW-004-110
CACMW-004-060
CACMW-003-110
CACMW-003-060
CACMW-002-110
CACMW-002-060
CACMW-001-110
CACMW-001-060

Project Screening Levels

Analyte	PFOS	PFHxS	PFHxA	PFOA
PSL	4**	10**	990*	4**

* = PSL is the November 2023 Tap Water Regional Screening Level (ASD 2024).
** = PSL is the April 2024 Maximum Contaminant Level (USEPA 2024).



Legend
- Deep Well
- Shallow Well
- Intermediate Well
- Approximate Location of Proposed CAC Injection Transect

Notes:
1. Base map: World Imagery, ESRI.
2. Each well cluster consists of three separate wells screened from 10 to 60 ft bgs, 60 to 110 ft bgs, and 110 to 160 ft bgs.
3. Groundwater samples were collected between 7/10/24 and 7/15/2024 via low-flow sampling methods.
4. All results are displayed in ng/L.
5. Total PFAS was calculated as the sum of all 40 PFAS compounds analyzed by Method 1633, the limit of detection was used to represent non-detect results.
6. **Bolded** results are detected results.
7. **Bolded and shaded** results are greater than the applicable PSL.
8. Duplicate results are presented in ( ).
9. Sample depths presented are the pump intake depths in ft btoc.
10. Qualifiers:
    M = manual integration performed
11. Acronyms:
    CAC = colloidal activated carbon
    PSL = project screening level
    ft bgs = feet below ground surface
    ft btoc = feet below top of casing
    ng/L = nanograms per liter
    PFAS = per- and polyfluoroalkyl substances
    PFHxA = perfluorohexanoic acid
    PFHxS = perfluorohexane sulfonic acid
    PFOA = perfluorooctanoic acid
    PFOS = perfluorooctane sulfonic acid
    6:2 FTSA = 6:2 Fluorotelomer sulfonic acid

0 20 40 80 Feet

N

Data Gap Investigation Report for
PFAS Treatment Pilot Study at FT009P

Figure 6
Groundwater PFAS Concentrations in Monitoring Wells - Deep Zone Wells
Eielson Air Force Base, Alaska

Drawn By: J. Chen	Date: 6/12/2025	Ahtna ARCADIS
Checked By: A. Marchioni	Contract No.: FA8903-23-C-0037	

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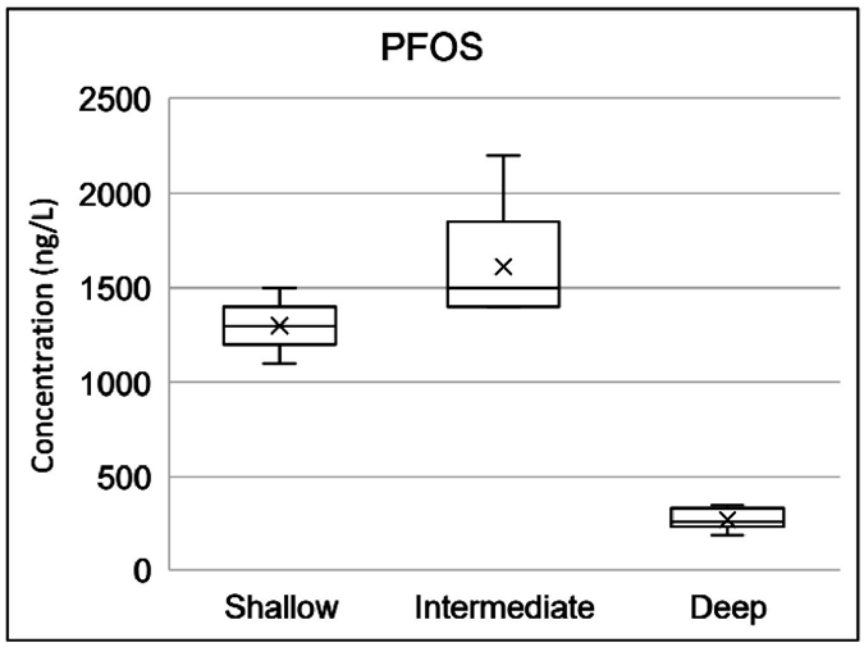

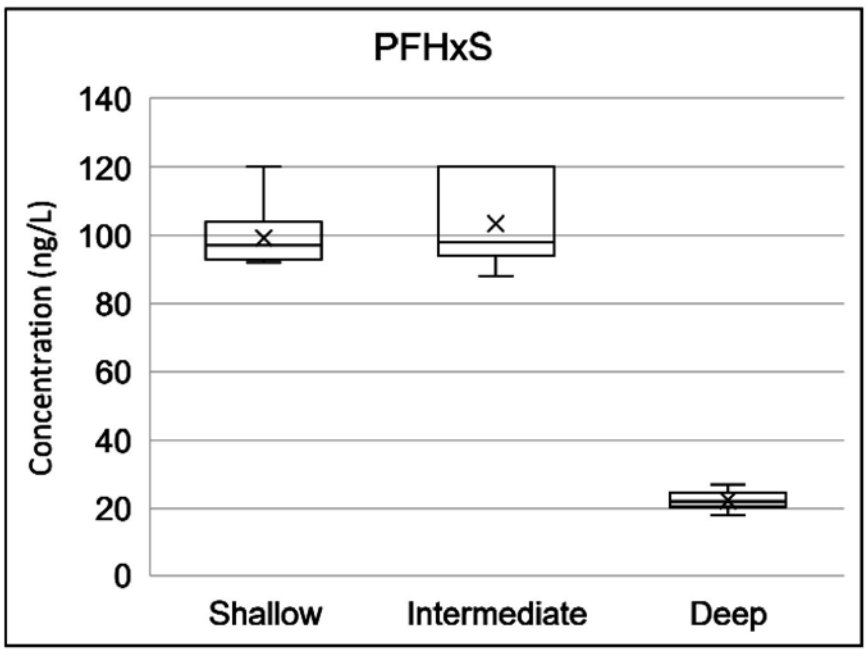

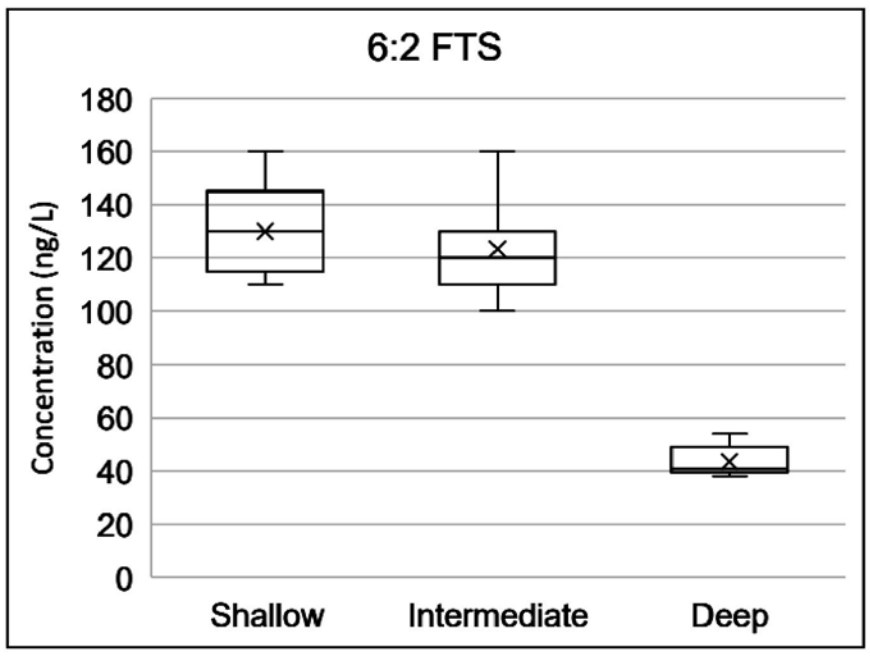

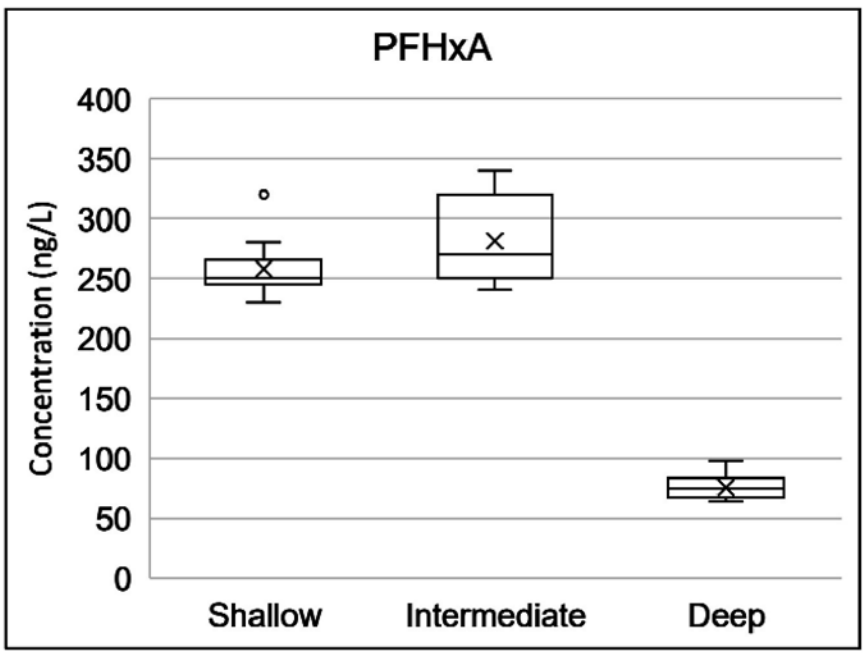

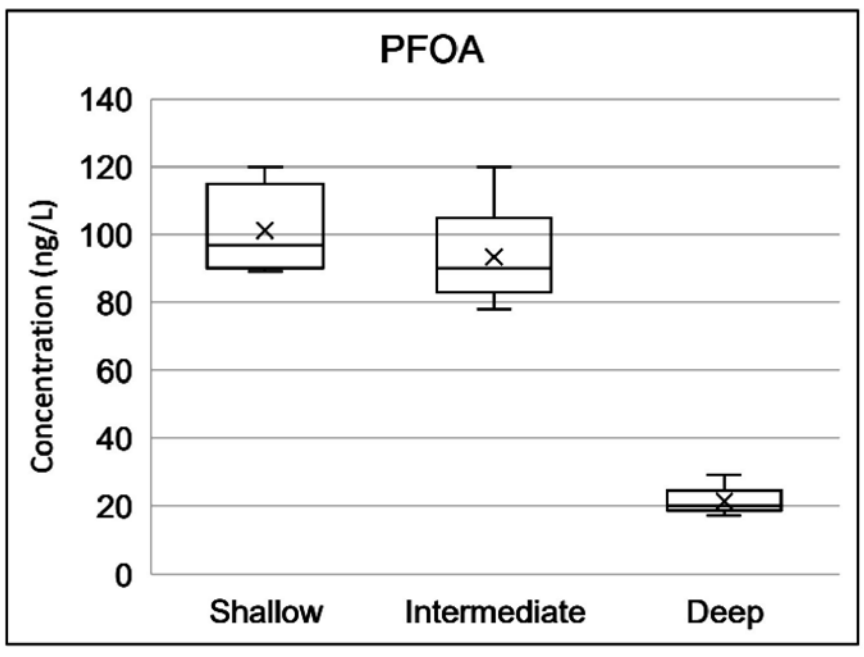

Notes:
1. The lower box edge equates to the first quartile (25th percentile).
2. The line through the center of the box equates to the second quartile (median).
3. The upper box edge equates to the third quartile (75th percentile).
4. The "X" represents the mean.
5. The open circle is an outliers. Outliers were determined as any data point that exceeded a distance of 1.5 times the interquartile range from the first or third quartile.
6. The top whisker is the maximum, excluding outliers, if present. The bottom whisker is the minimum, excluding outliers, if present.
7. Acronyms:
   ng/L = nanograms per liter
   PFAS = per- and polyfluoroalkyl substances
   PFHxA = perfluorohexanoic acid
   PFHxS = perfluorohexane sulfonic acid
   PFOA = perfluorooctanoic acid
   PFOS = perfluorooctane sulfonic acid
   6:2 FTSA = 6:2 Fluorotelomer sulfonic acid

Data Gap Investigation Report for
PFAS Treatment Pilot Study at FT009P

Figure 7
PFAS Distribution by Analyte from Low-Flow Groundwater Samples
Eielson Air Force Base, Alaska

Drawn By:	Date:	
J. Chen	12/20/2024	Ahtna ARCADIS JV
Checked By: M. Thompson	Contract No.: FA8903-23-C-0037	

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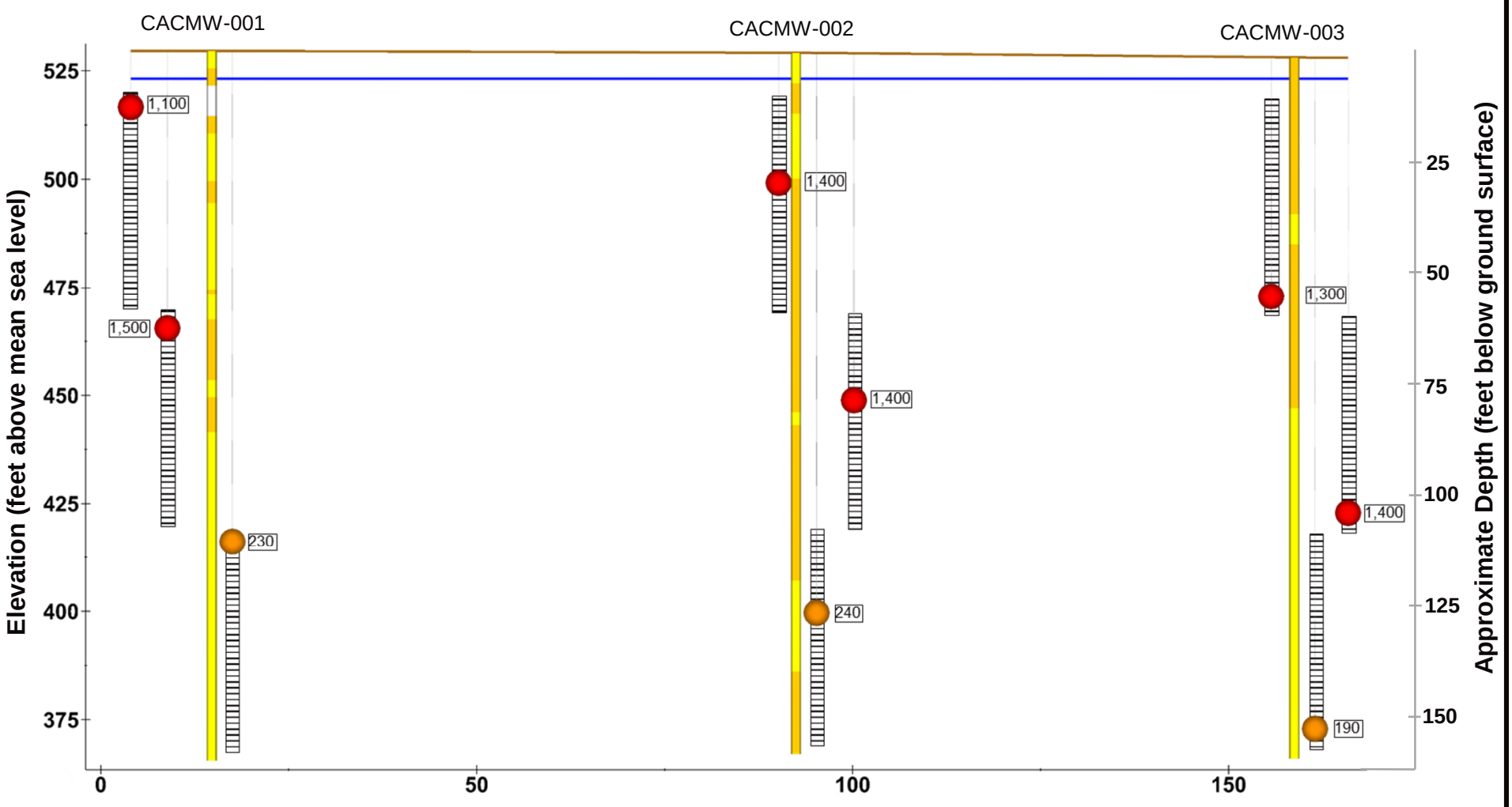
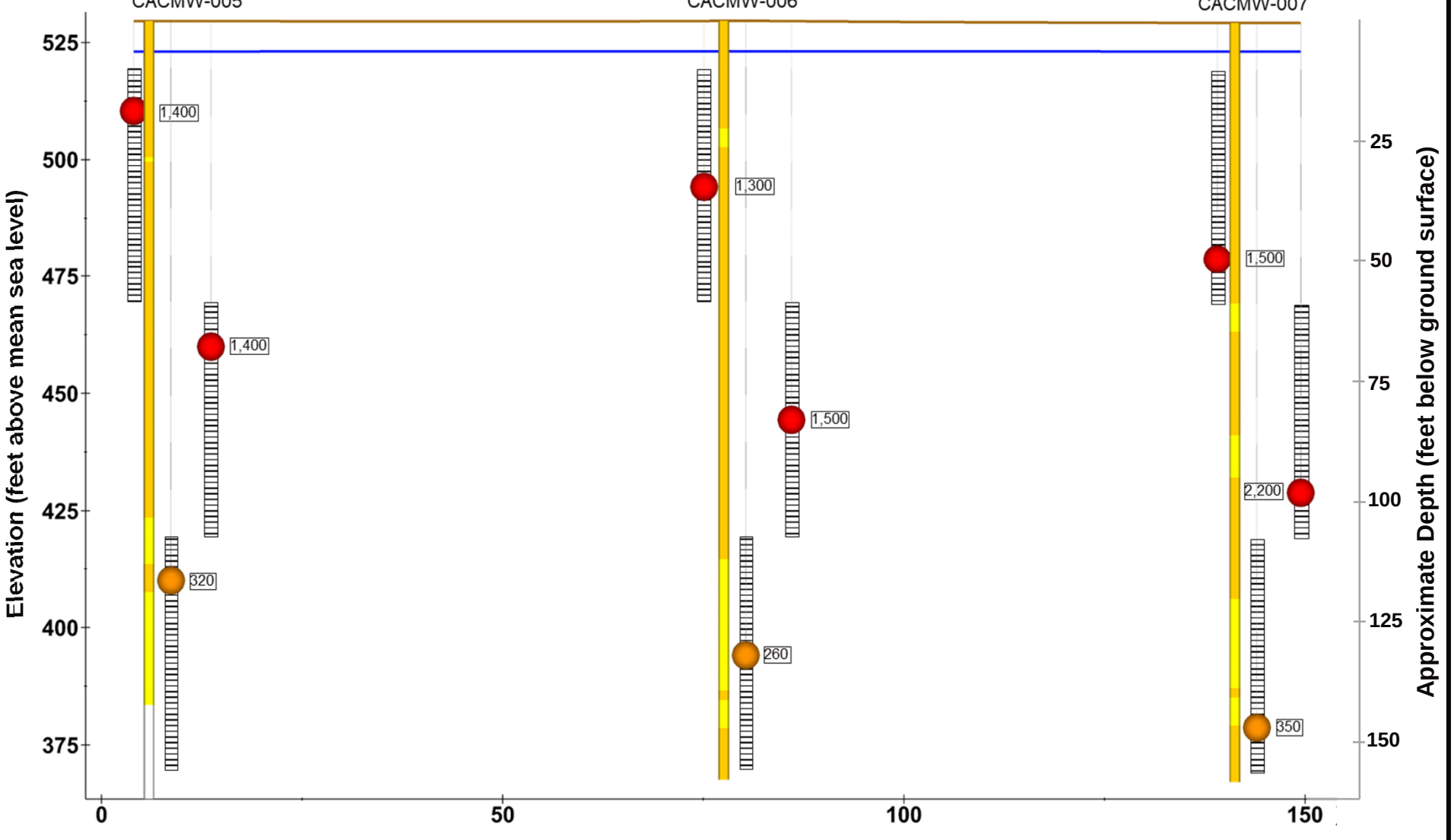
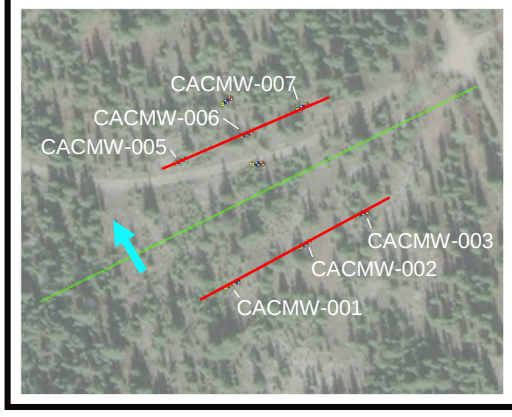
Upgradient Transect



Downgradient Transect





Inset Features
- Groundwater Flow Direction
- Proposed Injection Transect
- Cross-Section Transect

Model Features
- Ground Surface
- Water Table
- Well Screen

Lithology at Borings
- Predominantly Gravel Mixes
- Predominantly Sand Mixes
- No Recovery

PFOS Concentration in Groundwater
- Between 100x and 1,000x PSL
- Between 10x and 100x PSL
- 1,400 PFOS Concentration in ng/L

Notes
1. Vertical exaggeration = 0.575x
2. ng/L = nanograms per liter
3. PSL = project screening level (4.0 ng/L for PFOS)

Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P

Figure 8
Low-Flow Groundwater PFOS Concentrations and Lithology Cross-Section

Eielson Air Force Base, Alaska

Drawn by:	Date:
D. Olexa	12/17/2024
Checked by:	Contract No:
M. Thompson	

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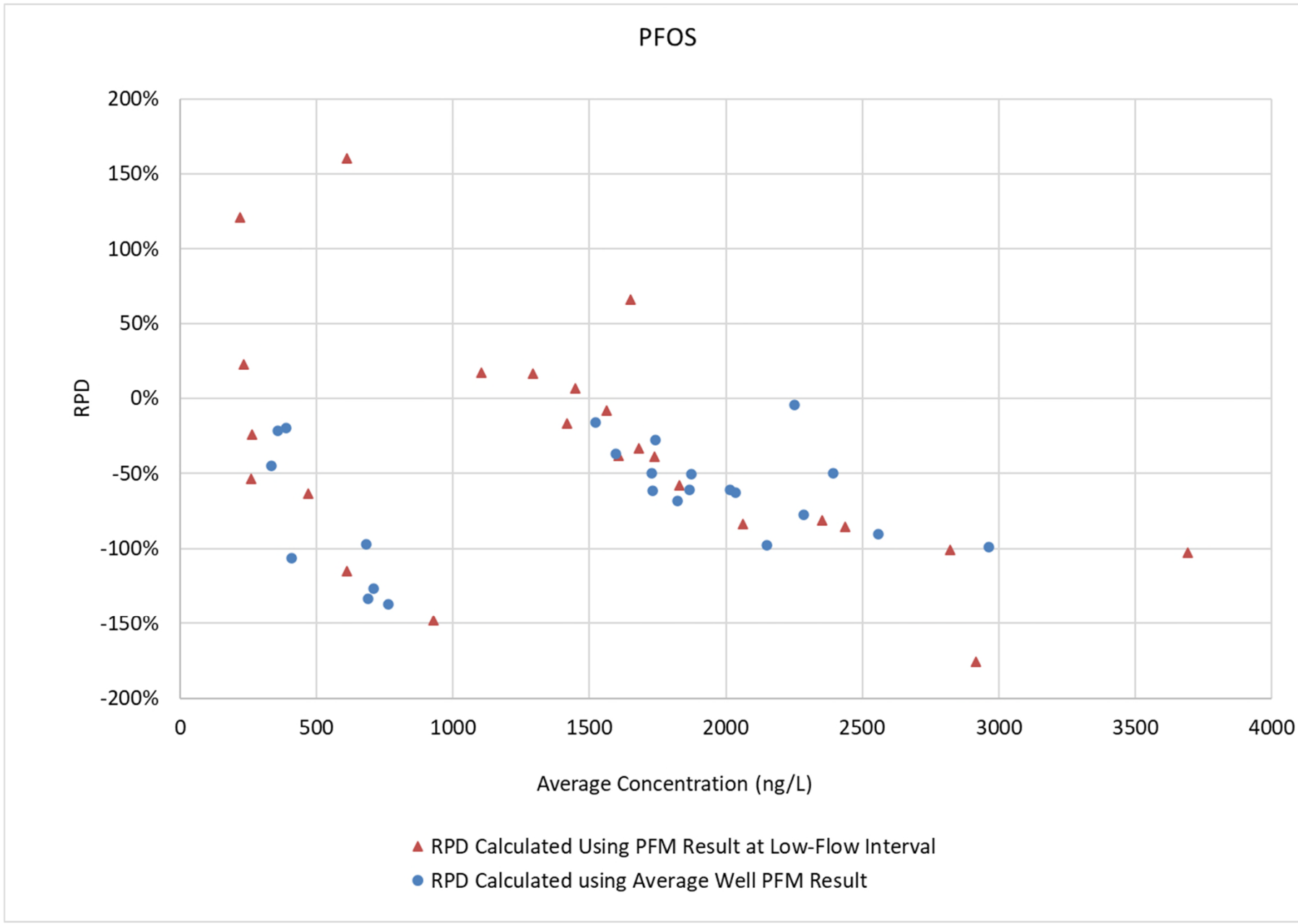

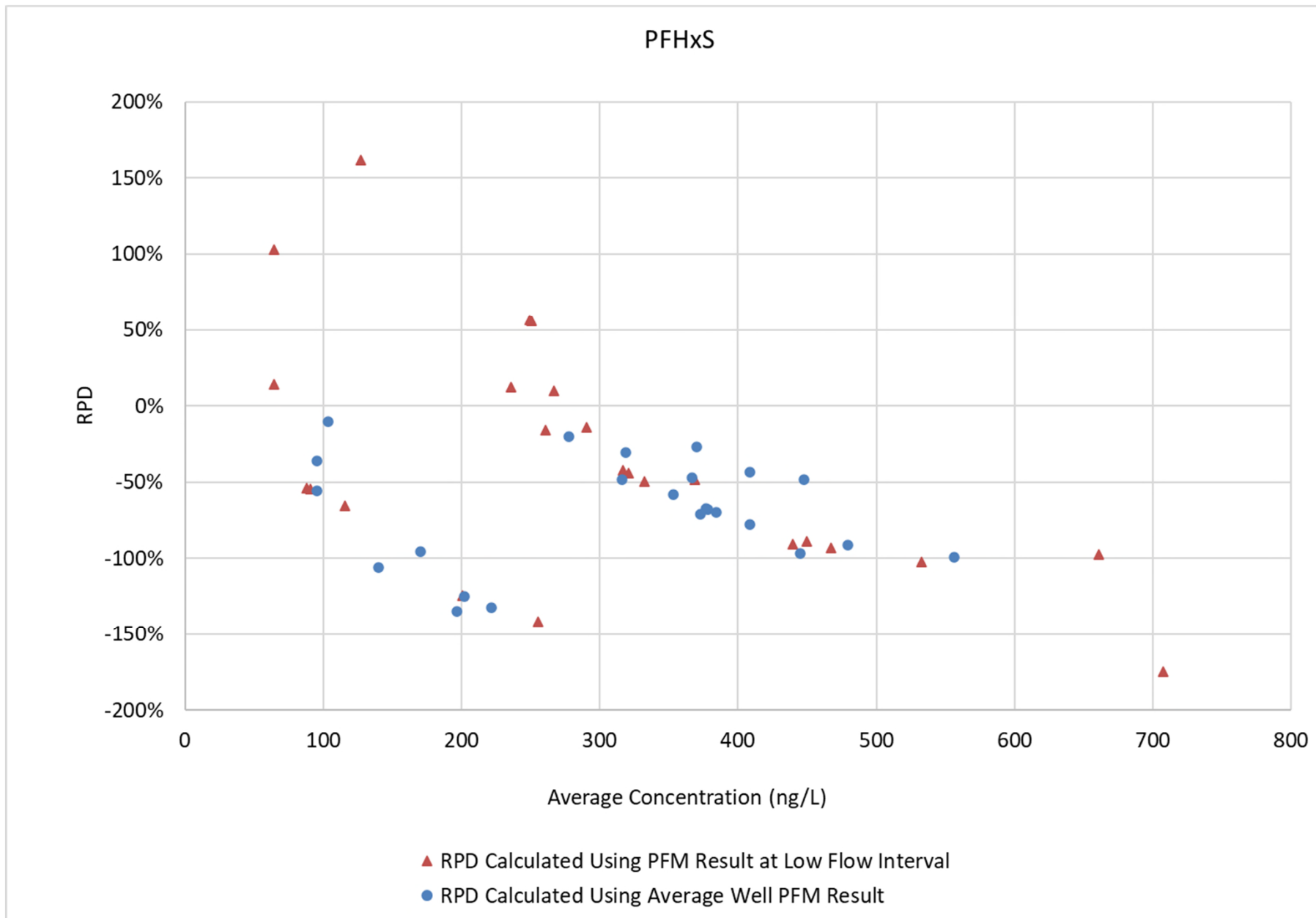

Notes

1. ng/L = nanograms per liter
2. PFAS = perfluoroalkyl substances
3. PFHxS = perfluorohexane sulfonate
4. PFOS = Perfluorooctanesulfonic acid
5. PFM = passive flux meter
6. RPD = relative percent difference

Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P

Figure 9
Low-Flow Versus PFM RPD Charts for PFOS and PFHxS

Eielson Air Force Base, Alaska

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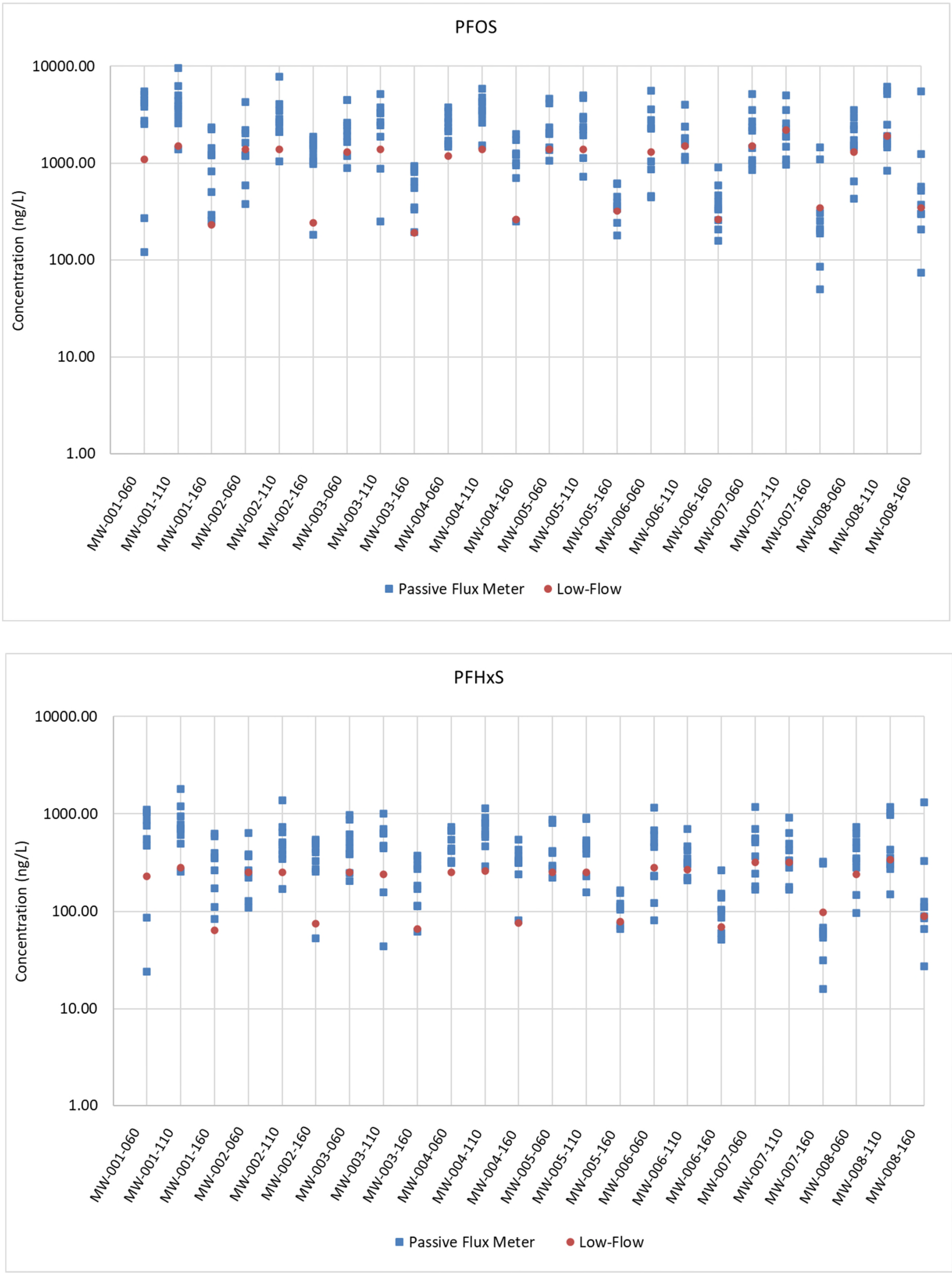

Notes

1. ng/L = nanograms per liter
2. PFAS = perfluoroalkyl substances
3. PFHxS = perfluorohexane sulfonate
4. PFOS = perfluorooctanesulfonic acid

Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P

Figure 10
Low-Flow Versus PFM Concentration Charts for PFOS and PFHxS

Eielson Air Force Base, Alaska

Drawn by:	Date:
M. Thompson	2/24//2025
Checked by:	Contract No:
K. Heinze	

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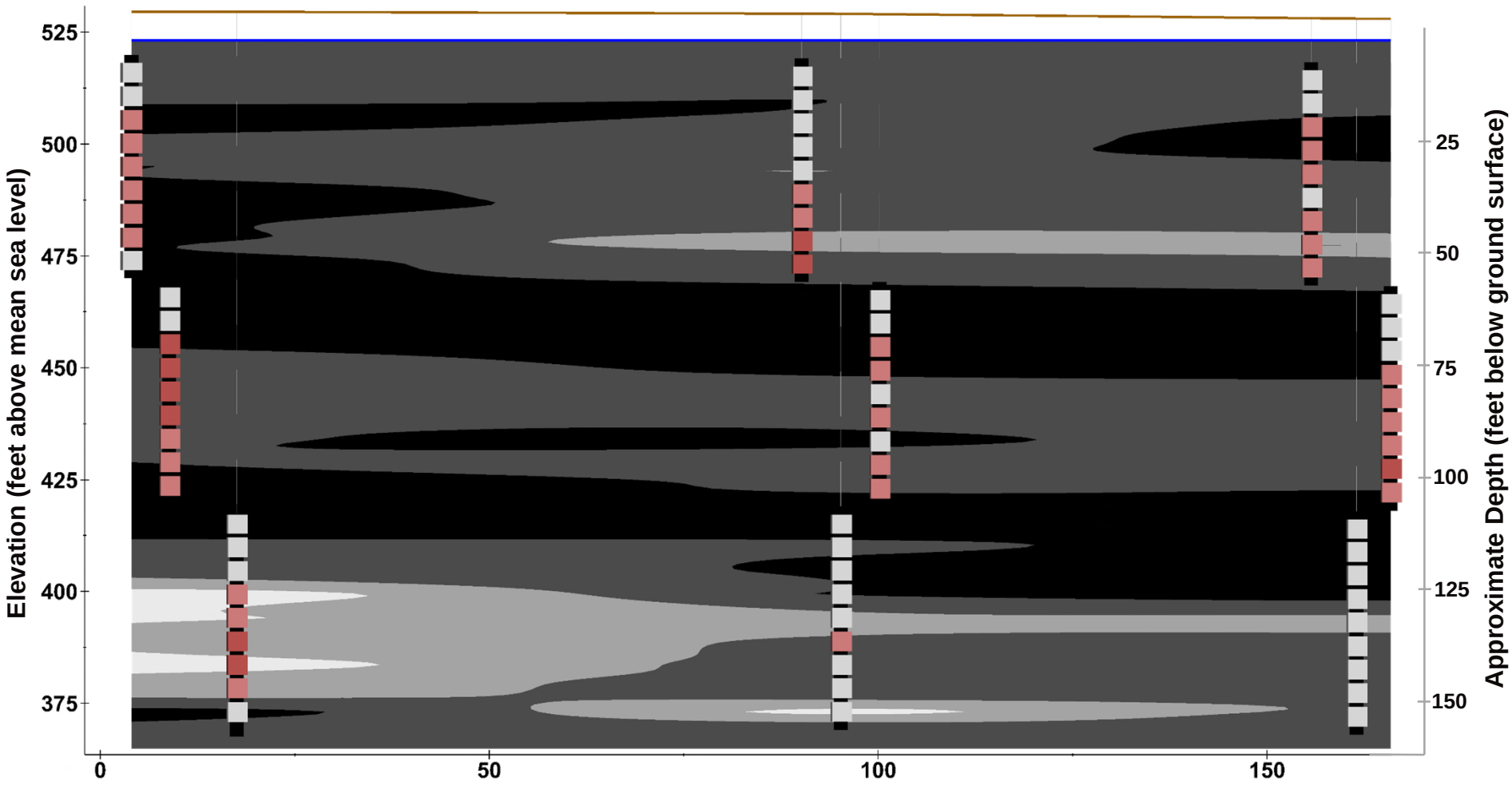
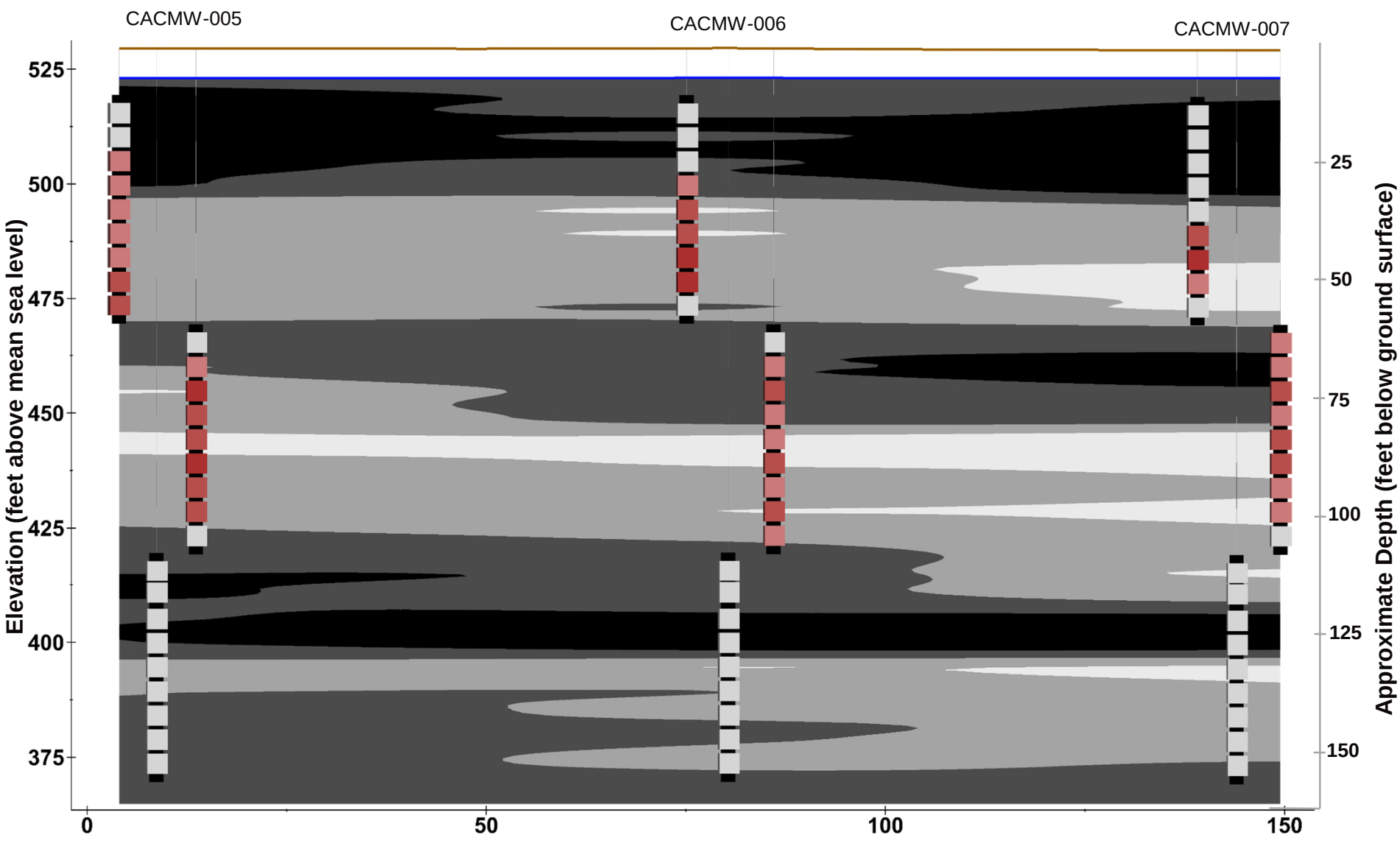
Upgradient Transect

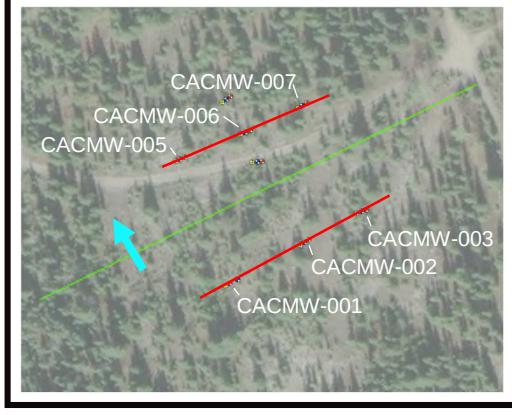


Distance (feet)

Downgradient Transect



Distance (feet)



Inset Features

- Groundwater Flow Direction
- Proposed Injection Transect
- Cross-Section Transect

Model Features

- Ground Surface
- Water Table
- Well Screen

PFOS Mass Flux

- > 450 ug/m²/day
- 300 – 450 ug/m²/day
- 150 – 300 ug/m²/day
- 0 – 150 ug/m²/day

Darcy Velocity

- > 16.1 cm/day
- 11.1 – 16.1 cm/day
- 6.1 – 11.1 cm/day
- < 6.1 cm/day

Notes

1. Vertical exaggeration = 0.575x
2. cm/day = centimeters per day
3. ug/m²/day = micrograms per meter squared per day
4. Interpolation was created by kriging Darcy velocity results in C-Tech's Earth Volumetric Studio

Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P

Figure 11
Groundwater Flux in Cross-Section

Eielson Air Force Base, Alaska

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Checked by: M. Thompson	Contract No:

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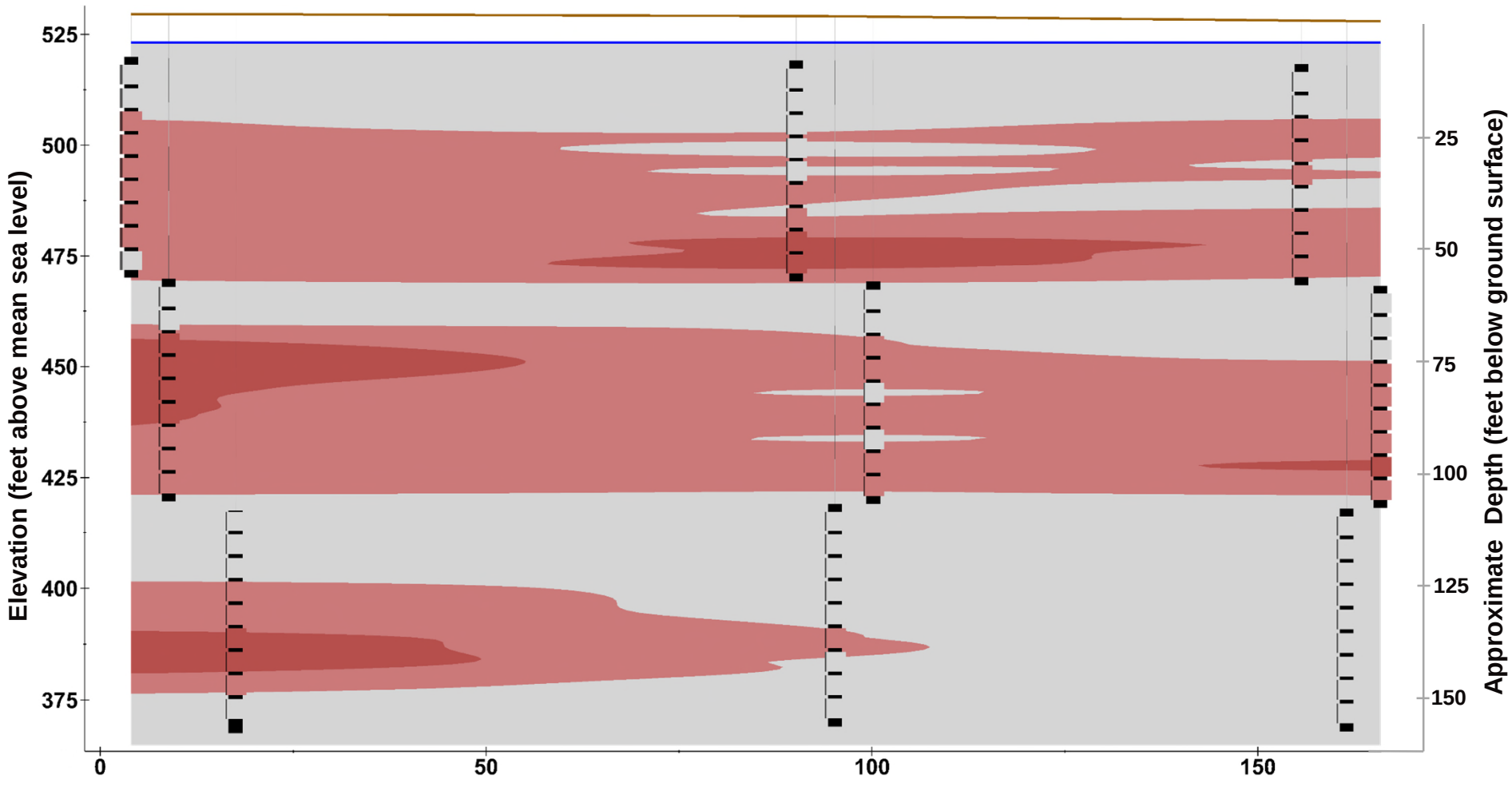
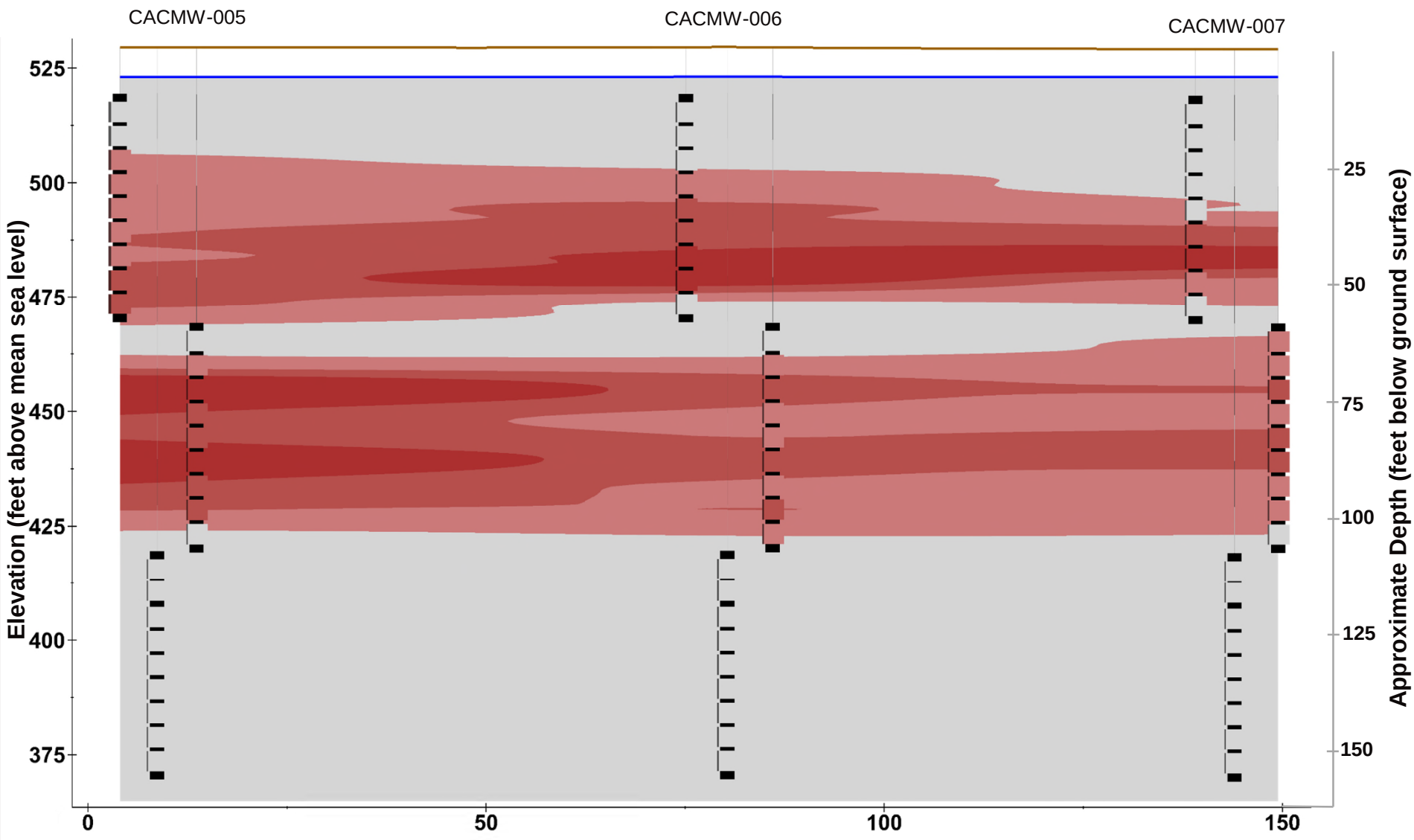
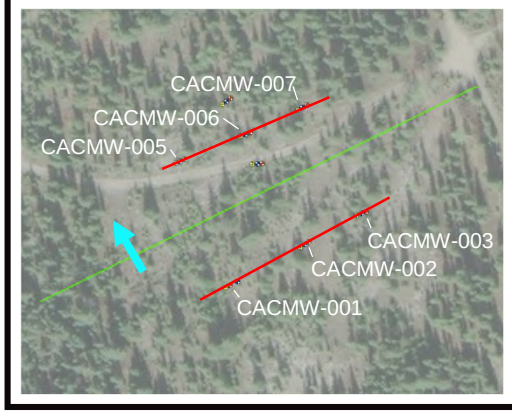
Upgradient Transect



Downgradient Transect





Inset Features

- Groundwater Flow Direction
- Proposed Injection Transect
- Cross-Section Transect

Model Features

- Ground Surface
- Water Table
- Well Screen

PFOS Mass Flux

- > 450 ug/m^2/day
- 300 – 450 ug/m^2/day
- 150 – 300 ug/m^2/day
- 0 – 150 ug/m^2/day

Notes

1. Vertical exaggeration = 0.575x
2. ug/m^2/day = micrograms per meter squared per day
3. Interpolation was created by kriging mass flux results in C-Tech's Earth Volumetric Studio

Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P

Figure 12
Groundwater PFOS Mass Flux in Cross-Section

Eielson Air Force Base, Alaska

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D. Olexa	12/17/2024
Checked by:	Contract No:
M. Thompson	

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Tables

Table 1. Sampling Summary
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well Screen (ft bgs)	Sampling Depth (ft bgs)	Well Cluster ID																													
		CACMW-001[1]				CACMW-002				CACMW-003				CACMW-004				CACMW-005				CACMW-006				CACMW-007				CACMW-008			
		PFM	GW / ST	Soil PFAS	Soil GT	PFM	GW / ST	Soil PFAS	Soil GT	PFM	GW / ST	Soil PFAS	Soil GT	PFM	GW / ST	Soil PFAS	Soil GT	PFM	GW / ST	Soil PFAS	Soil GT	PFM	GW / ST	Soil PFAS	Soil GT	PFM	GW / ST	Soil PFAS	Soil GT	PFM	GW / ST	Soil PFAS	Soil GT
10 - 60	11.5 - 16.5	X	X	X	X	X				X				X				X				X				X				X			
	16.75 - 21.75	X				X				X				X				X	X	X	X	X				X			X	X			
	22 - 27	X				X				X				X				X				X			X	X				X	X	X	X
	27.25 - 32.25	X				X	X	X	X	X				X				X			X	X				X		X	X	X			
	32.5 - 37.5	X				X				X				X				X				X	X	X	X	X				X			
	37.75 - 42.75	X				X				X				X	X	X	X	X		X	X	X				X				X			
	43 - 48	X				X				X				X				X				X		X	X	X				X			
	48.25 - 53.25	X				X				X				X				X				X				X	X	X	X	X			
	53.5 - 58.5	X				X				X	X	X	X	X				X				X				X				X			
60 - 110	61.5 - 66.5	X	X	X	X	X				X				X				X				X				X				X			
	66.75 - 71.75	X				X				X				X				X	X	X	X	X				X				X			
	72 - 77	X				X				X				X				X				X				X				X	X	X	X
	77.25 - 82.25	X				X	X	X	X	X				X				X				X				X				X			
	82.5 - 87.5	X				X				X				X				X		X	X	X	X	X	X	X			X	X			
	87.75 - 92.75	X				X				X				X	X	X	X	X				X				X		X	X	X			
	93 - 98	X				X				X				X				X			X	X		X	X	X				X			
	98.25 - 103.25	X				X				X				X				X				X				X	X	X	X	X			
	103.5 - 108.5	X				X				X	X	X	X	X				X				X				X				X			
110 - 160	111.5 - 116.5	X	X	X	X	X				X				X				X				X				X			X	X			
	116.75 - 121.75	X				X				X				X				X	X	X	X	X				X				X			
	122 - 127	X				X				X				X				X				X				X				X	X	X	X
	127.25 - 132.25	X				X	X	X	X	X				X				X				X				X				X			
	132.5 - 137.5	X				X				X				X				X		X	X	X	X	X	X	X				X			
	137.75 - 142.75	X				X				X				X	X	X	X	X				X				X				X			
	143 - 148	X				X				X				X				X				X				X				X			
	148.25 - 153.25	X				X				X				X				X				X		X	X	X	X	X	X	X			
	153.5 - 158.5	X				X				X	X	X	X	X				X				X			X	X				X			

Notes:

[1] = screen sank 2 ft at CACMW-001-160 during installation; groundwater samples and PFMs from the CACMW-001 cluster are offset approximately 0.5 feet lower than shown in this table. Specific sample depths for each sample are shown in the analytical results tables.

Soil samples were collected from the continuous soil cores during drilling of the 160 foot deep well at each well cluster.

X = location where PFM was deployed, sample was taken, and/or analysis was performed

X = supplemental soil sample that does not correspond exactly with a PFM interval; see analytical table/log for depth

Acronyms & Abreviations:

ft bgs = feet below ground surface

GT = Geotechnical sample

GW / ST = groundwater sample intake and slug test interval

PFAS = per- and polyfluoroalkyl substances

PFM = passive flux meter

Table 2. Well Construction Summary
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Location ID	X Coordinate	Y Coordinate	TOC Elevation (ft amsl)	Ground Surface Elevation (ft amsl)	Total Well Depth (ft bgs)	Screen Interval (ft bgs)
CACMW-001-060	1462844.1	3912189.1	530.62	529.94	62.3	10-60
CACMW-001-110	1462848.4	3912191.4	530.52	529.68	112.3	60-110
CACMW-001-160	1462856.2	3912195.3	530.14	529.56	164.3	112-162
CACMW-002-060	1462919.9	3912230.1	529.69	529.11	62.3	10-60
CACMW-002-110	1462928.3	3912235.6	529.88	529.08	112.3	60-110
CACMW-002-160	1462924.1	3912233.0	529.63	529.10	162.3	110-160
CACMW-003-060	1462976.9	3912262.5	528.93	528.29	62.3	10-60
CACMW-003-110	1462986.6	3912265.9	528.85	528.18	112.3	60-110
CACMW-003-160	1462982.4	3912264.5	528.90	528.02	162.3	110-160
CACMW-004-060	1462870.9	3912314.2	529.95	529.16	62.3	10-60
CACMW-004-110	1462880.9	3912315.2	529.77	529.11	112.3	60-110
CACMW-004-160	1462876.2	3912314.7	529.74	529.09	162.3	110-160
CACMW-005-060	1462793.4	3912315.3	529.97	529.45	62.3	10-60
CACMW-005-110	1462802.1	3912319.4	529.96	529.27	112.3	60-110
CACMW-005-160	1462797.7	3912317.0	530.04	529.55	162.3	110-160
CACMW-006-060	1462859.0	3912342.7	530.17	529.39	62.3	10-60
CACMW-006-110	1462869.2	3912346.6	530.39	529.33	112.3	60-110
CACMW-006-160	1462864.0	3912344.4	530.12	529.63	162.3	110-160
CACMW-007-060	1462917.2	3912369.3	529.67	528.95	62.3	10-60
CACMW-007-110	1462926.3	3912374.4	529.86	529.17	112.30	60-110
CACMW-007-160	1462921.5	3912371.8	529.70	529.13	162.3	110-160
CACMW-008-060	1462840.5	3912374.9	529.88	529.06	62.3	10-60
CACMW-008-110	1462848.9	3912381.2	529.86	529.00	112.3	60-110
CACMW-008-160	1462844.8	3912377.9	529.94	529.25	162.3	110-160

Notes:
Wells were surveyed on July 25, 2024.
XY Coordinate system is in Alaska State Plane NAD1983, Zone 3.
Vertical elevation is in NAVD '88.
All wells were constructed with 2-inch diameter stainless steel wire-wrapped screens with 2-inch PVC risers to surface.

Abbreviations:
amsl = above mean sea level
ft bgs = feet below ground surface
TOC = top of casing

Table 3. Groundwater Gauging and Elevations
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Location ID	Top of Casing (ft amsl)	Depth to Water (ft-BTOC)	Groundwater Elevation (ft amsl)
CACMW-001-060	530.62	7.46	523.16
CACMW-001-110	530.52	7.34	523.18
CACMW-001-160	530.14	6.96	523.18
CACMW-002-060	529.69	6.52	523.17
CACMW-002-110	529.88	6.67	523.21
CACMW-002-160	529.63	6.50	523.13
CACMW-003-060	528.93	5.74	523.19
CACMW-003-110	528.85	5.62	523.23
CACMW-003-160	528.90	5.80	523.10
CACMW-004-060	529.95	6.84	523.11
CACMW-004-110	529.77	6.62	523.15
CACMW-004-160	529.74	6.72	523.02
CACMW-005-060	529.97	6.88	523.09
CACMW-005-110	529.96	6.88	523.08
CACMW-005-160	530.04	7.04	523.00
CACMW-006-060	530.17	6.88	523.29
CACMW-006-110	530.39	7.30	523.09
CACMW-006-160	530.12	7.11	523.01
CACMW-007-060	529.67	6.59	523.08
CACMW-007-110	529.86	6.82	523.04
CACMW-007-160	529.70	6.68	523.02
CACMW-008-060	529.88	6.83	523.05
CACMW-008-110	529.86	6.86	523.00
CACMW-008-160	529.94	6.97	522.97

Notes:

amsl = above mean sea level using the NAVD88 vertical datum

ft-BTOC = feet below top of casing

Listed groundwater elevations resulted from a synoptic groundwater gauging event completed on 7/9/2024.

Table 4. Soil Analytical Results – PFAS
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

			Location ID	CACMW-001-160		CACMW-001-160		CACMW-001-160		CACMW-002-160		CACMW-002-160		CACMW-002-160		CACMW-003-160		CACMW-003-160		CACMW-003-160		CACMW-003-160	
			Sample Depth (feet bgs)	15-16.5		61.5-66.5		111.5-116.5		27.25-32.25		77.25-82.25		127.25-132.25		53.5-58.5		103.5-108.5		103.5-108.5		153.5-158.5	
			Sample Type	N		N		N		N		N		N		N		N		FD		N	
			Sample Date	6/11/2024		6/11/2024		6/11/2024		6/15/2024		6/15/2024		6/14/2024		6/17/2024		6/17/2024		6/17/2024		6/17/2024	
Chemical	**CAS No.**	**Units**	**PSL[1]**																				
PFAS																							
Perfluoroalkyl carboxylic acids																							
PFBA	375-22-4	µg/kg	7800	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	UM	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U
PFDA	335-76-2	µg/kg	0.06*	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFDoA	307-55-1	µg/kg	320	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFHpA	375-85-9	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFHxA	307-24-4	µg/kg	3200	<0.08	U	**0.026**	JM	<0.08	U	<0.08	U	**0.057**	J	<0.08	U	**0.041**	JM	<0.08	UM	<0.08	U	<0.08	U
PFNA	375-95-1	µg/kg	19	<0.08	U	<0.08	U	<0.08	U	<0.08	U	**0.027**	JM	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFOA	335-67-1	µg/kg	0.07*	<0.08	U	<0.08	UM	<0.08	U	<0.08	U	**0.08**	JM	<0.08	U	<0.08	U	<0.08	U	**0.051**	JM	<0.08	U
PFPeA	2706-90-3	µg/kg	--	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U
PFTeDA	376-06-7	µg/kg	6300	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFTrDA	72629-94-8	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFUdA	2058-94-8	µg/kg	1900	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
Perfluoroalkyl sulfonic acids																							
PFBS	375-73-5	µg/kg	1900	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	UM	<0.071	U	<0.071	U
PFDS	335-77-3	µg/kg	--	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U
PFDOS	79780-39-5	µg/kg	--	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U
PFHpS	375-92-8	µg/kg	--	<0.076	U	<0.076	U	<0.076	U	<0.076	U	**0.063**	J	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U
PFHxS	355-46-4	µg/kg	130	**0.04**	JM	**0.048**	JM	<0.073	U	**0.084**	J	**0.21**	M	**0.026**	JM	**0.057**	JM	**0.033**	JM	**0.04**	JM	<0.073	UM
PFNS	68259-12-1	µg/kg	--	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U
PFOS	1763-23-1	µg/kg	0.63	**0.22**	J+M	**0.28**	J+M	<0.074	UBM	**0.39**	J+M	**9.1**	J+M	**0.076**	J+M	**0.47**	J+M	**0.28**	J+	**0.24**	J+M	<0.074	UBM
PFPeS	138495-42-8	µg/kg	--	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U
Fluorotelomer sulfonic acids																							
4:2 FTS	757124-72-4	µg/kg	--	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U
6:2 FTSA	27619-97-2	µg/kg	--	<0.61	U	<0.6	U	<0.6	U	<0.6	U	<0.6	UM	<0.6	U	<0.6	U	<0.61	U	<0.6	U	<0.6	U
8:2 FTSA	39108-34-4	µg/kg	--	<0.31	U	<0.3	U	<0.3	U	<0.3	U	**0.2**	JM	<0.3	U	<0.3	U	<0.31	U	<0.3	U	<0.3	U
Perfluoroctane sulfonamides																							
N-EtFOSA	4151-50-2	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
N-MeFOSA	31506-32-8	µg/kg	--	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U
PFOSA	754-91-6	µg/kg	--	<0.04	U	<0.04	U	<0.04	U	<0.04	U	**0.083**	JM	<0.04	UM	<0.04	U	<0.04	U	<0.04	U	<0.04	U
Perfluorooctane sulfanamidoacetic acids																							
N-EtFOSAA	2991-50-6	µg/kg	--	<0.16	U	<0.16	U	<0.16	U	<0.16	U	**0.27**	M	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U
MeFOSAA	2355-31-9	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	**0.2**	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
Perfluoroctane sulfonamide ethanols																							
N-EtFOSE	1691-99-2	µg/kg	--	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U
N-MeFOSE	24448-09-7	µg/kg	--	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U
Per- and Polyfluoroether carboxylic acids																							
HFPO-DA	13252-13-6	µg/kg	23	<0.8	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U
DONA	919005-14-4	µg/kg	--	<0.76	U	<0.75	U	<0.75	U	<0.75	U	<0.75	U	<0.75	U	<0.75	UM	<0.76	U	<0.75	U	<0.75	U
PFMPA	377-73-1	µg/kg	--	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U
PFMBA	863090-89-5	µg/kg	--	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	U
NFDHA	151772-58-6	µg/kg	--	<0.8	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U
Ether sulfonic acids																							
F-53B Minor	763051-92-9	µg/kg	--	<0.76	U	<0.75	U	<0.75	U	<0.75	U	<0.75	U	<0.75	U	<0.75	U	<0.76	U	<0.75	U	<0.75	U
9CL-PF3ONS	756426-58-1	µg/kg	--	<0.75	U	<0.74	U	<0.74	U	<0.74	U	<0.74	U	<0.74	U	<0.74	UM	<0.74	U	<0.74	U	<0.74	U
PFEESA	113507-82-7	µg/kg	--	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U
Fluorotelomer carboxylic acids																							
7:3 FTCA	812-70-4	µg/kg	--	<4	U	<3.9	U	<4	U	<4	U	<4	U	<3.9	U	<3.9	U	<4	U	<4	U	<4	U
3:3 FTCA	356-02-5	µg/kg	--	<0.8	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U	<0.79	U
5:3 FTCA	914637-49-3	µg/kg	--	<4	U	<3.9	U	<4	U	<4	U	<4	U	<3.9	U	<3.9	U	<4	U	<4	U	<4	U

Table 4. Soil Analytical Results – PFAS
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

			Location ID	CACMW-004-160		CACMW-004-160		CACMW-004-160		CACMW-004-160		CACMW-005-160		CACMW-005-160		CACMW-005-160		CACMW-005-160		CACMW-005-160		CACMW-005-160	
			Sample Depth (feet bgs)	37.75-42.75		87.75-92.75		137.75-142.75		137.75-142.75		16.75-21.75		40-45		66.75-71.75		80-85		116.75-121.75		130-135	
			Sample Type	N		N		N		FD		N		N		N		N		N		N	
			Sample Date	6/24/2024		6/24/2024		6/24/2024		6/24/2024		6/18/2024		6/18/2024		6/18/2024		6/18/2024		6/18/2024		6/18/2024	
Chemical	**CAS No.**	**Units**	**PSL[1]**																				
PFAS																							
Perfluoroalkyl carboxylic acids																							
PFBA	375-22-4	µg/kg	7800	<0.32	U	<0.32	UM	<0.32	UM	<0.32	U	<0.31	UM	<0.32	UM	<0.32	UM	<0.32	U	<0.32	U	<0.32	U
PFDA	335-76-2	µg/kg	0.06*	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFDoA	307-55-1	µg/kg	320	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFHpA	375-85-9	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFHxA	307-24-4	µg/kg	3200	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	**0.033**	JM	<0.08	U	<0.08	UM	<0.08	U	<0.08	U
PFNA	375-95-1	µg/kg	19	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFOA	335-67-1	µg/kg	0.07*	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFPeA	2706-90-3	µg/kg	--	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U
PFTeDA	376-06-7	µg/kg	6300	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFTrDA	72629-94-8	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFUdA	2058-94-8	µg/kg	1900	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
Perfluoroalkyl sulfonic acids																							
PFBS	375-73-5	µg/kg	1900	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U
PFDS	335-77-3	µg/kg	--	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U
PFDOS	79780-39-5	µg/kg	--	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U
PFHpS	375-92-8	µg/kg	--	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U
PFHxS	355-46-4	µg/kg	130	**0.048**	JM	**0.058**	JM	**0.032**	JM	**0.023**	JM	**0.055**	JM	**0.059**	JM	**0.03**	JM	**0.046**	JM	**0.023**	JM	**0.025**	JM
PFNS	68259-12-1	µg/kg	--	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U
PFOS	1763-23-1	µg/kg	0.63	**0.29**	J+M	**0.33**	J+M	**0.079**	J+M	**0.08**	J+M	**0.63**	J+M	**0.22**	J+M	**0.4**	J+M	**0.25**	J+M	**0.079**	J+M	**0.084**	J+M
PFPeS	138495-42-8	µg/kg	--	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U
Fluorotelomer sulfonic acids																							
4:2 FTS	757124-72-4	µg/kg	--	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.29	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U
6:2 FTSA	27619-97-2	µg/kg	--	<0.61	UM	<0.6	UM	<0.61	U	<0.61	U	<0.59	UM	<0.6	U	<0.6	U	<0.61	UM	<0.6	U	<0.6	U
8:2 FTSA	39108-34-4	µg/kg	--	<0.31	U	<0.3	U	<0.31	U	<0.31	U	<0.3	U	<0.3	U	<0.3	U	<0.31	U	<0.3	U	<0.3	U
Perfluoroctane sulfonamides																							
N-EtFOSA	4151-50-2	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
N-MeFOSA	31506-32-8	µg/kg	--	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U
PFOSA	754-91-6	µg/kg	--	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U
Perfluorooctane sulfanamidoacetic acids																							
N-EtFOSAA	2991-50-6	µg/kg	--	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U
MeFOSAA	2355-31-9	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
Perfluoroctane sulfonamide ethanols																							
N-EtFOSE	1691-99-2	µg/kg	--	<0.8	U	<0.8	UM	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	UM	<0.8	U	<0.8	U
N-MeFOSE	24448-09-7	µg/kg	--	<0.8	U	<0.8	UM	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	U	<0.8	UM	<0.8	U	<0.8	U
Per- and Polyfluoroether carboxylic acids																							
HFPO-DA	13252-13-6	µg/kg	23	<0.79	U	<0.79	U	<0.8	U	<0.8	U	<0.78	U	<0.78	U	<0.79	U	<0.8	U	<0.79	U	<0.78	U
DONA	919005-14-4	µg/kg	--	<0.76	U	<0.75	U	<0.76	U	<0.76	U	<0.74	UM	<0.75	UM	<0.75	U	<0.76	UM	<0.75	U	<0.75	U
PFMPA	377-73-1	µg/kg	--	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.31	U	<0.31	U	<0.32	U	<0.32	U	<0.32	U	<0.31	U
PFMBA	863090-89-5	µg/kg	--	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.31	U	<0.31	U	<0.32	U	<0.32	U	<0.32	U	<0.31	U
NFDHA	151772-58-6	µg/kg	--	<0.79	U	<0.79	U	<0.8	U	<0.8	U	<0.78	U	<0.78	U	<0.79	U	<0.8	UM	<0.79	U	<0.78	U
Ether sulfonic acids																							
F-53B Minor	763051-92-9	µg/kg	--	<0.76	U	<0.75	U	<0.76	U	<0.76	U	<0.74	U	<0.75	U	<0.75	U	<0.76	U	<0.75	U	<0.75	U
9CL-PF3ONS	756426-58-1	µg/kg	--	<0.74	U	<0.74	U	<0.75	U	<0.75	U	<0.73	U	<0.73	U	<0.74	U	<0.75	U	<0.74	U	<0.73	U
PFEESA	113507-82-7	µg/kg	--	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U
Fluorotelomer carboxylic acids																							
7:3 FTCA	812-70-4	µg/kg	--	<4	U	<3.9	U	<4	U	<4	U	<3.9	U	<3.9	U	<4	U	<4	U	<4	U	<3.9	U
3:3 FTCA	356-02-5	µg/kg	--	<0.79	U	<0.79	U	<0.8	U	<0.8	U	<0.78	U	<0.78	U	<0.79	U	<0.8	U	<0.79	U	<0.78	U
5:3 FTCA	914637-49-3	µg/kg	--	<4	U	<3.9	U	<4	U	<4	U	<3.9	UM	<3.9	UM	<4	U	<4	U	<4	U	<3.9	U

Table 4. Soil Analytical Results – PFAS
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

			Location ID	CACMW-006-160		CACMW-006-160		CACMW-006-160		CACMW-006-160		CACMW-006-160		CACMW-006-160		CACMW-007-160		CACMW-007-160		CACMW-007-160		CACMW-007-160	
			Sample Depth (feet bgs)	32.5-37.5		43-48		82.5-87.5		93-98		132.5-137.5		143-148		28-33		48.25-53.25		88-93		88-93	
			Sample Type	N		N		N		N		N		N		N		N		N		FD	
			Sample Date	6/19/2024		6/19/2024		6/19/2024		6/19/2024		6/19/2024		6/19/2024		6/20/2024		6/20/2024		6/20/2024		6/20/2024	
Chemical	**CAS No.**	**Units**	**PSL[1]**																				
PFAS																							
Perfluoroalkyl carboxylic acids																							
PFBA	375-22-4	µg/kg	7800	<0.32	UM	<0.32	UM	<0.32	UM	<0.32	UM	<0.32	U	<0.32	UM	<0.32	UM	<0.32	UM	<0.32	UM	<0.32	U
PFDA	335-76-2	µg/kg	0.06*	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFDoA	307-55-1	µg/kg	320	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFHpA	375-85-9	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	UM	<0.08	UM
PFHxA	307-24-4	µg/kg	3200	<0.08	UM	<0.08	U	<0.08	U	**0.027**	JM	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	UM	<0.08	U
PFNA	375-95-1	µg/kg	19	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFOA	335-67-1	µg/kg	0.07*	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFPeA	2706-90-3	µg/kg	--	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U
PFTeDA	376-06-7	µg/kg	6300	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFTrDA	72629-94-8	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFUdA	2058-94-8	µg/kg	1900	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
Perfluoroalkyl sulfonic acids																							
PFBS	375-73-5	µg/kg	1900	<0.071	U	<0.071	UM	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	U	<0.071	UM	<0.071	U
PFDS	335-77-3	µg/kg	--	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U
PFDOS	79780-39-5	µg/kg	--	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U
PFHpS	375-92-8	µg/kg	--	<0.076	U	<0.076	U	<0.076	U	<0.076	UM	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U
PFHxS	355-46-4	µg/kg	130	**0.033**	JM	**0.043**	JM	**0.041**	JM	**0.077**	JM	**0.021**	JM	**0.024**	JM	**0.033**	JM	**0.035**	JM	**0.058**	JM	**0.062**	J
PFNS	68259-12-1	µg/kg	--	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U
PFOS	1763-23-1	µg/kg	0.63	**0.19**	J+M	**0.23**	J+M	**0.2**	J+	**0.42**	J+M	**0.075**	JM	**0.056**	J+M	**0.16**	J+M	**0.53**	J+M	**0.47**	J+M	**0.43**	J+M
PFPeS	138495-42-8	µg/kg	--	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	UM	<0.075	U	<0.075	U
Fluorotelomer sulfonic acids																							
4:2 FTS	757124-72-4	µg/kg	--	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U
6:2 FTSA	27619-97-2	µg/kg	--	<0.6	UM	<0.61	UM	<0.6	U	<0.6	UM	<0.6	U	<0.61	UM	<0.6	UM	<0.6	U	<0.6	UM	<0.61	UM
8:2 FTSA	39108-34-4	µg/kg	--	<0.3	U	<0.31	UM	<0.3	U	<0.3	UM	<0.3	U	<0.31	U	<0.3	U	<0.3	UM	<0.3	UM	<0.31	U
Perfluoroctane sulfonamides																							
N-EtFOSA	4151-50-2	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
N-MeFOSA	31506-32-8	µg/kg	--	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U
PFOSA	754-91-6	µg/kg	--	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	UM	<0.04	U
Perfluorooctane sulfanamidoacetic acids																							
N-EtFOSAA	2991-50-6	µg/kg	--	<0.16	UM	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	UM	<0.16	UM	<0.16	U	<0.16	U
MeFOSAA	2355-31-9	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	UM	<0.08	U	<0.08	U
Perfluoroctane sulfonamide ethanols																							
N-EtFOSE	1691-99-2	µg/kg	--	<0.8	UM	<0.8	UM	<0.8	UM	<0.8	UM	<0.8	UM	<0.8	UM	<0.8	U	<0.8	UM	<0.8	UM	<0.8	U
N-MeFOSE	24448-09-7	µg/kg	--	<0.8	U	<0.8	UM	<0.8	UM	<0.8	UM	<0.8	UM	<0.8	UM	<0.8	UM	<0.8	UM	<0.8	UM	<0.8	U
Per- and Polyfluoroether carboxylic acids																							
HFPO-DA	13252-13-6	µg/kg	23	<0.79	U	<0.8	U	<0.79	U	<0.79	U	<0.79	U	<0.8	U	<0.79	U	<0.78	U	<0.79	U	<0.8	U
DONA	919005-14-4	µg/kg	--	<0.75	UM	<0.76	U	<0.75	U	<0.75	U	<0.75	UM	<0.76	U	<0.75	U	<0.75	U	<0.75	UM	<0.76	UM
PFMPA	377-73-1	µg/kg	--	<0.31	U	<0.32	U	<0.31	U	<0.32	U	<0.31	U	<0.32	U	<0.32	U	<0.31	U	<0.31	U	<0.32	U
PFMBA	863090-89-5	µg/kg	--	<0.31	U	<0.32	U	<0.31	U	<0.32	U	<0.31	U	<0.32	UM	<0.32	U	<0.31	U	<0.31	U	<0.32	U
NFDHA	151772-58-6	µg/kg	--	<0.79	UM	<0.8	UM	<0.79	UM	<0.79	U	<0.79	UM	<0.8	U	<0.79	UM	<0.78	UM	<0.79	U	<0.8	U
Ether sulfonic acids																							
F-53B Minor	763051-92-9	µg/kg	--	<0.75	U	<0.76	U	<0.75	U	<0.75	U	<0.75	U	<0.76	U	<0.75	U	<0.75	U	<0.75	U	<0.76	U
9CL-PF3ONS	756426-58-1	µg/kg	--	<0.74	U	<0.75	U	<0.74	U	<0.74	U	<0.74	U	<0.75	U	<0.74	U	<0.73	U	<0.74	U	<0.75	U
PFEESA	113507-82-7	µg/kg	--	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U
Fluorotelomer carboxylic acids																							
7:3 FTCA	812-70-4	µg/kg	--	<3.9	U	<4	U	<3.9	U	<3.9	U	<3.9	U	<4	UM	<3.9	U	<3.9	U	<3.9	U	<4	U
3:3 FTCA	356-02-5	µg/kg	--	<0.79	U	<0.8	U	<0.79	U	<0.79	U	<0.79	U	<0.8	U	<0.79	U	<0.78	U	<0.79	U	<0.8	U
5:3 FTCA	914637-49-3	µg/kg	--	<3.9	U	<4	U	<3.9	U	<3.9	UM	<3.9	U	<4	U	<3.9	UM	<3.9	U	<3.9	U	<4	U

Table 4. Soil Analytical Results – PFAS
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

			Location ID	CACMW-007-160		CACMW-007-160		CACMW-008-160		CACMW-008-160		CACMW-008-160		CACMW-008-160	
			Sample Depth (feet bgs)	98.25-103.25		148.25-153.25		22-27		72-77		122-127		122-127	
			Sample Type	N		N		N		N		N		FD	
			Sample Date	6/20/2024		6/20/2024		6/21/2024		6/21/2024		6/21/2024		6/21/2024	
Chemical	**CAS No.**	**Units**	**PSL[1]**												
PFAS															
Perfluoroalkyl carboxylic acids															
PFBA	375-22-4	µg/kg	7800	<0.32	UM	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.32	UM
PFDA	335-76-2	µg/kg	0.06*	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFDoA	307-55-1	µg/kg	320	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFHpA	375-85-9	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	UM	<0.08	U	<0.08	U
PFHxA	307-24-4	µg/kg	3200	<0.08	U	<0.08	U	**0.036**	JM	**0.034**	JM	<0.08	U	<0.08	U
PFNA	375-95-1	µg/kg	19	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFOA	335-67-1	µg/kg	0.07*	<0.08	UM	<0.08	U	<0.08	U	**0.034**	JM	<0.08	U	<0.08	U
PFPeA	2706-90-3	µg/kg	--	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U
PFTeDA	376-06-7	µg/kg	6300	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFTrDA	72629-94-8	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
PFUdA	2058-94-8	µg/kg	1900	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
Perfluoroalkyl sulfonic acids															
PFBS	375-73-5	µg/kg	1900	<0.071	UM	<0.071	UM	<0.071	U	<0.071	U	<0.071	U	<0.071	UM
PFDS	335-77-3	µg/kg	--	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U
PFDOS	79780-39-5	µg/kg	--	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U	<0.078	U
PFHpS	375-92-8	µg/kg	--	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U	<0.076	U
PFHxS	355-46-4	µg/kg	130	**0.062**	JM	**0.02**	JM	**0.055**	JM	**0.072**	JM	**0.024**	JM	**0.028**	JM
PFNS	68259-12-1	µg/kg	--	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U	<0.077	U
PFOS	1763-23-1	µg/kg	0.63	**0.36**	J+	**0.03**	J+M	**0.33**	J+M	**0.41**	J+M	**0.039**	J+M	**0.054**	J+M
PFPeS	138495-42-8	µg/kg	--	<0.075	UM	<0.075	U	<0.075	U	<0.075	U	<0.075	U	<0.075	U
Fluorotelomer sulfonic acids															
4:2 FTS	757124-72-4	µg/kg	--	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U	<0.3	U
6:2 FTSA	27619-97-2	µg/kg	--	<0.61	UM	<0.6	UM	<0.61	U	<0.6	U	<0.6	U	<0.61	U
8:2 FTSA	39108-34-4	µg/kg	--	<0.31	U	<0.3	U	<0.31	U	<0.3	U	<0.3	U	<0.31	U
Perfluoroctane sulfonamides															
N-EtFOSA	4151-50-2	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
N-MeFOSA	31506-32-8	µg/kg	--	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U
PFOSA	754-91-6	µg/kg	--	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	U	<0.04	UM
Perfluorooctane sulfanamidoacetic acids															
N-EtFOSAA	2991-50-6	µg/kg	--	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U	<0.16	U
MeFOSAA	2355-31-9	µg/kg	--	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U	<0.08	U
Perfluoroctane sulfonamide ethanols															
N-EtFOSE	1691-99-2	µg/kg	--	<0.8	UM	<0.8	UM	<0.8	U	<0.8	U	<0.8	U	<0.8	U
N-MeFOSE	24448-09-7	µg/kg	--	<0.8	U	<0.8	UM	<0.8	U	<0.8	U	<0.8	U	<0.8	U
Per- and Polyfluoroether carboxylic acids															
HFPO-DA	13252-13-6	µg/kg	23	<0.8	U	<0.79	U	<0.79	U	<0.79	U	<0.78	U	<0.8	U
DONA	919005-14-4	µg/kg	--	<0.76	U	<0.75	U	<0.76	U	<0.75	U	<0.75	U	<0.76	UM
PFMPA	377-73-1	µg/kg	--	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.31	U	<0.32	U
PFMBA	863090-89-5	µg/kg	--	<0.32	U	<0.32	U	<0.32	U	<0.32	U	<0.31	U	<0.32	U
NFDHA	151772-58-6	µg/kg	--	<0.8	UM	<0.79	UM	<0.79	U	<0.79	U	<0.78	U	<0.8	U
Ether sulfonic acids															
F-53B Minor	763051-92-9	µg/kg	--	<0.76	U	<0.75	U	<0.76	U	<0.75	U	<0.75	U	<0.76	U
9CL-PF3ONS	756426-58-1	µg/kg	--	<0.75	U	<0.74	U	<0.74	U	<0.74	U	<0.73	U	<0.75	UM
PFEESA	113507-82-7	µg/kg	--	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U	<0.28	U
Fluorotelomer carboxylic acids															
7:3 FTCA	812-70-4	µg/kg	--	<4	U	<4	U	<4	U	<4	U	<3.9	U	<4	U
3:3 FTCA	356-02-5	µg/kg	--	<0.8	U	<0.79	U	<0.79	U	<0.79	U	<0.78	U	<0.8	U
5:3 FTCA	914637-49-3	µg/kg	--	<4	U	<4	U	<4	U	<4	U	<3.9	U	<4	U

Notes:
Detected results appear in bold font.
Highlighted cells indicate detections that exceed the selected screening levels.
1 = Soil Project Screening Levels (PSLs) are either the 18 AAC 75.341 DEC Table B1 Method Two migration-to-groundwater soil cleanup levels (DEC 2023) or DoD Resident Scenario RSLs for soil (HQ =0.1) based on the November 2024 EPA RSL update (DoD 2025), whichever is lower. 2023 EPA RSL update (OUSD, 2024), whichever is lower.
ng/g is equivalent to µg/kg

* = indicates the PSL is the pooled MDL (DOD 2025)

Acronyms:

< = less than the limit of detection shown

-- = not applicable

ADEC = Alaska Department of Conservation

bgs = below ground surface
FD = Field Duplicate
N = normal sample
µg/kg = nanograms per kilogram
ng/g = nanograms per gram
OUSD = Office of the Under Secretary of Defense

Qualifiers:
B = analyte is also detected in the associated method blank
J = Estimated Value
J+ = the result is estimated with a high bias
M = manual integration performed
U = Undetected: The analyte was analyzed for, but not detected.
UJ = The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.

PFAS Constituients analyzed by USEPA Method 1633
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA)
2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA)
2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA)
2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA)
4,8-Dioxa-3H-perfluorononanoic acid (DONA)
4:2 Fluorotelomer sulfonate (4:2 FTS)
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS)
N-Ethyl perfluoroctane sulfonamide (N-EtFOSA)
N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE)
N-Ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)
N-Methyl perfluorooctane sulfonamide (N-MeFOSA)
N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)
N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA)
Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA)
Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA)
Perfluoro-3-methoxypropanoic aci (PFMPA)
Perfluoro-4-Methoxybutanic acid (PFMBA)
Perfluorobutane sulfonic acid (PFBS)
Perfluorobutanoic acid (PFBA)
Perfluorodecane sulfonic acid (PFDS)
Perfluorodecanoic acid (PFDA)
Perfluorododecane sulfonic acid (PFDOS)
Perfluorododecanoic acid (PFDoA)
Perfluoroheptane sulfonic acid (PFHpS)
Perfluoroheptanoic acid (PFHpA)
Perfluorohexane sulfonic acid (PFHxS)
Perfluorohexanoic acid (PFHxA)
Perfluorononane sulfonic acid (PFNS)
Perfluorononanoic acid (PFNA)
Perfluorooctane sulfonamide (PFOSA)
Perfluorooctane sulfonic acid (PFOS)
Perfluorooctanoic acid (PFOA)
Perfluoropentane sulfonate (PFPeS)
Perfluoropentanoic acid (PFPeA)
Perfluorotetradecanoic acid (PFTeDA)
Perfluorotridecanoic acid (PFTrDA)
Perfluoroundecanoic acid (PFUdA)

Table 5. Soil Analytical Results – Grain Size
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Location ID	Depth Interval (ft bgs)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Laboratory Description and USCS Code
CACMW-001-160	15-16.5	51.4	46.3	1.7	0.6	WELL GRADED GRAVEL WITH SAND (GW), dark brown
	61.5-66.5	11.6	84.2	3	1.2	POORLY GRADED SAND (SP), trace gravel, dark gray
	111.5-116.5	40.9	56.3	1.8	1.0	POORLY GRADED SAND WITH GRAVEL (SP), dark brown
CACMW-002-160	27.25-32.25	19.1	78.4	2.0	0.5	POORLY GRADED SAND WITH GRAVEL (SP), dark gray
	77.25-82.25	54	30.4	13.4	2.2	SILTY GRAVEL WITH SAND (GM), dark gray
	127.25-132.25	1.3	92.7	4.4	1.6	POORLY GRADED SAND WITH SILT (SP-SM), dark gray
CACMW-003-160	53.5-58.5	4.2	56.5	3.0	0.3	POORLY GRADED SAND WITH GRAVEL (SP), dark gray
	103.5-108.5	52.4	44.8	2.1	0.7	WELL GRADED GRAVEL WITH SAND (GW), dark gray
	153.5-158.5	48.3	48.2	2.6	0.9	POORLY GRADED GRAVEL WITH SAND (GP), dark gray
CACMW-004-160	37.75-42.75	80.3	17.9	1.8 [1]		POORLY GRADED GRAVEL WITH SAND (GP), gray
	87.75-92.75	68.8	30.3	0.9 [1]		WELL GRADED GRAVEL WITH SAND (GW), gray
	137.25-142.75	23	72.2	3.8	1.0	POORLY GRADED SAND WITH GRAVEL (SP), gray
CACMW-005-160	16.5-21.5	35.6	62.5	1.4	0.5	POORLY GRADED SAND WITH GRAVEL (SP), gray
	29-34	62.4	35.3	1.7	0.6	POORLY GRADED GRAVEL WITH SAND (GP), gray
	40-45	72.1	26.0	1.9 [1]		POORLY GRADED GRAVEL WITH SAND (GP), gray
	66.75-71.75	40.5	54.7	4.8 [1]		WELL GRADED SAND WITH GRAVEL (SW), gray
	80-85	72.4	25.8	1.8 [1]		POORLY GRADED GRAVEL WITH SAND (GP), gray
	95-100	37.9	59.7	2.1	0.3	POORLY GRADED SAND WITH GRAVEL (SP), gray
	116.75-121.75	57.1	41.1	1.4	0.4	WELL GRADED GRAVEL WITH SAND (GW), gray
	130-135	27.1	69.5	2.4	1.0	POORLY GRADED SAND WITH GRAVEL (SP), gray
CACMW-006-160	21-26	21.4	55.5	20.4	2.7	SILTY SAND WITH GRAVEL (SM), gray
	32.5-37.5	70.6	26.6	2.8 [1]		POORLY GRADED GRAVEL WITH SAND (GP), gray
	43-48	87.6	11.4	1.0 [1]		WELL GRADED GRAVEL (GW), trace sand, gray
	75	74.1	23.5	2.4 [1]		WELL GRADED GRAVEL WITH SAND (GW), gray
	82.5-87.5	64.0	29.9	6.1 [1]		WELL GRADED GRAVEL WITH SAND (GW-GM), gray
	93-98	55.3	42.6	1.4	0.7	POORLY GRADED GRAVEL WITH SAND (GP), gray
	132.5-137.5	9.1	85.1	4.4	1.4	POORLY GRADED SAND WITH SILT (SP-SM), trace gravel
	143-148	7.5	83.8	7.0	1.7	POORLY GRADED SAND WITH SILT (SP-SM), trace gravel, gray
	155-160	63.7	35.7	1.2 [1]		POORLY GRADED GRAVEL WITH SAND (GP), gray
CACMW-007-160	16-21	83.4	15.8	0.8 [1]		WELL GRADED GRAVEL WITH SAND (GW), gray
	28-33	78.5	19.6	1.9 [1]		WELL GRADED GRAVEL WITH SAND (GW), gray
	48.25-53.25	73.6	24.7	1.7 [1]		POORLY GRADED GRAVEL WITH SAND (GP), gray
	80-85	64.8	33.2	1.6	0.4	WELL GRADED GRAVEL WITH SAND (GW), gray
	88-93	13.2	85.2	1.0	0.6	POORLY GRADED SAND (SP), trace gravel, gray
	98.25-103.25	37.0	59.6	2.3	1.1	POORLY GRADED SAND WITH GRAVEL (SP), gray
	111-116	16.1	79.8	2.4	1.7	POORLY GRADED SAND WITH GRAVEL (SP), gray
	148.25-153.25	70.9	27.2	1.9 [1]		WELL GRADED GRAVEL WITH SAND (GW), gray
CACMW-008-160	22-27	63	34.8	1.8	0.4	POORLY GRADED GRAVEL WITH SAND (GP), gray
	72-77	60.7	36.2	2.6	0.5	WELL GRADED GRAVEL WITH SAND (GW), gray
	122-127	35.9	60.5	2.9	0.7	POORLY GRADED SAND WITH GRAVEL (SP), gray

Notes:

[1] Silt and clay percentages were combined in the laboratory analytical report.

Acronyms:

ft bgs = feet below ground surface
% = percent
USCS = Unified Soil Classification System
GM = silty gravel
GP = poorly graded gravel
GW = well-graded gravel
GW-GM = well-graded gravel with silt
SM = silty sand
SP = poorly graded sand
SW = well-graded sand
SP-SM = poorly graded sand with silt

Location ID	Sample Depth (ft bgs)	Moisture Content (%)	Organic Content (%)	Specfic Gravity	Bulk Density - Dry (pcf)	Porosity (%)
CACMW-001-160	15-16.5	6.9	0.21	2.66	126.2	24.1
	61.5-66.5	11.3	0.11	2.67	118.2	29.2
	111.5-116.5	8.6	0.15	2.65	126.5	23.4
CACMW-002-160	27.25-32.25	14.2	0.08	2.68	111.9	33.2
	77.25-82.25	10.7	2.55	2.66	118.8	28.6
	127.25-132.25	16.1	0.19	2.69	103.5	38.3
CACMW-003-160	53.5-58.5	9.7	0.19	2.65	122.5	26
	103.5-108.5	5.7	0.18	2.65	127.5	23
	153.5-158.5	7	0.2	2.65	127.4	23
CACMW-004-160	37.75-42.75	2.8	0.3	2.65	123.8	25.3
	87.75-92.75	3.6	0.3	2.66	125.7	24.4
	137.25-142.75	2.6	0.41	2.68	108.2	35.4
CACMW-005-160	16.5-21.5	2.9	0.23	2.66	119.6	27.8
	29-34	3.1	0.28	2.66	128.3	22.6
	40-45	4	0.18	2.66	132.2	20.3
	66.75-71.75	5.3	0.26	2.65	117.3	29.1
	80-85	4	0.22	2.65	129.9	21.5
	95-100	2.4	0.34	2.67	120.4	27.7
	116.75-121.75	4.5	0.3	2.66	129.2	22.2
	130-135	4.1	0.3	2.66	115.4	30.5
CACMW-006-160	21-26	3.1	1.24	2.67	110.1	24.1
	32.5-37.5	3.7	0.21	2.66	123.7	25.6
	43-48	2.4	0.24	2.65	122.5	26
	75	0.4	0.25	2.65	123.4	25.3
	82.5-87.5	3.8	0.21	2.65	128	22.6
	93-98	1	0.5	2.65	128	22.6
	132.5-137.5	4.1	0.27	2.66	104.5	37.2
	143-148	4.8	0.28	2.65	114	31.1
	155-160	5.9	0.2	2.67	129.3	22.5
CACMW-007-160	16-21	2.1	0.25	2.65	122.9	25.7
	28-33	3.1	0.19	2.65	123.5	25.3
	48.25-53.25	4.1	0.18	2.65	127.1	23
	80-85	2.6	0.21	2.65	129.1	21.9
	88-93	3	0.2	2.67	108.2	35.2
	98.25-103.25	1.2	0.38	2.66	121.1	27.1
	111-116	2.5	0.28	2.66	106.7	35.7
	148.25-153.25	3.4	0.31	2.65	127.9	22.6

Location ID	Sample Depth (ft bgs)	Moisture Content (%)	Organic Content (%)	Specfic Gravity	Bulk Density - Dry (pcf)	Porosity (%)
CACMW-008-160	22-27	2.9	0.19	2.66	127.7	22.9
	72-77	2.5	0.23	2.66	128.1	22.9
	122-127	3.5	0.26	2.67	121.2	27.3

Notes:

% = percent

ft bgs = feet below ground surface

pcf = pounds per cubic feet

Table 7. Slug Test Hydraulic Conductivity Results
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Depth Interval (ft bgs)	K Estimation Method	Hydraulic Conductivity	
			cm/s	ft/d
CACMW-001-060	12.5-15.5	KGS	3.30E-02	94
CACMW-001-110	62.5-65.5	BR/KGS	2.45E-02	69
CACMW-001-160	113-116	BR/KGS	1.90E-02	54
CACMW-002-060	28.25-31.25	KGS	1.90E-02	54
CACMW-002-110	78.25-81.25	BR/KGS	1.35E-02	38
CACMW-002-160	128.25-131.25	BR/KGS	1.30E-02	37
CACMW-003-060	54.5-57.5	KGS	1.50E-02	43
CACMW-003-110	104.5-107.5	BR/KGS	3.35E-02	95
CACMW-003-160	154.5-157.5	BR/KGS	1.43E-02	40
CACMW-004-060	38.75-41.75	BR/KGS	2.20E-02	62
CACMW-004-110	88.75-91.75	BR/KGS	2.00E-02	57
CACMW-004-160	138.75-141.75	BR/KGS	1.90E-02	54
CACMW-005-060	17.75-20.75	KGS	2.10E-02	60
CACMW-005-110	67.75-70.75	KGS	1.60E-02	45
CACMW-005-160	117.75-120.75	BR/KGS	1.35E-02	38
CACMW-006-060	33.5-36.5	KGS	4.10E-02	116
CACMW-006-110*	83.5-86.5	--	--	--
CACMW-006-160	133.5-136.5	BR/KGS	1.20E-02	34
CACMW-007-060	49.25-52.25	BR/KGS	3.70E-02	105
CACMW-007-110	99.25-102.25	BR/KGS	2.00E-02	57
CACMW-007-160	149.25-152.25	BR/KGS	1.40E-02	40
CACMW-008-060	23-26	KGS	2.30E-02	65
CACMW-008-110	73-76	BR/KGS	2.20E-02	62
CACMW-008-160	123-126	BR/KGS	1.35E-02	38

Notes:
*** =** Slug test performed but transducer data lost; unable to calculate K
BR = Bouwer-Rice (Bouwer, 1989)
cm/s = centimeters per second
ft/d = feet per day
ft/s = feet per second
K = hydraulic conductivity
KGS = Kansas Geological Society (Hyder et al., 1994)

Well ID	Sample ID	Depth Interval (ft bgs)	K Estimation Method	Hydraulic Conductivity			Sample Description
				cm/s	ft/s	ft/d	
CACMW-001-160	CACMW-001-160-116.5-061124-GT	111.5-116.5	Arithmetic Mean	4.78E-02	1.57E-03	135.5	FINE SAND; AND FINE GRAVEL; LITTLE COARSE GRAVEL
CACMW-001-160	CACMW-001-160-16.5-061124-GT	15-16.5	Arithmetic Mean	8.84E-02	2.90E-03	250.5	FINE GRAVEL; SOME FINE SAND; SOME MEDIUM GRAVEL
CACMW-001-160	CACMW-001-160-66.5-061124-GT	61.5-66.5	Arithmetic Mean	4.62E-02	1.52E-03	130.9	FINE SAND; SOME FINE GRAVEL; TRACE MEDIUM GRAVEL
CACMW-002-160	CACMW-002-160-132.25-061424-GT	127.25-132.25	Arithmetic Mean	1.88E-02	6.15E-04	53.15	FINE SAND; TRACE FINE GRAVEL; TRACE MEDIUM SILT
CACMW-002-160	CACMW-002-160-32.25-061424-GT	27.25-32.25	Arithmetic Mean	7.15E-02	2.34E-03	202.6	FINE SAND; SOME FINE GRAVEL; TRACE MEDIUM GRAVEL
CACMW-002-160	CACMW-002-160-82.25-061424-GT	77.25-82.25	Arithmetic Mean	8.15E-05	2.67E-06	0.23	FINE GRAVEL; SOME MEDIUM GRAVEL; SOME FINE SAND
CACMW-003-160	CACMW-003-160-108.5-061724-GT	103.5-108.5	Arithmetic Mean	8.94E-02	2.93E-03	253.4	FINE GRAVEL; SOME FINE SAND; LITTLE MEDIUM GRAVEL
CACMW-003-160	CACMW-003-160-158.5-061724-GT	153.5-158.5	Arithmetic Mean	3.32E-02	1.09E-03	94.16	FINE SAND; SOME FINE GRAVEL; LITTLE COARSE GRAVEL
CACMW-003-160	CACMW-003-160-58.5-061724-GT	53.5-58.5	Arithmetic Mean	3.90E-02	1.28E-03	110.6	FINE SAND; SOME FINE GRAVEL; SOME MEDIUM GRAVEL
CACMW-004-160	CACMW-004-160-142.75-062424-GT	137.25-142.75	Arithmetic Mean	3.550E-02	1.165E-03	100.6	FINE SAND; LITTLE MEDIUM GRAVEL; TRACE FINE GRAVEL
CACMW-004-160	CACMW-004-160-42.75-062424-GT	37.75-42.75	Arithmetic Mean	5.456E-01	1.790E-02	1547	COARSE GRAVEL; SOME MEDIUM GRAVEL; SOME FINE GRAVEL
CACMW-004-160	CACMW-004-160-92.75-062424-GT	87.75-92.75	Arithmetic Mean	1.101E-01	3.613E-03	312.2	COARSE GRAVEL; SOME FINE GRAVEL; SOME MEDIUM GRAVEL
CACMW-005-160	CACMW-005-160-100-061824-GT	95-100	Arithmetic Mean	6.911E-02	2.267E-03	195.9	FINE SAND; SOME FINE GRAVEL; SOME MEDIUM GRAVEL
CACMW-005-160	CACMW-005-160-121.75-061824-GT	116.75-121.75	Arithmetic Mean	1.243E-01	4.079E-03	352.4	FINE GRAVEL; SOME FINE SAND; LITTLE MEDIUM GRAVEL
CACMW-005-160	CACMW-005-160-135-061824-GT	130-135	Arithmetic Mean	5.892E-02	1.933E-03	167	FINE SAND; LITTLE FINE GRAVEL; LITTLE MEDIUM GRAVEL
CACMW-005-160	CACMW-005-160-21.75-061824-GT	16.75-21.75	Arithmetic Mean	5.442E-02	1.786E-03	154.3	FINE SAND; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL
CACMW-005-160	CACMW-005-160-34-061824-GT	29-34	Geometric Mean	4.883E+00	1.602E-01	13840	COARSE GRAVEL; AND FINE GRAVEL; LITTLE MEDIUM GRAVEL
CACMW-005-160	CACMW-005-160-45-061824-GT	40-45	Arithmetic Mean	2.602E-02	8.536E-04	73.75	COARSE GRAVEL; SOME FINE GRAVEL; SOME MEDIUM GRAVEL
CACMW-005-160	CACMW-005-160-71.75-061824-GT	66.75-71.75	Arithmetic Mean	4.576E-02	1.501E-03	129.7	FINE GRAVEL; LITTLE COARSE SAND; TRACE MEDIUM GRAVEL
CACMW-005-160	CACMW-005-160-85-061824-GT	80-85	Arithmetic Mean	2.701E-02	8.863E-04	76.57	COARSE GRAVEL; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL
CACMW-006-160	CACMW-006-160-137.5-061924-GT	132.5-137.5	Arithmetic Mean	2.117E-02	6.946E-04	60.02	FINE SAND; TRACE COARSE GRAVEL; TRACE FINE GRAVEL
CACMW-006-160	CACMW-006-160-148-061924-GT	143-148	Arithmetic Mean	8.036E-03	2.637E-04	22.78	FINE SAND; LITTLE FINE GRAVEL; TRACE COARSE SILT
CACMW-006-160	CACMW-006-160-160-061924-GT	155-160	Arithmetic Mean	2.842E-02	9.325E-04	80.56	COARSE GRAVEL; LITTLE FINE GRAVEL; LITTLE MEDIUM SAND
CACMW-006-160	CACMW-006-160-26-061924-GT	21-26	Geometric Mean	5.324E-05	1.747E-06	0.15	FINE SAND; LITTLE FINE GRAVEL; TRACE COARSE SILT
CACMW-006-160	CACMW-006-160-37.5-061924-GT	32.5-37.5	Arithmetic Mean	6.074E-02	1.993E-03	172.2	MEDIUM GRAVEL; SOME FINE GRAVEL; LITTLE COARSE GRAVEL

Well ID	Sample ID	Depth Interval (ft bgs)	K Estimation Method	Hydraulic Conductivity			Sample Description
				cm/s	ft/s	ft/d	
CACMW-006-160	CACMW-006-160-48-061924-GT	43-48	Geometric Mean	6.871E+00	2.254E-01	19480	COARSE GRAVEL; LITTLE FINE GRAVEL; LITTLE MEDIUM GRAVEL
CACMW-006-160	CACMW-006-160-75-061924-GT	75	Arithmetic Mean	2.973E-01	9.752E-03	842.6	COARSE GRAVEL; SOME FINE GRAVEL; SOME MEDIUM GRAVEL
CACMW-006-160	CACMW-006-160-87.5-061924-GT	82.5-87.5	Arithmetic Mean	7.355E-03	2.413E-04	20.85	COARSE GRAVEL; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL
CACMW-006-160	CACMW-006-160-98-061924-GT	93-98	Arithmetic Mean	7.168E-02	2.352E-03	203.2	FINE SAND; SOME COARSE GRAVEL; LITTLE FINE GRAVEL
CACMW-007-160	CACMW-007-160-103.25-062024-GT	98.25-103.25	Arithmetic Mean	2.969E-02	9.739E-04	84.15	FINE SAND; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL
CACMW-007-160	CACMW-007-160-116-062024-GT	111-116	Arithmetic Mean	3.704E-02	1.215E-03	105	FINE SAND; LITTLE COARSE GRAVEL; TRACE FINE GRAVEL
CACMW-007-160	CACMW-007-160-153.25-062024-GT	148.25-153.25	Arithmetic Mean	1.056E-01	3.465E-03	299.3	COARSE GRAVEL; LITTLE FINE GRAVEL; LITTLE MEDIUM GRAVEL
CACMW-007-160	CACMW-007-160-21-062024-GT	16-21	Geometric Mean	2.690E+00	8.827E-02	7626	COARSE GRAVEL; SOME MEDIUM GRAVEL; SOME FINE GRAVEL
CACMW-007-160	CACMW-007-160-33-062024-GT	28-33	Geometric Mean	1.482E+00	4.861E-02	4200	COARSE GRAVEL; SOME FINE GRAVEL; SOME MEDIUM GRAVEL
CACMW-007-160	CACMW-007-160-53.25-062024-GT	48.25-53.25	Arithmetic Mean	5.285E-02	1.734E-03	149.8	COARSE GRAVEL; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL
CACMW-007-160	CACMW-007-160-85-062024-GT	80-85	Arithmetic Mean	1.511E-01	4.959E-03	428.4	COARSE GRAVEL; SOME FINE GRAVEL; SOME FINE SAND
CACMW-007-160	CACMW-007-160-93-062024-GT	88-93	Arithmetic Mean	6.985E-02	2.292E-03	198	FINE SAND; LITTLE FINE GRAVEL; TRACE MEDIUM GRAVEL
CACMW-008-160	CACMW-008-160-127-062124-GT	122-127	Arithmetic Mean	5.702E-02	1.871E-03	161.6	FINE SAND; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL
CACMW-008-160	CACMW-008-160-27-062124-GT	22-27	Arithmetic Mean	8.362E-02	2.743E-03	237	COARSE GRAVEL; SOME FINE SAND; LITTLE MEDIUM GRAVEL
CACMW-008-160	CACMW-008-160-77-062124-GT	72-77	Arithmetic Mean	8.885E-02	2.915E-03	251.9	FINE SAND; SOME MEDIUM GRAVEL; SOME FINE GRAVEL

Notes:
cm/s = centimeters per second
ft/d = feet per day
ft/s = feet per second
ft bgs = feet below ground surface
K = hydraulic conductivity

Table 9. Darcy Velocity Results
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Sample ID	Depth Interval (ft bgs)	Center Point of PFM Location (ft bgs)	Darcy Velocity (cm/day)
CACMW-001-060	CACMW-001-060-16.5-090424-FM-G	11.5-16.5	14.00	6.3
	CACMW-001-060-21.75-090424-FM-G	16.75-21.75	19.25	8.1
	CACMW-001-060-27-090424-FM-G	22-27	24.50	3.1
	CACMW-001-060-32.25-090424-FM-G	27.25-32.25	29.75	7.4
	CACMW-001-060-37.5-081424-FM-G	32.5-37.5	35.00	5.9
	CACMW-001-060-42.75-081424-FM-G	37.75-42.75	40.25	4.0
	CACMW-001-060-48-081424-FM-G	43-48	45.50	4.8
	CACMW-001-060-53.25-081524-FM-G	48.25-53.25	50.75	4.0
	CACMW-001-060-58.5-081524-FM-G	53.5-58.5	56.00	4.0
CACMW-001-110	CACMW-001-110-66.5-090424-FM-G	61.5-66.5	64.00	5.5
	CACMW-001-110-71.75-090424-FM-G	66.75-71.75	69.25	3.8
	CACMW-001-110-77-090424-FM-G	72-77	74.50	5.3
	CACMW-001-110-82.25-090424-FM-G	77.25-82.25	79.75	8.8
	CACMW-001-110-87.5-081424-FM-G	82.5-87.5	85.00	10.6
	CACMW-001-110-92.75-081424-FM-G	87.75-92.75	90.25	8.4
	CACMW-001-110-98-081424-FM-G	93-98	95.50	6.8
	CACMW-001-110-103.25-081424-FM-G	98.25-103.25	100.75	6.2
	CACMW-001-110-108.5-081424-FM-G	103.5-108.5	106.00	2.3
CACMW-001-160	CACMW-001-160-117-090424-FM-G	112-117	114.50	3.6
	CACMW-001-160-122.25-090424-FM-G	117.25-122.25	119.75	7.6
	CACMW-001-160-127.5-090424-FM-G	122.5-127.5	125.00	8.5
	CACMW-001-160-132.75-090424-FM-G	127.75-132.75	130.25	19.2
	CACMW-001-160-138-081524-FM-G	133-138	135.50	16.4
	CACMW-001-160-143.25-081524-FM-G	138.25-143.25	140.75	15.8
	CACMW-001-160-148.5-081524-FM-G	143.5-148.5	146.00	19.0
	CACMW-001-160-153.75-081524-FM-G	148.75-153.75	151.25	15.5
	CACMW-001-160-159-081524-FM-G	154-159	156.50	4.0
CACMW-002-060	CACMW-002-060-16.5-090424-FM-G	11.5-16.5	14.00	8.9
	CACMW-002-060-21.75-090424-FM-G	16.75-21.75	19.25	6.0
	CACMW-002-060-27-090424-FM-G	22-27	24.50	7.3
	CACMW-002-060-32.25-090424-FM-G	27.25-32.25	29.75	8.8
	CACMW-002-060-37.5-081524-FM-G	32.5-37.5	35.00	11.6
	CACMW-002-060-42.75-081524-FM-G	37.75-42.75	40.25	8.5
	CACMW-002-060-48-081524-FM-G	43-48	45.50	9.4
	CACMW-002-060-53.25-081524-FM-G	48.25-53.25	50.75	16.2
	CACMW-002-060-58.5-081524-FM-G	53.5-58.5	56.00	9.0
CACMW-002-110	CACMW-002-110-66.5-090424-FM-G	61.5-66.5	64.05	3.1
	CACMW-002-110-71.75-090424-FM-G	66.75-71.75	69.25	1.7
	CACMW-002-110-77-090424-FM-G	72-77	74.50	3.9
	CACMW-002-110-82.25-090424-FM-G	77.25-82.25	79.75	4.6
	FD-4-090424-FM-G [CACMW-002-110-82.25-090424-FM-G]		79.8	4.2
	CACMW-002-110-87.5-081524-FM-G	82.5-87.5	85.00	11.1
	CACMW-002-110-92.75-081524-FM-G	87.75-92.75	90.25	7.5
	CACMW-002-110-98-081524-FM-G	93-98	95.50	4.3
	CACMW-002-110-103.25-081524-FM-G	98.25-103.25	100.75	10.4
	CACMW-002-110-108.5-081524-FM-G	103.5-108.5	106.00	7.8
CACMW-002-160	CACMW-002-160-116.5-090424-FM-G	111.5-116.5	114.00	4.5
	CACMW-002-160-121.75-090424-FM-G	116.75-121.75	119.25	7.8
	CACMW-002-160-127-090424-FM-G	122-127	124.50	5.5
	CACMW-002-160-132.25-090424-FM-G	127.25-132.25	129.75	5.6
	FD-5-090424-FM-G [CACMW-002-110-132.25-090424-FM-G]		129.8	3.2
	CACMW-002-160-137.5-081524-FM-G	132.5-137.5	135.00	11.8
	CACMW-002-160-142.75-081524-FM-G	137.75-142.75	140.25	10.2
	CACMW-002-160-148-081524-FM-G	143-148	145.50	8.5
	CACMW-002-160-153.25-081524-FM-G	148.25-153.25	150.75	6.7
	CACMW-002-160-158.5-081524-FM-G	153.5-158.5	156.00	18.6
CACMW-003-060	CACMW-003-060-16.5-090424-FM-G	11.5-16.5	14.00	7.0
	CACMW-003-060-21.75-090424-FM-G□	16.75-21.75	19.25	7.8
	CACMW-003-060-27-090424-FM-G	22-27	24.50	5.6
	CACMW-003-060-32.25-090424-FM-G□	27.25-32.25	29.75	3.7
	CACMW-003-060-37.5-081624-FM-G	32.5-37.5	35.00	7.5
	CACMW-003-060-42.75-081624-FM-G	37.75-42.75	40.25	6.0
	CACMW-003-060-48-081624-FM-G	43-48	45.50	8.4
	CACMW-003-060-53.25-081624-FM-G	48.25-53.25	50.75	11.1
	CACMW-003-060-58.5-081624-FM-G	53.5-58.5	56.00	10.1

Table 9. Darcy Velocity Results
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Sample ID	Depth Interval (ft bgs)	Center Point of PFM Location (ft bgs)	Darcy Velocity (cm/day)
CACMW-003-110	CACMW-003-110-66.5-090524-FM-G	61.5-66.5	64.00	4.5
	CACMW-003-110-71.75-090524-FM-G	66.75-71.75	69.25	4.9
	CACMW-003-110-77-090524-FM-G	72-77	74.50	3.2
	CACMW-003-110-82.25-090524-FM-G	77.25-82.25	79.75	4.4
	CACMW-003-110-87.5-081624-FM-G	82.5-87.5	85.00	10.6
	CACMW-003-110-92.75-081624-FM-G	87.75-92.75	90.25	9.9
	CACMW-003-110-98-081624-FM-G	93-98	95.50	11.1
	CACMW-003-110-103.25-081624-FM-G	98.25-103.25	100.75	8.8
	CACMW-003-110-108.5-081624-FM-G	103.5-108.5	106.00	5.5
CACMW-003-160	CACMW-003-160-116.5-090424-FM-G	111.5-116.5	114.00	4.3
	CACMW-003-160-121.75-090424-FM-G	116.75-121.75	119.25	2.8
	CACMW-003-160-127-090424-FM-G	122-127	124.50	3.4
	CACMW-003-160-132.25-090424-FM-G	127.25-132.25	129.75	5.5
	CACMW-003-160-137.5-081524-FM-G	132.5-137.5	135.00	13.3
	CACMW-003-160-142.75-081524-FM-G	137.75-142.75	140.25	7.2
	CACMW-003-160-148-081524-FM-G	143-148	145.50	9.3
	CACMW-003-160-153.25-081524-FM-G	148.25-153.25	150.75	7.6
	CACMW-003-160-158.5-081524-FM-G	153.5-158.5	156.00	8.3
CACMW-004-060	CACMW-004-060-16.5-090524-FM-G	11.5-16.5	14.00	1.2
	CACMW-004-060-21.75-090524-FM-G	16.75-21.75	19.25	2.0
	CACMW-004-060-27-090524-FM-G	22-27	24.50	6.5
	CACMW-004-060-32.25-090524-FM-G	27.25-32.25	29.75	11.4
	FD-6-090524-FM-G [CACMW-004-060-32.25-090524-FM-G]		29.8	5.1
	CACMW-004-060-37.5-081624-FM-G	32.5-37.5	35.00	8.9
	CACMW-004-060-42.75-081624-FM-G	37.75-42.75	40.25	8.5
	CACMW-004-060-48-081624-FM-G	43-48	45.50	8.7
	CACMW-004-060-53.25-081624-FM-G	48.25-53.25	50.75	9.6
	CACMW-004-060-58.5-081624-FM-G	53.5-58.5	56.00	9.2
	FD-1-081624-FM-G [CACMW-004-060-58.5-081624-FM-G]		56.00	13.0
CACMW-004-110	CACMW-004-110-66.5-090524-FM-G	61.5-66.5	64.00	9.1
	CACMW-004-110-71.75-090524-FM-G	66.75-71.75	69.25	3.7
	CACMW-004-110-77-090524-FM-G	72-77	74.50	5.9
	CACMW-004-110-82.25-090524-FM-G	77.25-82.25	79.75	8.2
	FD-7-090524-FM-G [CACMW-004-110-82.25-090524-FM-G]		79.8	6.4
	CACMW-004-110-87.5-081624-FM-G	82.5-87.5	85.00	12.1
	CACMW-004-110-92.75-081624-FM-G	87.75-92.75	90.25	8.8
	CACMW-004-110-98-081624-FM-G	93-98	95.50	8.1
	CACMW-004-110-103.25-081624-FM-G	98.25-103.25	100.75	8.7
	CACMW-004-110-108.5-081624-FM-G	103.5-108.5	106.00	4.6
CACMW-004-160	CACMW-004-160-116.5-090524-FM-G	111.5-116.5	114.00	4.4
	CACMW-004-160-121.75-090524-FM-G	116.75-121.75	119.25	5.6
	CACMW-004-160-127-090524-FM-G	122-127	124.50	7.4
	CACMW-004-160-132.25-090524-FM-G	127.25-132.25	129.75	4.5
	CACMW-004-160-137.5-081624-FM-G	132.5-137.5	135.00	7.6
	CACMW-004-160-142.75-081624-FM-G	137.75-142.75	140.25	8.8
	CACMW-004-160-148-081624-FM-G	143-148	145.50	6.4
	CACMW-004-160-153.25-081624-FM-G	148.25-153.25	150.75	7.6
	CACMW-004-160-158.5-081624-FM-G	153.5-158.5	156.00	9.7
CACMW-005-060	CACMW-005-060-16.5-090524-FM-G	11.5-16.5	14.00	5.0
	CACMW-005-060-21.75-090524-FM-G	16.75-21.75	19.25	3.7
	CACMW-005-060-27-090524-FM-G	22-27	24.50	4.9
	CACMW-005-060-32.25-090524-FM-G	27.25-32.25	29.75	5.4
	CACMW-005-060-37.5-081624-FM-G	32.5-37.5	35.00	15.2
	CACMW-005-060-42.75-081624-FM-G	37.75-42.75	40.25	14.5
	CACMW-005-060-48-081624-FM-G	43-48	45.50	15.8
	CACMW-005-060-53.25-081624-FM-G	48.25-53.25	50.75	15.1
	CACMW-005-060-58.5-081624-FM-G	53.5-58.5	56.00	15.8
CACMW-005-110	CACMW-005-110-66.5-090524-FM-G	61.5-66.5	64.00	7.1
	CACMW-005-110-71.75-090524-FM-G	66.75-71.75	69.25	11.3
	CACMW-005-110-77-090524-FM-G	72-77	74.50	16.7
	CACMW-005-110-82.25-090524-FM-G	77.25-82.25	79.75	15.3
	CACMW-005-110-87.5-081624-FM-G	82.5-87.5	85.00	17.8
	CACMW-005-110-92.75-081624-FM-G	87.75-92.75	90.25	15.1
	CACMW-005-110-98-081624-FM-G	93-98	95.50	14.3
	CACMW-005-110-103.25-081624-FM-G	98.25-103.25	100.75	13.4
	CACMW-005-110-108.5-081624-FM-G	103.5-108.5	106.00	10.7

Table 9. Darcy Velocity Results
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Sample ID	Depth Interval (ft bgs)	Center Point of PFM Location (ft bgs)	Darcy Velocity (cm/day)
CACMW-005-160	CACMW-005-160-116.5-090524-FM-G	111.5-116.5	114.00	6.4
	CACMW-005-160-121.75-090524-FM-G	116.75-121.75	118.75	5.9
	CACMW-005-160-127-090524-FM-G	122-127	124.50	6.3
	CACMW-005-160-132.25-090524-FM-G	127.25-132.25	129.75	6.1
	CACMW-005-160-137.5-081624-FM-G	132.5-137.5	135.00	12.1
	CACMW-005-160-142.75-081624-FM-G	137.75-142.75	140.25	11.2
	CACMW-005-160-148-081624-FM-G	143-148	145.50	8.0
	CACMW-005-160-153.25-081624-FM-G	148.25-153.25	150.75	9.0
	CACMW-005-160-158.5-081624-FM-G	153.5-158.5	156.00	7.9
CACMW-006-060	CACMW-006-060-16.5-090524-FM-G	11.5-16.5	14.00	9.4
	CACMW-006-060-21.75-090524-FM-G	16.75-21.75	19.25	9.7
	CACMW-006-060-27-090524-FM-G	22-27	24.50	7.5
	CACMW-006-060-32.25-090524-FM-G	27.25-32.25	29.75	10.1
	FD-8-090524-FM-G [CACMW-006-060-32.25-090524-FM-G]		29.8	6.8
	CACMW-006-060-37.5-081724-FM-G	32.5-37.5	35.00	17.6
	CACMW-006-060-42.75-081724-FM-G	37.75-42.75	40.25	17.0
	CACMW-006-060-48-081724-FM-G	43-48	45.50	14.6
	CACMW-006-060-53.25-081724-FM-G	48.25-53.25	50.75	12.2
	CACMW-006-060-58.5-081724-FM-G	53.5-58.5	56.00	9.5
CACMW-006-110	CACMW-006-110-66.5-090624-FM-G	61.5-66.5	64.00	7.7
	CACMW-006-110-71.75-090624-FM-G	66.75-71.75	69.25	7.0
	CACMW-006-110-77-090624-FM-G	72-77	74.50	8.7
	CACMW-006-110-82.25-090624-FM-G	77.25-82.25	79.75	11.4
	FD-9-090624-FM-G [CACMW-006-110-82.25-090624-FM-G]		79.8	10.3
	CACMW-006-110-87.5-081724-FM-G	82.5-87.5	85.00	18.0
	CACMW-006-110-92.75-081724-FM-G	87.75-92.75	90.25	17.9
	CACMW-006-110-98-081724-FM-G	93-98	95.50	15.5
	CACMW-006-110-103.25-081724-FM-G	98.25-103.25	100.75	17.3
	CACMW-006-110-108.5-081724-FM-G	103.5-108.5	106.00	13.9
CACMW-006-160	CACMW-006-160-116.5-090624-FM-G	111.5-116.5	114.00	8.9
	CACMW-006-160-121.75-090624-FM-G	116.75-121.75	118.75	9.0
	CACMW-006-160-127-090624-FM-G	122-127	124.50	6.0
	CACMW-006-160-132.25-090624-FM-G	127.25-132.25	129.75	2.5
	CACMW-006-160-137.5-081724-FM-G	132.5-137.5	135.00	16.4
	CACMW-006-160-142.75-081724-FM-G	137.75-142.75	140.25	10.8
	CACMW-006-160-148-081724-FM-G	143-148	145.50	13.7
	CACMW-006-160-153.25-081724-FM-G	148.25-153.25	150.75	10.4
	CACMW-006-160-158.5-081724-FM-G	153.5-158.5	156.00	12.8
CACMW-007-060	CACMW-007-060-16.5-090624-FM-G	11.5-16.5	14.00	5.3
	CACMW-007-060-21.75-090624-FM-G	16.75-21.75	19.25	2.0
	CACMW-007-060-27-090624-FM-G	22-27	24.50	1.9
	CACMW-007-060-32.25-090624-FM-G	27.25-32.25	29.75	1.9
	CACMW-007-060-37.5-081724-FM-G	32.5-37.5	35.00	13.1
	CACMW-007-060-42.75-081724-FM-G	37.75-42.75	40.25	13.8
	CACMW-007-060-48-081724-FM-G	43-48	45.50	15.7
	CACMW-007-060-53.25-081724-FM-G	48.25-53.25	50.75	18.7
	CACMW-007-060-58.5-081724-FM-G	53.5-58.5	56.00	17.5
CACMW-007-110	CACMW-007-110-66.5-090624-FM-G	61.5-66.5	64.00	6.8
	CACMW-007-110-71.75-090624-FM-G	66.75-71.75	69.25	5.5
	CACMW-007-110-77-090624-FM-G	72-77	74.50	6.5
	CACMW-007-110-82.25-090624-FM-G	77.25-82.25	79.75	8.5
	FD-10-090624-FM-G [CACMW-007-110-82.25-090624-FM-G]		85.0	6.8
	CACMW-007-110-87.5-081724-FM-G	82.5-87.5	85.00	21.5
	CACMW-007-110-92.75-081724-FM-G	87.75-92.75	90.25	18.9
	CACMW-007-110-98-081724-FM-G	93-98	95.50	15.8
	CACMW-007-110-103.25-081724-FM-G	98.25-103.25	100.75	19.0
	CACMW-007-110-108.5-081724-FM-G	103.5-108.5	106.00	15.6
CACMW-007-160	CACMW-007-160-116.5-090624-FM-G	111.5-116.5	114.00	17.9
	CACMW-007-160-121.75-090624-FM-G	116.75-121.75	118.75	15.5
	CACMW-007-160-127-090624-FM-G	122-127	124.50	3.9
	CACMW-007-160-132.25-090624-FM-G	127.25-132.25	129.75	3.4
	CACMW-007-160-137.5-081724-FM-G	132.5-137.5	135.00	18.1
	CACMW-007-160-142.75-081724-FM-G	137.75-142.75	140.25	16.0
	CACMW-007-160-148-081724-FM-G	143-148	145.50	13.4
	CACMW-007-160-153.25-081724-FM-G	148.25-153.25	150.75	13.6
	CACMW-007-160-158.5-081724-FM-G	153.5-158.5	156.00	10.1
	FD-2-081724-FM-G [CACMW-007-160-158.5-081724-FM-G]		156.00	12.3

Table 9. Darcy Velocity Results
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Sample ID	Depth Interval (ft bgs)	Center Point of PFM Location (ft bgs)	Darcy Velocity (cm/day)
CACMW-008-060	CACMW-008-060-16.5-090624-FM-G	11.5-16.5	14.00	4.6
	CACMW-008-060-21.75-090624-FM-G	16.75-21.75	19.25	2.6
	CACMW-008-060-27-090624-FM-G	22-27	24.50	5.4
	CACMW-008-060-32.25-090624-FM-G	27.25-32.25	29.75	6.5
	CACMW-008-060-37.5-081724-FM-G	32.5-37.5	34.75	17.3
	CACMW-008-060-42.75-081724-FM-G	37.75-42.75	40.25	20.0
	CACMW-008-060-48-081724-FM-G	43-48	45.50	24.0
	CACMW-008-060-53.25-081724-FM-G	48.25-53.25	50.75	20.3
	CACMW-008-060-58.5-081724-FM-G	53.5-58.5	56.00	15.0
CACMW-008-110	CACMW-008-110-66.5-090624-FM-G	61.5-66.5	64.00	6.1
	CACMW-008-110-71.75-090624-FM-G	66.75-71.75	69.25	5.5
	CACMW-008-110-77-090624-FM-G	72-77	74.50	6.7
	CACMW-008-110-82.25-090624-FM-G	77.25-82.25	79.75	2.4
	CACMW-008-110-87.5-081724-FM-G	82.5-87.5	85.00	18.6
	CACMW-008-110-92.75-081724-FM-G	87.75-92.75	90.25	18.3
	CACMW-008-110-98-081724-FM-G	93-98	95.50	14.5
	CACMW-008-110-103.25-081724-FM-G	98.25-103.25	100.75	13.8
	CACMW-008-110-108.5-081724-FM-G	103.5-108.5	106.00	14.7
	FD-3-081724-FM-G [CACMW-008-110-108.5-081724-FM-G]		106.00	16.2
CACMW-008-160	CACMW-008-160-116.5-090624-FM-G	111.5-116.5	114.00	7.2
	CACMW-008-160-121.75-090624-FM-G	116.75-121.75	119.25	9.4
	CACMW-008-160-127-090624-FM-G	122-127	124.50	1.1
	CACMW-008-160-132.25-090624-FM-G	127.25-132.25	129.75	3.2
	CACMW-008-160-137.5-081724-FM-G	132.5-137.5	135.00	18.2
	CACMW-008-160-142.75-081724-FM-G	137.75-142.75	140.25	14.6
	CACMW-008-160-148-081724-FM-G	143-148	145.50	13.1
	CACMW-008-160-153.25-081724-FM-G	148.25-153.25	150.75	14.8
	CACMW-008-160-158.5-081724-FM-G	153.5-158.5	156.00	13.9

Notes:
Parent sample IDs corresponding to field duplicate samples are shown in brackets
cm/day = centimeters per day
ft bgs = feet below ground surface
PFM = passive flux meter

Table 10. Groundwater Analytical Results – Geochemical
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Location				CACMW-001						CACMW-002					
Location ID				CACMW-001-060		CACMW-001-110		CACMW-001-160		CACMW-002-060		CACMW-002-110		CACMW-002-160	
Sample Depth (ft bgs)				14		65		114		30.5		81		130	
Sample Date				7/9/2024		7/9/2024		7/10/2024		7/10/2024		7/11/2024		7/11/2024	
Sample Type				N		N		N		N		N		N	
Chemical	**CAS No.**	**Units**	**PSL[1]**												
TOC															
Total Organic Carbon	--	µg/L	--	**4160**		**4250**		**2000**		**4520**		**4070**		**2380**	
Total Metals															
Arsenic	7440-38-2	µg/L	10	**52.1**		**41.1**		**6.18**		**64.8**		**18.5**		**6.14**	
Barium	7440-39-3	µg/L	2000	**170**		**202**		**126**		**195**		**186**		**124**	
Cadmium	7440-43-9	µg/L	5	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U
Calcium	7440-70-2	µg/L	--	**57500**		**53300**		**36200**		**54100**		**51900**		**37000**	
Chromium	7440-47-3	µg/L	100	<15	U	<15	U	<15	U	<15	U	<15	U	<15	U
Iron	7439-89-6	µg/L	--	**2440**		**2400**		**3070**		**2430**		**2940**		**3030**	
Lead	7439-92-1	µg/L	--	**0.532**	J	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U
Magnesium	7439-95-4	µg/L	--	**11800**		**11600**		**9650**		**12000**		**11600**		**9790**	
Manganese	7439-96-5	µg/L	--	**2010**		**1660**		**199**		**2170**		**1440**		**220**	
Mercury	7439-97-6	µg/L	2	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U
Selenium	7782-49-2	µg/L	50	<1	U	<1	U	<1	U	<1	U	<1	U	<1	U
Silver	7440-22-4	µg/L	--	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U
Dissolved Metals															
Calcium	7440-70-2	µg/L	--	**58500**		**52700**		**36100**		**53100**		**51400**		**36200**	
Iron	7439-89-6	µg/L	--	**2350**		**2300**		**2990**		**2410**		**2860**		**2970**	
Magnesium	7439-95-4	µg/L	--	**12000**		**11700**		**9750**		**12100**		**11800**		**9800**	
Manganese	7439-96-5	µg/L	--	**2070**		**1650**		**204**		**2220**		**1460**		**222**	
Anions															
Chloride	16887-00-6	µg/L	--	**52700**		**60100**		**4630**		**62500**		**58000**		**5470**	
Fluoride (F-, Anion)	16984-48-8	µg/L	--	**436**	J+	**499**	J+	**286**	J+	**422**	J+	**500**	J+	**202**	J+
Nitrate/Nitrite	--	µg/L	10	<100	U	<100	U	<100	U	<100	U	<100	U	<100	U
Sulfate	14808-79-8	µg/L	--	**4400**	J	<2500	U	**13200**		<2500	U	<2500	U	**12900**	
General Chemistry															
Alkalinity	--	µg/L	--	**226000**		**239000**		**138000**		**241000**		**233000**		**143000**	
Hardness (as CaCO3)	--	µg/L	--	**195000**		**185000**		**141000**		**186000**		**185000**		**137000**	
Total Dissolved Solids	--	µg/L	--	**323000**		**328000**		**204000**		**340000**		**326000**		**203000**	
Total Suspended Solids	--	µg/L	--	**21100**	J-	**6530**	J-	**3400**	J-	**5700**	J-	**11600**		<5000	U

Table 10. Groundwater Analytical Results – Geochemical
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Location				CACMW-003						CACMW-004							
Location ID				CACMW-003-060		CACMW-003-110		CACMW-003-160		CACMW-004-060		CACMW-004-110		CACMW-004-160		CACMW-004-160	
Sample Depth (ft bgs)				56		106		156		40		90		140		140	
Sample Date				7/10/2024		7/11/2024		7/11/2024		7/11/2024		7/12/2024		7/12/2024		7/12/2024	
Sample Type				N		N		N		N		N		N		FD	
Chemical	**CAS No.**	**Units**	**PSL[1]**														
TOC																	
Total Organic Carbon	--	µg/L	--	**4410**		**4450**		**2080**		**4390**		**4410**		**2430**		**2420**	
Total Metals																	
Arsenic	7440-38-2	µg/L	10	**67.8**		**28.6**		**6.29**		**48.6**		**38.1**		**5.72**		**5.56**	
Barium	7440-39-3	µg/L	2000	**182**		**191**		**122**		**188**		**223**		**135**		**135**	
Cadmium	7440-43-9	µg/L	5	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U
Calcium	7440-70-2	µg/L	--	**52200**		**49300**		**35900**		**55000**		**54100**		**38500**		**38300**	
Chromium	7440-47-3	µg/L	100	<15	U	<15	U	<15	U	<15	U	<15	U	<15	U	<15	U
Iron	7439-89-6	µg/L	--	**4770**		**4150**		**3240**		**4080**		**3460**		**3430**		**3360**	
Lead	7439-92-1	µg/L	--	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U
Magnesium	7439-95-4	µg/L	--	**12200**		**11500**		**9710**		**12200**		**11400**		**9450**		**9360**	
Manganese	7439-96-5	µg/L	--	**1810**		**1380**		**224**		**2660**		**1190**		**228**		**222**	
Mercury	7439-97-6	µg/L	2	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U
Selenium	7782-49-2	µg/L	50	<1	U	<1	U	<1	U	<1	U	<1	U	<1	U	<1	U
Silver	7440-22-4	µg/L	--	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U
Dissolved Metals																	
Calcium	7440-70-2	µg/L	--	**50900**		**48300**		**35200**		**54900**		**50100**		**36000**		**36200**	
Iron	7439-89-6	µg/L	--	**4340**		**3740**		**3180**		**4170**		**3310**		**3300**		**3360**	
Magnesium	7439-95-4	µg/L	--	**12200**		**11400**		**9710**		**12300**		**11500**		**9470**		**9510**	
Manganese	7439-96-5	µg/L	--	**1810**		**1370**		**224**		**2760**		**1220**		**232**		**233**	
Anions																	
Chloride	16887-00-6	µg/L	--	**62400**		**53600**		**3950**		**58400**		**58400**	J-	**6320**		**6170**	
Fluoride (F-, Anion)	16984-48-8	µg/L	--	**544**	J+	**506**	J+	**209**	J+	**480**	J+	**552**	J+	**281**	J+	**205**	J+
Nitrate/Nitrite	--	µg/L	10	<100	U	<100	U	<100	U	<100	U	<100	U	<100	U	<100	U
Sulfate	14808-79-8	µg/L	--	<2500	U	<2500	U	**13200**		**2620**	J	<2500	U	**12900**		**12600**	
General Chemistry																	
Alkalinity	--	µg/L	--	**240000**		**225000**		**138000**		**240000**		**245000**		**150000**		**148000**	
Hardness (as CaCO3)	--	µg/L	--	**192000**		**181000**		**135000**		**214000**		**171000**		**129000**		**128000**	
Total Dissolved Solids	--	µg/L	--	**343000**		**314000**		**198000**		**339000**		**329000**		**211000**		**214000**	
Total Suspended Solids	--	µg/L	--	**48200**	J-	**51600**		**6420**		**14000**		**14700**		**4490**		**4390**	

Table 10. Groundwater Analytical Results – Geochemical
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Location				CACMW-005						CACMW-006					
Location ID				CACMW-005-060		CACMW-005-110		CACMW-005-160		CACMW-006-060		CACMW-006-110		CACMW-006-160	
Sample Depth (ft bgs)				19.6		70		120		36		86		136	
Sample Date				7/11/2024		7/12/2024		7/12/2024		7/15/2024		7/15/2024		7/15/2024	
Sample Type				N		N		N		N		N		N	
Chemical	**CAS No.**	**Units**	**PSL[1]**												
TOC															
Total Organic Carbon	--	µg/L	--	**4350**		**4750**		**3940**		**4370**		**5270**		**2490**	
Total Metals															
Arsenic	7440-38-2	µg/L	10	**63.7**		**40.1**		**2.45**		**69.8**		**31.5**		**5.28**	
Barium	7440-39-3	µg/L	2000	**208**		**199**		**104**		**178**		**225**		**121**	
Cadmium	7440-43-9	µg/L	5	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U
Calcium	7440-70-2	µg/L	--	**52300**		**54400**		**39100**		**59200**		**50300**		**36300**	
Chromium	7440-47-3	µg/L	100	<15	U	<15	U	<15	U	<15	U	<15	U	<15	U
Iron	7439-89-6	µg/L	--	**3010**		**4320**		**2890**		**5470**		**4320**		**3570**	
Lead	7439-92-1	µg/L	--	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U
Magnesium	7439-95-4	µg/L	--	**11900**		**11300**		**9500**		**12700**		**11500**		**9700**	
Manganese	7439-96-5	µg/L	--	**1500**		**1470**		**316**		**3830**		**1310**		**280**	
Mercury	7439-97-6	µg/L	2	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U
Selenium	7782-49-2	µg/L	50	<1	U	<1	U	<1	U	<1	U	<1	U	<1	U
Silver	7440-22-4	µg/L	--	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U
Dissolved Metals															
Calcium	7440-70-2	µg/L	--	**51200**		**50500**		**36300**		**60600**		**49500**		**36000**	
Iron	7439-89-6	µg/L	--	**2730**		**4150**		**2920**		**5390**		**4230**		**3480**	
Magnesium	7439-95-4	µg/L	--	**11900**		**11700**		**9550**		**12400**		**11400**		**9520**	
Manganese	7439-96-5	µg/L	--	**1530**		**1520**		**316**		**3850**		**1310**		**278**	
Anions															
Chloride	16887-00-6	µg/L	--	**61100**		**60000**		**7120**		**59200**	J-	**56300**		**5180**	
Fluoride (F-, Anion)	16984-48-8	µg/L	--	**546**	J+	**520**	J+	**329**	J+	**379**	J+	**442**	J+	**306**	J+
Nitrate/Nitrite	--	µg/L	10	<100	U	<100	U	<100	U	<100	UJ	<100	U	<100	U
Sulfate	14808-79-8	µg/L	--	<2500	U	<2500	U	**13000**		**1330**	J	**1090**	J	**11400**	
General Chemistry															
Alkalinity	--	µg/L	--	**236000**		**254000**		**155000**		**251000**		**230000**		**142000**	
Hardness (as CaCO3)	--	µg/L	--	**183000**		**176000**		**129000**		**190000**		**175000**		**131000**	
Total Dissolved Solids	--	µg/L	--	**334000**		**335000**		**217000**		**336000**		**322000**		**197000**	
Total Suspended Solids	--	µg/L	--	**29200**		**18000**		**9000**		**16000**		**19000**		**9600**	

Table 10. Groundwater Analytical Results – Geochemical
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Location				CACMW-007								CACMW-008							
Location ID				CACMW-007-060		CACMW-007-060		CACMW-007-110		CACMW-007-160		CACMW-008-060		CACMW-008-110		CACMW-008-110		CACMW-008-160	
Sample Depth (ft bgs)				51		51		111		151		24		74		74		125	
Sample Date				7/15/2024		7/15/2024		7/15/2024		7/15/2024		7/16/2024		7/16/2024		7/16/2024		7/16/2024	
Sample Type				N		FD		N		N		N		N		FD		N	
Chemical	**CAS No.**	**Units**	**PSL[1]**																
TOC																			
Total Organic Carbon	--	µg/L	--	**4940**		**4840**		**4290**		**2200**		**4640**		**4840**		**4740**		**2510**	
Total Metals																			
Arsenic	7440-38-2	µg/L	10	**57.1**		**60.9**		**26**		**4.56**		**40**		**42.1**		**40**		**5.4**	
Barium	7440-39-3	µg/L	2000	**186**		**185**		**220**		**113**		**172**		**216**		**221**		**127**	
Cadmium	7440-43-9	µg/L	5	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U
Calcium	7440-70-2	µg/L	--	**59200**		**59500**		**49900**		**36900**		**59900**		**51100**		**50100**		**36700**	
Chromium	7440-47-3	µg/L	100	<15	U	<15	U	<15	U	<15	U	<15	U	<15	U	<15	U	<15	U
Iron	7439-89-6	µg/L	--	**4430**		**4380**		**4630**		**3170**		**3510**		**3600**		**3490**		**2740**	
Lead	7439-92-1	µg/L	--	**0.515**	J	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U
Magnesium	7439-95-4	µg/L	--	**12500**		**12600**		**11400**		**9870**		**12200**		**11400**		**11100**		**9640**	
Manganese	7439-96-5	µg/L	--	**4160**		**4070**		**1290**		**504**		**3690**		**1370**		**1350**		**405**	
Mercury	7439-97-6	µg/L	2	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U
Selenium	7782-49-2	µg/L	50	<1	U	<1	U	<1	U	<1	U	<1	U	<1	U	<1	U	<1	U
Silver	7440-22-4	µg/L	--	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U	<0.5	U
Dissolved Metals																			
Calcium	7440-70-2	µg/L	--	**59000**		**59800**		**49100**		**36900**		**59500**		**50100**		**50400**		**36700**	
Iron	7439-89-6	µg/L	--	**4040**		**4080**		**4350**		**2960**		**3720**		**3490**		**3510**		**2620**	
Magnesium	7439-95-4	µg/L	--	**12100**		**12200**		**11100**		**9790**		**12100**		**11200**		**11200**		**9560**	
Manganese	7439-96-5	µg/L	--	**4020**		**4060**		**1260**		**483**		**3720**		**1350**		**1350**		**405**	
Anions																			
Chloride	16887-00-6	µg/L	--	**57600**		**58100**		**56300**		**5710**		**53400**		**58500**		**57900**		**5560**	
Fluoride (F-, Anion)	16984-48-8	µg/L	--	**387**	J+	**378**	J+	**439**	J+	**235**	J+	**350**	J+	**443**	J+	**434**	J+	**238**	J+
Nitrate/Nitrite	--	µg/L	10	<100	U	<100	U	<100	U	<100	U	<100	U	<100	UJ	<100	U	<100	U
Sulfate	14808-79-8	µg/L	--	**1250**	J	**1200**	J	**838**	J	**11000**		**1900**	J	**831**	J	**861**	J	**11200**	
General Chemistry																			
Alkalinity	--	µg/L	--	**245000**		**253000**		**229000**		**148000**		**234000**		**238000**		**234000**		**146000**	
Hardness (as CaCO3)	--	µg/L	--	**195000**		**188000**		**174000**		**132000**		**186000**		**175000**		**171000**		**132000**	
Total Dissolved Solids	--	µg/L	--	**339000**		**339000**		**316000**		**201000**		**333000**		**321000**		**320000**		**201000**	
Total Suspended Solids	--	µg/L	--	**38200**		**28000**		**37000**		**23200**		**22400**		**14600**		**14200**		**10200**	

Notes:
Detected results appear in **bold** font
Highlighted cells indicate detections that exceed the selected screening levels.
Dissolved metal analytes were field filtered prior to lab analysis.
Sample depths presented are the pump intake depths below ground surface.

[1] = Project screening levels (PSL) are the November 2024 maximum contaminant levels (MCL) (USEPA 2024)

Acronymns:
< = less than the limit of detection shown
-- = not applicable
FD = Field Duplicate
ft bgs = feet below ground surface
N = normal sample
NA = not analyzed
ng/L = nanograms per Liter
THQ = total hazard quotient
USEPA = United States Environmental Protection Agency
µg/L = micrograms per Liter

Qualifiers:
J = Estimated value
J+ = the result is estimated with a high bias
J- = the result is estimated with low bias
U = The analyte was analyzed for, but not detected.
UJ = The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
M = manual integration performed

Analytes Analyzed under Method EPA 9060
Total Organic Carbon (TOC)
Analytes Analyzed under Method USEPA 160.1
Total dissolved solids (TDS)
Analytes analyzed under Method 300 (Wet Chemistry)
Chloride
Fluoride (F-, Anion)
Nitrate/Nitrite
Sulfate
Analytes analyzed under Method 6010
Arsenic
Barium
Cadmium
Calcium
Chromium
Iron
Lead
Magnesium
Manganese
Mercury
Selenium
Silver
Analytes analyzed under Method 130.1 (Wet Chemistry)
Hardness (as CaCO3)
Analytes analyzed under Method 2320 (Wet Chemistry)
Alkalinity

Table 11. Groundwater Analytical Results – PFAS
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Location				CACMW-001						CACMW-002						CACMW-003					
Location ID				CACMW-001-060		CACMW-001-110		CACMW-001-160		CACMW-002-060		CACMW-002-110		CACMW-002-160		CACMW-003-060		CACMW-003-110		CACMW-003-160	
Sample Depth (ft bgs)				14		65		114		30.5		81		130		56		106		156	
Sample Date				7/9/2024		7/9/2024		7/10/2024		7/10/2024		7/11/2024		7/11/2024		7/10/2024		7/11/2024		7/11/2024	
Sample Type				N		N		N		N		N		N		N		N		N	
Chemical	**CAS No.**	**Units**	**PSL[1]**																		
Perfluoroalkyl carboxylic acids																					
PFBA	375-22-4	ng/L	1800*	**19**	M	**18**		**4.9**	M	**18**	M	**18**	M	**5.4**		**17**		**17**		**4.6**	
PFDA	335-76-2	ng/L	0.52***	**2.3**	M	**2.7**	M	<0.44	U	**2.6**	M	**2.8**	M	<0.39	U	**2.3**	M	**2.6**	M	<0.40	U
PFDoA	307-55-1	ng/L	--	<0.44	U	<0.44	U	<0.44	U	<0.44	U	<0.38	U	<0.39	U	<0.40	U	<0.44	U	<0.40	U
PFHpA	375-85-9	ng/L	--	**33**		**32**		**6.4**		**32**		**31**		**7.1**		**29**		**29**		**5.9**	
PFHxA	307-24-4	ng/L	990*	**93**	M	**97**		**19**		**98**		**98**		**22**		**97**		**88**		**18**	
PFNA	375-95-1	ng/L	5.9*	**11**	M	**11**	M	**1.1**	M	**11**	M	**11**	M	**1.3**	M	**11**		**10**	M	**1.1**	M
PFOA	335-67-1	ng/L	4**	**89**	M	**86**	M	**20**		**97**	M	**91**	M	**20**	M	**90**	M	**83**		**17**	
PFPeA	2706-90-3	ng/L	--	**58**		**59**		**15**		**57**		**56**		**16**		**54**		**53**		**14**	
PFTeDA	376-06-7	ng/L	--	<0.88	U	<0.88	U	<0.88	U	<0.88	U	<0.75	U	<0.78	U	<0.80	U	<0.88	U	<4.0	UJ
PFTrDA	72629-94-8	ng/L	--	<0.44	U	<0.44	U	<0.44	U	<0.44	U	<0.38	U	<0.39	U	<0.40	U	<0.44	U	<0.40	UJ
PFUdA	2058-94-8	ng/L	--	<0.88	U	**0.32**	JM	<0.88	U	**0.47**	JM	**0.46**	JM	<0.78	U	**0.40**	J	**0.42**	J	<0.80	U
Perfluoroalkyl sulfonic acids																					
PFBS	375-73-5	ng/L	600*	**14**	M	**17**	M	**6.6**	M	**16**	M	**19**	M	**8.0**		**14**	M	**17**	M	**6.1**	
PFDS	335-77-3	ng/L	--	<0.43	U	<0.43	U	<0.43	U	<0.43	U	<0.37	U	<0.38	U	<0.39	U	<0.43	U	<0.39	UJ
PFDOS	79780-39-5	ng/L	--	<0.43	U	<0.43	U	<0.43	U	<0.43	U	<0.37	U	<0.38	U	<0.39	U	<0.43	U	NA	R
PFHpS	375-92-8	ng/L	--	**16**		**19**		**4.6**		**18**		**21**		**5.2**	M	**18**		**18**		**3.6**	
PFHxS	355-46-4	ng/L	10**	**230**		**280**	M	**64**	M	**250**		**250**		**75**		**250**		**240**		**66**	
PFNS	68259-12-1	ng/L	--	**0.83**	JM	**1.7**	M	<0.42	U	**1.5**	M	**1.4**	M	<0.37	U	**1.8**	M	**1.5**	M	<0.38	U
PFOS	1763-23-1	ng/L	4*	**1100**	M	**1500**	M	**230**	M	**1400**	M	**1400**		**240**		**1300**		**1400**	M	**190**	M
PFPeS	138495-42-8	ng/L	--	**18**		**20**		**7.9**		**20**		**21**		**9.3**		**18**		**20**		**7.1**	
Fluorotelomer sulfonic acids																					
4:2 FTS	757124-72-4	ng/L	--	**0.91**	JM	**0.96**	JM	**0.74**	JM	**0.90**	JM	**0.96**	J	**0.94**	J	**0.96**	JM	**0.98**	JM	**0.71**	JM
6:2 FTSA	27619-97-2	ng/L	--	**120**		**110**		**40**		**130**		**120**		**39**		**110**		**130**		**40**	
8:2 FTSA	39108-34-4	ng/L	--	**34**	M	**29**		**5.2**	M	**29**		**31**		**6.0**		**32**	M	**28**		**8.1**	M
Perfluoroctane sulfonamides																					
N-EtFOSA	4151-50-2	ng/L	--	<0.44	U	<0.44	U	<0.44	U	<0.44	U	<0.38	U	<0.39	U	<0.40	U	<0.44	U	<0.40	U
N-MeFOSA	31506-32-8	ng/L	--	<0.88	U	**0.23**	JM	<0.88	U	<0.88	U	<0.75	U	<0.78	U	<0.80	U	<0.88	U	<0.80	U
PFOSA	754-91-6	ng/L	--	**11**	M	**11**	M	**2.3**	M	**11**	M	**9.7**	M	**2.3**	M	**10**	M	**9.2**	M	**2.2**	J
Perfluorooctane sulfanamidoacetic acids																					
N-EtFOSAA	2991-50-6	ng/L	--	**12**	M	**14**	M	**1.7**	M	**13**	M	**13**	M	**1.9**		**15**	M	**14**		**2.0**	M
MeFOSAA	2355-31-9	ng/L	--	**12**	M	**17**		**1.0**	JM	**17**	M	**15**	M	**1.4**	M	**16**	M	**13**		**1.7**	M
Perfluoroctane sulfonamide ethanols																					
N-EtFOSE	1691-99-2	ng/L	--	<2.2	U	<2.2	U	<2.2	U	<2.2	U	<1.9	U	<1.9	U	<2.0	U	<2.2	U	<10	UJ
N-MeFOSE	24448-09-7	ng/L	--	<2.2	U	**1.6**	JM	<2.2	U	**1.4**	JM	**1.1**	JM	<1.9	U	<2.0	U	**1.0**	J	<10	UJ
Per- and Polyfluoroether carboxylic acids																					
HFPO-DA	13252-13-6	ng/L	1.5*	<2.5	U	<2.6	U	<2.5	U	<2.6	U	<2.3	U	<2.3	U	<2.5	U	<2.5	U	<2.5	U
DONA	919005-14-4	ng/L	--	<2.4	U	<2.5	U	<2.4	U	<2.5	U	<2.2	U	<2.2	U	<2.4	U	<2.4	U	<2.4	UM
PFMPA	377-73-1	ng/L	--	<0.67	U	<0.70	U	<0.67	U	<0.70	U	<0.61	U	<0.61	U	<0.67	U	<0.67	U	**0.40**	JM
PFMBA	863090-89-5	ng/L	--	<1.4	U	<1.4	U	<1.4	U	<1.4	U	<1.2	U	<1.2	U	<1.4	U	<1.4	U	<1.4	U
NFDHA	151772-58-6	ng/L	--	<1.4	U	<1.4	U	<1.4	U	<1.4	U	<1.2	U	<1.2	U	<1.4	U	<1.4	U	<1.4	U
Ether sulfonic acids																					
F-53B Minor	763051-92-9	ng/L	--	<2.4	U	<2.5	U	<2.4	U	<2.5	U	<2.2	U	<2.2	U	<2.4	U	<2.4	U	NA	R
9CL-PF3ONS	756426-58-1	ng/L	--	<2.3	U	<2.4	U	<2.3	U	<2.4	U	<2.1	U	<2.1	U	<2.3	U	<2.3	U	<2.3	U
PFEESA	113507-82-7	ng/L	--	<1.2	U	<1.2	U	<1.2	U	<1.2	U	<1.0	U	<1.0	U	<1.2	U	<1.2	U	<1.2	U
Fluorotelomer carboxylic acids																					
7:3 FTCA	812-70-4	ng/L	--	<10	U	<11	UM	<10	U	<11	UM	<9.6	U	<9.6	U	<10	UM	<10	U	<10	U
3:3 FTCA	356-02-5	ng/L	--	<2.1	U	<2.2	U	<2.1	U	<2.2	U	<1.9	U	<2.0	U	<2.1	U	<2.1	U	<2.1	U
5:3 FTCA	914637-49-3	ng/L	--	**5.7**	JM	**6.8**	JM	<10	UM	**7.5**	JM	**8.0**	JM	<9.6	U	**7.9**	JM	**7.0**	J	<10	UM
Totals																					
Total PFAS	--	ng/L	--	1915.33		2367.47		476.89		2265.41		2249.01		503.68		2128.31		2215.21		449.78	

Table 11. Groundwater Analytical Results – PFAS
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Location				CACMW-004								CACMW-005						CACMW-006					
Location ID				CACMW-004-060		CACMW-004-110		CACMW-004-160		CACMW-004-160		CACMW-005-060		CACMW-005-110		CACMW-005-160		CACMW-006-060		CACMW-006-110		CACMW-006-160	
Sample Depth (ft bgs)				40		90		140		140		19.6		70		120		36		86		136	
Sample Date				7/11/2024		7/12/2024		7/12/2024		7/12/2024		7/11/2024		7/12/2024		7/12/2024		7/15/2024		7/15/2024		7/15/2024	
Sample Type				N		N		N		FD		N		N		N		N		N		N	
Chemical	**CAS No.**	**Units**	**PSL[1]**																				
Perfluoroalkyl carboxylic acids																							
PFBA	375-22-4	ng/L	1800*	**19**		**16**		**5.0**	M	**5.0**	M	**18**		**17**		**5.4**		**21**		**17**	M	**4.9**	M
PFDA	335-76-2	ng/L	0.52***	**2.1**	M	**2.4**	M	<0.40	U	<0.40	U	**2.6**	M	**2.4**	M	<0.40	U	**2.8**	JM	**2.2**	M	<0.40	U
PFDoA	307-55-1	ng/L	--	<0.40	U	<0.40	U	<0.40	U	<0.40	U	<0.38	U	<0.40	U	<0.40	U	<2.0	U	<0.40	U	<0.40	U
PFHpA	375-85-9	ng/L	--	**33**		**28**		**7.5**		**6.9**		**31**		**31**		**7.4**		**41**	M	**30**		**6.8**	
PFHxA	307-24-4	ng/L	990*	**93**		**100**	M	**22**		**22**		**92**		**95**	M	**23**		**110**		**93**	M	**22**	M
PFNA	375-95-1	ng/L	5.9*	**10**		**9.4**	M	**1.3**	M	**1.2**	M	**11**	M	**10**	M	**1.3**	M	**15**	M	**10**	M	**1.0**	M
PFOA	335-67-1	ng/L	4**	**99**	M	**83**		**20**		**18**	M	**90**	M	**90**	M	**21**	M	**120**	M	**78**		**19**	M
PFPeA	2706-90-3	ng/L	--	**58**		**54**		**16**	M	**16**	M	**57**		**54**		**17**	M	**69**		**54**	M	**15**	
PFTeDA	376-06-7	ng/L	--	<0.80	U	<0.80	U	<0.80	U	<0.80	U	<0.77	U	<0.79	U	<0.79	U	<4.0	U	<0.80	U	<0.80	U
PFTrDA	72629-94-8	ng/L	--	<0.40	U	<0.40	U	<0.40	U	<0.40	U	<0.38	U	<0.40	U	<0.40	U	<2.0	U	<0.40	U	<0.40	U
PFUdA	2058-94-8	ng/L	--	**0.35**	JM	**0.45**	JM	<0.80	U	<0.80	U	**0.45**	JM	**0.44**	JM	<0.79	U	<4.0	U	**0.38**	JM	<0.80	U
Perfluoroalkyl sulfonic acids																							
PFBS	375-73-5	ng/L	600*	**14**	M	**16**	M	**7.6**	M	**7.7**		**16**	M	**15**	M	**8.9**	M	**16**	M	**16**	M	**7.9**	M
PFDS	335-77-3	ng/L	--	<0.39	U	<0.39	U	<0.39	U	<0.39	U	<0.37	U	<0.39	U	<0.39	U	<2.0	U	<0.39	U	<0.39	U
PFDOS	79780-39-5	ng/L	--	<0.39	U	<0.39	U	<0.39	U	<0.39	U	<0.37	U	<0.39	U	<0.39	U	<2.0	U	<0.39	U	<0.39	U
PFHpS	375-92-8	ng/L	--	**17**		**20**		**5.0**		**5.0**	M	**19**		**18**		**5.6**		**18**	M	**20**		**5.2**	M
PFHxS	355-46-4	ng/L	10**	**250**		**260**	M	**76**		**68**	M	**250**		**250**		**78**		**280**		**270**	M	**69**	
PFNS	68259-12-1	ng/L	--	**1.1**	M	**1.4**	M	<0.38	U	<0.38	U	**1.6**	M	**1.6**	M	<0.38	U	**1.2**	JM	**1.8**	M	<0.38	U
PFOS	1763-23-1	ng/L	4*	**1200**	M	**1400**	M	**260**	M	**260**	M	**1400**	M	**1400**	M	**320**	M	**1300**	M	**1500**	M	**260**	M
PFPeS	138495-42-8	ng/L	--	**19**		**20**		**8.7**		**7.8**		**18**		**19**		**9.3**	M	**19**		**20**	M	**8.8**	M
Fluorotelomer sulfonic acids																							
4:2 FTS	757124-72-4	ng/L	--	**0.98**	JM	**0.95**	JM	**0.72**	JM	<1.5	U	**1.1**	JM	**1.1**	JM	**0.62**	JM	<7.5	U	**0.98**	JM	**0.68**	J
6:2 FTSA	27619-97-2	ng/L	--	**130**		**100**		**38**		**42**		**150**		**120**		**51**		**140**		**110**		**47**	
8:2 FTSA	39108-34-4	ng/L	--	**33**	M	**29**	M	**8.1**		**7.3**	M	**28**		**33**	M	**27**	M	**36**		**29**		**7.5**	M
Perfluorooctane sulfonamides																							
N-EtFOSA	4151-50-2	ng/L	--	<0.40	U	<0.40	U	<0.40	U	<0.40	U	<0.38	U	<0.40	U	<0.40	U	<2.0	U	<0.40	U	<0.40	U
N-MeFOSA	31506-32-8	ng/L	--	<0.80	U	<0.80	U	<0.80	U	<0.80	U	<0.77	U	<0.79	U	<0.79	U	<4.0	U	<0.80	U	<0.80	U
PFOSA	754-91-6	ng/L	--	**11**	M	**9.9**	M	**2.0**	M	**2.1**	M	**10**	M	**11**	M	**2.4**	M	**12**	M	**10**	M	**2.2**	M
Perfluorooctane sulfanamidoacetic acids																							
N-EtFOSAA	2991-50-6	ng/L	--	**13**	M	**15**		**1.9**	M	**2.3**	M	**15**		**17**		**2.1**	M	**14**	M	**16**	M	**2.4**	M
MeFOSAA	2355-31-9	ng/L	--	**17**	M	**14**	M	**1.6**	M	**1.2**	M	**15**		**16**		**2.0**	M	**21**	M	**15**		**1.8**	JM
Perfluorooctane sulfonamide ethanols																							
N-EtFOSE	1691-99-2	ng/L	--	<2.0	U	<2.0	UJ	NA	R	<10	UJ	<1.9	U	<2.0	U	NA	R	<10	U	<2.0	U	<2.0	U
N-MeFOSE	24448-09-7	ng/L	--	**1.1**	J	**2.3**	JM	<2.0	UJ	<10	UJ	**1.4**	JM	**1.1**	JM	<2.0	UJ	<10	U	**1.4**	JM	<2.0	U
Per- and Polyfluoroether carboxylic acids																							
HFPO-DA	13252-13-6	ng/L	1.5*	<2.5	U	<2.5	U	<2.4	U	<2.4	U	<2.3	U	<2.4	U	<2.3	U	<12	U	<2.5	U	<2.4	U
DONA	919005-14-4	ng/L	--	<2.4	U	<2.4	U	<2.3	U	<2.3	U	<2.2	U	<2.3	U	<2.2	U	<12	U	<2.4	U	<2.3	U
PFMPA	377-73-1	ng/L	--	<0.64	U	<0.67	U	<0.64	U	<0.64	U	<0.61	U	<0.64	U	<0.64	U	<3.2	U	<0.67	U	<0.64	U
PFMBA	863090-89-5	ng/L	--	<1.3	U	<1.4	U	<1.3	U	<1.3	U	<1.2	U	<1.3	U	<1.3	U	<6.5	U	<1.4	U	<1.3	U
NFDHA	151772-58-6	ng/L	--	<1.3	U	<1.4	U	<1.3	U	<1.3	U	<1.2	U	<1.3	U	<1.3	U	<6.5	U	<1.4	U	<1.3	U
Ether sulfonic acids																							
F-53B Minor	763051-92-9	ng/L	--	<2.4	U	<2.4	U	<2.3	U	<2.3	U	<2.2	U	<2.3	U	<2.2	U	<12	U	<2.4	U	<2.3	U
9CL-PF3ONS	756426-58-1	ng/L	--	<2.3	U	<2.3	U	<2.2	U	<2.2	U	<2.1	U	<2.2	U	<2.1	U	<11	U	<2.3	U	<2.2	U
PFEESA	113507-82-7	ng/L	--	<1.1	U	<1.2	U	<1.1	U	<1.1	U	<1.0	U	<1.1	U	<1.1	U	<5.5	U	<1.2	U	<1.1	U
Fluorotelomer carboxylic acids																							
7:3 FTCA	812-70-4	ng/L	--	<10	U	<10	UM	<10	U	<10	U	<9.6	UM	<10	UM	<10	U	<52	U	NA	UM	<10	U
3:3 FTCA	356-02-5	ng/L	--	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<1.9	U	<2.0	U	<2.0	U	<10	U	<2.1	U	<2.0	U
5:3 FTCA	914637-49-3	ng/L	--	**6.5**	JM	**6.6**	JM	<10	U	<10	UM	**7.5**	JM	**8.4**	J	<10	U	<52	UM	**7.6**	JM	<10	U
Totals																							
Total PFAS	--	ng/L	--	2059.65		2220.25		524.12		534.7		2264.28		2242.14		624.29		2468.2		2324.31		525.88	

Table 11. Groundwater Analytical Results – PFAS
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Location				CACMW-007								CACMW-008							
Location ID				CACMW-007-060		CACMW-007-060		CACMW-007-110		CACMW-007-160		CACMW-008-060		CACMW-008-110		CACMW-008-110		CACMW-008-160	
Sample Depth (ft bgs)				51		51		101		151		24		74		74		125	
Sample Date				7/15/2024		7/15/2024		7/15/2024		7/15/2024		7/16/2024		7/16/2024		7/16/2024		7/16/2024	
Sample Type				N		FD		N		N		N		N		FD		N	
Chemical	**CAS No.**	**Units**	**PSL[1]**																
Perfluoroalkyl carboxylic acids																			
PFBA	375-22-4	ng/L	1800*	**20**	M	**27**		**23**	M	**6.5**	JM	**22**	M	**23**	M	**22**	M	**6.6**	JM
PFDA	335-76-2	ng/L	0.52***	**2.1**	M	**3.2**	J	**3.6**	JM	<2.0	U	**3.5**	JM	**3.1**	JM	**4.0**	JM	<2.0	U
PFDoA	307-55-1	ng/L	--	<0.40	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U
PFHpA	375-85-9	ng/L	--	**33**	M	**46**	M	**40**		**8.7**		**39**		**39**		**39**		**8.4**	M
PFHxA	307-24-4	ng/L	990*	**93**	M	**120**		**120**		**27**		**97**		**120**		**120**		**26**	
PFNA	375-95-1	ng/L	5.9*	**11**	M	**14**		**14**	M	**1.7**	JM	**15**	M	**14**	M	**16**	M	**1.6**	JM
PFOA	335-67-1	ng/L	4**	**96**	M	**120**		**120**	M	**28**		**110**	M	**110**		**100**		**29**	M
PFPeA	2706-90-3	ng/L	--	**59**	M	**82**	M	**75**	M	**20**		**68**	M	**71**	M	**68**		**19**	M
PFTeDA	376-06-7	ng/L	--	<0.80	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U
PFTrDA	72629-94-8	ng/L	--	<0.40	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U
PFUdA	2058-94-8	ng/L	--	**0.39**	JM	<4.0	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U
Perfluoroalkyl sulfonic acids																			
PFBS	375-73-5	ng/L	600*	**14**	M	**18**	M	**23**	M	**9.3**	M	**14**	M	**19**	M	**20**	M	**8.9**	
PFDS	335-77-3	ng/L	--	<0.39	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U
PFDOS	79780-39-5	ng/L	--	<0.39	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U
PFHpS	375-92-8	ng/L	--	**17**		**19**		**27**		**6.3**		**16**		**22**		**24**		**7.1**	M
PFHxS	355-46-4	ng/L	10**	**250**	M	**320**		**320**		**98**	M	**240**		**340**		**320**		**89**	M
PFNS	68259-12-1	ng/L	--	**1.3**	M	**1.8**	JM	**1.8**	JM	<1.9	U	<1.9	U	**1.7**	JM	**1.9**	JM	<1.9	U
PFOS	1763-23-1	ng/L	4*	**1200**	M	**1500**	M	**2200**	M	**350**	M	**1300**	M	**1800**	M	**1900**	M	**350**	M
PFPeS	138495-42-8	ng/L	--	**18**		**24**	M	**26**		**12**		**19**		**24**		**25**		**11**	
Fluorotelomer sulfonic acids																			
4:2 FTS	757124-72-4	ng/L	--	**0.86**	JM	<7.5	U	<7.5	U	<7.5	U	<7.5	U	<7.5	U	<7.5	U	<7.5	U
6:2 FTSA	27619-97-2	ng/L	--	**110**	M	**160**		**160**		**54**		**120**	M	**130**	M	**130**		**41**	
8:2 FTSA	39108-34-4	ng/L	--	**32**		**45**		**36**	M	**8.1**	JM	**40**		**36**	M	**34**		**9.5**	JM
Perfluoroctane sulfonamides																			
N-EtFOSA	4151-50-2	ng/L	--	<0.40	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U	<2.0	U
N-MeFOSA	31506-32-8	ng/L	--	<0.80	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U	<4.0	U
PFOSA	754-91-6	ng/L	--	**11**	M	**15**	M	**15**	M	**2.9**	J+M	**12**	M	**13**		**13**	M	**2.8**	JM
Perfluorooctane sulfanamidoacetic acids																			
N-EtFOSAA	2991-50-6	ng/L	--	**13**	M	**21**	M	**22**	M	**3.5**	JM	**15**	M	**19**	M	**20**		<4.0	U
MeFOSAA	2355-31-9	ng/L	--	**14**		**21**		**24**	M	**2.9**	JM	**16**	M	**21**	M	**23**	M	**3.7**	J
Perfluoroctane sulfonamide ethanols																			
N-EtFOSE	1691-99-2	ng/L	--	<2.0	U	<10	U	<10	U	<10	U	<10	U	<10	U	<10	U	<10	U
N-MeFOSE	24448-09-7	ng/L	--	<2.0	U	<10	U	<10	U	<10	U	<10	U	<10	U	<10	U	<10	U
Per- and Polyfluoroether carboxylic acids																			
HFPO-DA	13252-13-6	ng/L	1.5*	<2.4	U	<12	U	<12	U	<12	U	<12	U	<12	U	<12	U	<12	U
DONA	919005-14-4	ng/L	--	<2.3	U	<12	U	<12	U	<12	U	<12	U	<12	U	<12	U	<12	U
PFMPA	377-73-1	ng/L	--	<0.64	U	<3.2	U	<3.2	U	<3.2	U	<3.2	U	<3.2	U	<3.2	U	<3.2	U
PFMBA	863090-89-5	ng/L	--	<1.3	U	<6.5	U	<6.5	U	<6.5	U	<6.5	U	<6.5	U	<6.5	U	<6.5	U
NFDHA	151772-58-6	ng/L	--	<1.3	U	<6.5	U	<6.5	U	<6.5	U	<6.5	U	<6.5	U	<6.5	U	<6.5	U
Ether sulfonic acids																			
F-53B Minor	763051-92-9	ng/L	--	<2.3	U	<12	U	<12	U	<12	U	<12	U	<12	U	<12	U	<12	U
9CL-PF3ONS	756426-58-1	ng/L	--	<2.2	U	<11	U	<11	U	<11	U	<11	U	<11	U	<11	U	<11	U
PFEESA	113507-82-7	ng/L	--	<1.1	U	<5.5	U	<5.5	U	<5.5	U	<5.5	U	<5.5	U	<5.5	U	<5.5	U
Fluorotelomer carboxylic acids																			
7:3 FTCA	812-70-4	ng/L	--	<10	UM	<52	U	<52	U	<52	U	<52	U	<52	U	<52	U	<52	U
3:3 FTCA	356-02-5	ng/L	--	<2.0	U	<10	U	<10	U	<10	U	<10	U	<10	U	<10	U	<10	U
5:3 FTCA	914637-49-3	ng/L	--	**5.0**	JM	<52	U	<52	U	<52	U	<52	U	<52	U	<52	U	<52	U
Totals																			
Total PFAS	--	ng/L	--	2033.77		2789.2		3482.6		875		2380.6		3038		3112.1		853.7	

Notes:
Detected results appear in **bold** font
Highlighted cells indicate detections that exceed the selected screening levels.
Sample depths presented are the pump intake depths below ground surface.

[1] = Project screening levels (PSL) are the MCL, the Tap Water RSLs for groundwater (HQ = 0.1) based on the November 2024 EPA RSL update, or the MDL, based on the DoD risk screening levels hierarchy (DoD 2025).

* = indicates the PSL is the November 2024 Tapwater RSL (USEPA 2024)
** = indicates the PSL is the November 2024 MCL
*** = indicates the PSL is the pooled MDL (DOD 2025)

Acronyms:
< = less than the limit of detection shown
-- = not applicable
ASD = Assistant Secretary of Defense
FD = Field Duplicate
ft bgs = feet below ground surface
N = normal sample
NA = not analyzed
ng/L = nanograms per Liter
THQ = total hazard quotient
USEPA = United States Environmental Protection Agency
µg/L = micrograms per liter
R = The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

Qualifiers:
J = Estimated Value
J+ = the result is estimated with a high bias
J- = the result is estimated with low bias
U = The analyte was analyzed for, but not detected.
UJ = The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
M = manual integration performed

Analytical List of PFAS compounds analyzed by EPA PFAS Method 1633
Perfluoroalkyl carboxylic acids
Perfluorobutanoic acid (PFBA)
Perfluorodecanoic acid (PFDA)
Perfluorododecanoic acid (PFDoA)
Perfluoroheptanoic acid (PFHpA)
Perfluorohexanoic acid (PFHxA)
Perfluorononanoic acid (PFNA)
Perfluorooctanoic acid (PFOA)
Perfluoropentanoic acid (PFPeA)
Perfluorotetradecanoic acid (PFTeDA)
Perfluorotridecanoic acid (PFTrDA)
Perfluoroundecanoic acid (PFUdA)
Perfluoroalkyl sulfonic acids
Perfluorobutane sulfonic acid (PFBS)
Perfluorodecane sulfonic acid (PFDS)
Perfluorododecane sulfonic acid (PFDOS)
Perfluoroheptane sulfonic acid (PFHpS)
Perfluorohexane sulfonic acid (PFHxS)
Perfluorononane sulfonic acid (PFNS)
Perfluorooctane sulfonic acid (PFOS)
Perfluoropentane sulfonate (PFPeS)
Fluorotelomer sulfonic acids
4:2 Fluorotelomer sulfonate (4:2 FTS)
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)
Perfluorooctane sulfonamides
Perfluorooctane sulfonamide (PFOSA)
N-Methyl perfluorooctane sulfonamide (N-MeFOSA)
N-Ethyl perfluorooctane sulfonamide (N-EtFOSA)
Perfluorooctane sulfanamidoacetic acids
N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA)
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)
Perfluorooctane sulfonamide ethanols
N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)
N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE)
Per- and Polyfluoroether carboxylic acids
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA)
4,8-Dioxa-3H-perfluorononanoic acid (DONA)
Perfluoro-3-methoxypropanoic aci (PFMPA)
Perfluoro-4-Methoxybutanic acid (PFMBA)
Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA)
Ether sulfonic acids
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)
Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA)
Fluorotelomer carboxylic acids
2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA)
2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA)
2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA)

Table 12. Passive Flux Meter Results – PFAS Mass Flux
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Depth interval (ft bgs)	Center Point of PFM Location (ft bgs)	Total PFAS[1] (µg/m²/day)	Perfluorobutanoic acid (PFBA) (µg/m²/day)	Perfluoropentanoic acid (PFPeA) (µg/m²/day)	Perfluorohexanoic acid (PFHxA) (µg/m²/day)	Perfluoroheptanoic acid (PFHpA) (µg/m²/day)	Perfluorooctanoic acid (PFOA) (µg/m²/day)	Perfluorononanoic acid (PFNA) (µg/m²/day)	Perfluorodecanoic acid (PFDA) (µg/m²/day)	Perfluoroundecanoic acid (PFUdA) (µg/m²/day)	Perfluorododecanoic acid (PFDoA) (µg/m²/day)	Perfluorotridecanoic acid (PFTrDA) (µg/m²/day)	Perfluorotetradecanoic acid (PFTeDA) (µg/m²/day)	Perfluorobutane sulfonic acid (PFBS) (µg/m²/day)	Perfluoropentane sulfonate (PFPeS) (µg/m²/day)	Perfluorohexane sulfonic acid (PFHxS) (µg/m²/day)	Perfluoroheptane sulfonic acid (PFHpS) (µg/m²/day)
MW-001-060	11.5-16.5	14.0	141.5	<2.23	<1.11	0.43	0.22	0.26	0.31	<0.56	<3.06	<0.56	<1.67	<0.6	<0.5	<0.5	1.53	<0.5
	16.75-21.75	19.3	159.5	<2.23	1.60	1.67	1.25	1.65	0.17	<0.56	<3.06	<0.56	<1.67	<0.6	0.39	0.52	6.96	0.24
	22-27	24.5	365.8	0.70	3.83	8.98	3.55	10.22	1.22	<0.56	<3.06	<0.56	<1.67	<0.6	1.60	2.23	32.73	1.60
	27.25-32.25	29.8	403.3	<2.23	4.60	10.37	4.60	12.31	1.22	0.49	<3.06	<0.56	<1.67	<0.6	1.74	2.51	34.82	2.30
	32.5-37.5	35.0	376.0	<2.25	4.08	9.78	4.01	11.03	1.16	0.46	<3.31	<0.56	<1.97	<0.6	1.55	2.39	32.38	1.97
	37.75-42.75	40.3	480.6	<2.25	5.42	13.30	5.91	14.55	2.36	0.40	<3.31	<0.56	<1.97	<0.6	2.39	3.24	44.34	2.67
	43-48	45.5	483.7	0.77	5.72	14.57	6.00	16.51	2.13	0.56	<3.28	<0.56	<1.95	<0.6	2.16	3.63	48.81	2.72
	48.25-53.25	50.8	386.4	<2.1	4.27	9.77	4.00	10.94	1.08	<0.53	<3.08	<0.53	<1.84	<0.5	1.84	2.43	34.79	2.30
	53.5-58.5	56.0	353.3	<2.1	3.41	8.46	3.35	9.63	1.21	0.43	<3.08	<0.53	<1.84	<0.5	1.58	2.17	30.19	2.03
MW-001-110	61.5-66.5	64.0	238.3	<2.23	2.23	4.31	1.67	4.37	0.45	<0.56	<3.06	<0.56	<1.67	<0.6	0.91	1.46	13.93	0.84
	66.75-71.75	69.3	271.0	<2.23	2.44	5.50	2.37	6.74	0.73	<0.56	<3.06	<0.56	<1.67	<0.6	1.04	1.74	18.80	1.04
	72-77	74.5	612.3	<2.23	5.36	15.94	6.69	18.58	1.98	0.77	<3.06	<0.56	<1.67	<0.6	2.99	5.01	63.37	4.18
	77.25-82.25	79.8	788.9	0.91	7.66	20.82	8.36	25.54	3.38	0.77	<3.06	<0.56	<1.67	<0.6	4.11	6.41	83.57	5.36
	82.5-87.5	85.0	622.0	0.83	6.26	15.92	6.61	19.94	2.82	0.67	<3.27	<0.56	<1.95	<0.6	2.99	4.73	64.68	3.96
	87.75-92.75	90.3	596.4	0.70	6.61	15.92	6.89	18.55	2.68	0.63	<3.27	<0.56	<1.95	<0.6	2.85	5.01	59.82	3.83
	93-98	95.5	527.3	0.97	5.56	13.84	5.84	15.77	1.50	0.66	<3.27	<0.56	<1.95	<0.6	2.43	3.69	47.30	3.41
	98.25-103.25	100.8	531.9	0.83	5.98	13.84	5.49	16.47	1.98	0.61	<3.27	<0.56	<1.95	<0.6	2.78	4.03	47.99	3.62
	103.5-108.5	106.0	460.9	<2.23	4.52	11.05	4.24	13.68	1.98	0.42	<3.27	<0.56	<1.95	<0.6	2.09	2.92	41.73	2.99
MW-001-160	112-117	114.5	142.3	<2.23	<1.11	1.04	0.41	1.03	<0.10	<0.56	<3.06	<0.56	<1.67	<0.6	0.29	0.31	3.97	<0.5
	117.25-122.25	119.8	156.8	<2.23	<1.11	1.46	0.70	1.72	0.52	<0.56	<3.06	<0.56	<1.67	<0.6	0.42	0.47	6.40	0.40
	122.5-127.5	125.0	199.1	<2.23	1.53	2.78	1.39	3.32	0.38	<0.56	<3.06	<0.56	<1.67	<0.6	1.11	1.60	14.62	0.84
	127.75-132.75	130.3	541.1	<2.23	4.87	11.76	5.92	17.87	1.43	0.46	<3.06	<0.56	<1.67	<0.6	3.90	6.75	69.61	5.01
	133-138	135.5	462.2	0.86	4.94	10.46	5.00	15.59	0.89	0.26	<3.09	<0.53	<1.84	<0.5	3.56	6.26	57.94	4.61
	138.25-143.25	140.8	743.9	0.92	8.56	17.71	7.90	26.78	2.34	0.47	<3.09	<0.53	<1.84	<0.5	5.86	9.22	98.77	7.24
	143.5-148.5	146.0	842.1	<2.11	7.90	18.37	8.56	30.08	1.81	0.47	<3.09	<0.53	<1.84	<0.5	7.24	11.19	111.94	8.56
	148.75-153.75	151.3	508.9	0.72	5.53	11.78	6.12	16.91	0.89	0.44	<3.09	<0.53	<1.84	<0.5	4.41	6.58	61.90	4.28
	154-159	156.5	178.7	<2.11	<1.05	2.76	1.12	2.29	0.10	0.20	<3.09	<0.53	<1.84	<0.5	0.86	1.19	10.54	0.55
MW-002-060	11.5-16.5	14.0	181.8	<2.23	1.88	3.12	1.81	2.97	0.52	<0.56	<3.06	<0.56	<1.67	<0.6	0.67	1.04	9.74	0.54
	16.75-21.75	19.3	175.1	<2.23	1.25	2.01	0.90	2.28	0.59	0.20	<3.06	<0.56	<1.67	<0.6	0.43	0.56	7.65	0.38
	22-27	24.5	262.3	<2.23	2.16	5.21	2.36	6.73	0.94	0.20	<3.06	<0.56	<1.67	<0.6	0.97	1.60	19.47	1.11
	27.25-32.25	29.8	280.6	<2.23	2.57	5.84	2.36	7.42	0.52	<0.56	<3.06	<0.56	<1.67	<0.6	1.04	1.39	19.47	1.53
	32.5-37.5	35.0	340.1	<2.04	3.82	9.47	4.01	9.97	1.30	0.34	<2.99	<0.51	<1.78	<0.5	1.34	2.23	29.26	1.72
	37.75-42.75	40.3	373.8	<2.04	4.01	10.11	4.01	11.88	1.49	0.36	<2.99	<0.51	<1.78	<0.5	1.53	2.35	31.80	1.91
	43-48	45.5	272.2	0.55	3.82	9.47	3.69	8.06	1.05	0.37	<2.99	<0.51	<1.78	<0.1	1.46	2.54	34.35	2.10
	48.25-53.25	50.8	566.0	1.78	8.27	18.38	7.00	23.33	2.64	0.52	<2.99	<0.51	<1.78	<0.1	2.99	5.22	62.33	4.20
	53.5-58.5	56.0	578.2	0.76	5.85	15.83	7.00	23.96	2.13	0.83	<2.99	<0.51	<1.78	<0.1	2.67	4.26	57.88	4.33
MW-002-110	61.5-66.5	64.1	248.9	<2.22	2.01	4.64	1.67	5.67	0.87	<0.56	<3.05	<0.56	<1.67	<0.6	0.83	0.97	15.27	0.90
	66.75-71.75	69.3	321.4	<2.22	2.43	6.66	2.71	7.41	0.94	<0.56	<3.05	<0.56	<1.67	<0.6	1.18	1.46	23.60	1.60
	72-77	74.5	350.1	<2.22	2.85	6.87	2.98	8.80	0.73	0.26	<3.05	<0.56	<1.67	<0.6	1.32	2.01	29.15	1.87
	77.25-82.25	79.8	354.3	<2.22	3.05	7.56	3.33	9.49	1.15	0.20	<3.05	<0.56	<1.67	<0.6	1.53	2.36	29.84	2.08
	77.25-82.25	79.8	359.0	<2.22	3.19	7.56	2.78	9.49	0.94	0.34	<3.05	<0.56	<1.67	<0.56	1.32	2.01	27.76	1.94
	82.5-87.5	85.0	192.7	0.32	2.42	5.55	2.09	5.67	0.36	0.24	<3.07	<0.52	<1.83	<0.1	1.11	1.57	18.95	1.37
	87.75-92.75	90.3	262.0	0.39	3.07	7.77	3.20	8.94	0.75	0.33	<3.07	<0.52	<1.83	<0.1	1.63	2.35	31.37	2.42
	93-98	95.5	299.4	<2.09	2.81	6.07	2.35	6.98	0.49	0.33	<3.07	<0.52	<1.83	<0.5	1.50	1.96	22.22	1.31
	98.25-103.25	100.8	378.1	0.50	3.59	8.43	3.27	14.16	0.95	0.35	<3.07	0.09	<1.83	<0.1	1.96	3.07	35.94	2.61
	103.5-108.5	106.0	266.4	0.46	2.88	7.12	2.81	9.59	0.62	0.29	<3.07	<0.52	<1.83	<0.1	1.70	2.68	30.06	2.22
MW-002-160	111.5-116.5	114.0	253.8	<2.22	2.02	4.51	1.88	4.57	0.59	<0.56	<3.06	<0.56	<1.67	<0.6	1.60	2.29	22.25	1.60
	116.75-121.75	119.3	276.9	<2.22	2.57	5.97	2.22	6.03	0.73	<0.56	<3.06	<0.56	<1.67	<0.6	2.16	2.78	25.72	1.88
	122-127	124.5	288.4	<2.22	3.06	6.74	2.64	6.73	0.80	<0.56	<3.06	<0.56	<1.67	<0.6	2.29	3.55	29.89	2.02
	127.25-132.25	129.8	270.3	<2.22	2.29	5.00	2.16	5.68	0.31	<0.56	<3.06	<0.56	<1.67	<0.6	1.81	2.64	24.33	1.74
	132.5-137.5	135.0	227.1	0.33	2.56	6.23	2.56	8.31	0.23	0.18	<3.08	0.05	<1.84	<0.1	2.30	3.54	32.13	2.36
	137.75-142.75	140.3	304.0	0.35	3.41	8.45	3.61	12.25	0.62	0.19	<3.08	0.06	<1.84	<0.1	3.02	4.66	53.12	3.28
	143-148	145.5	226.4	0.39	3.15	6.49	2.75	8.97	0.56	0.19	<3.08	0.06	<1.84	0.02	2.43	3.87	34.10	2.36
	148.25-153.25	150.8	137.0	0.28	1.84	3.86	1.51	3.92	0.23	0.12	<3.08	0.06	<1.84	0.03	1.38	1.84	17.05	1.31
	153.5-158.5	156.0	81.7	0.16	1.11	2.36	0.92	2.48	0.10	0.10	<3.08	0.06	<1.84	0.03	0.85	1.11	9.84	0.72
MW-003-060	11.5-16.5	14.0	262.4	<2.22	2.57	5.61	2.36	5.46	1.08	<0.55	<3.05	<0.55	<1.66	<0.6	1.04	1.25	17.34	0.97
	16.75-21.75	19.3	238.8	<2.22	2.70	4.78	2.22	5.18	0.59	<0.55	<3.05	<0.55	<1.66	<0.6	0.90	1.18	15.95	0.90
	22-27	24.5	514.3	0.97	6.66	15.88	7.63	17.11	2.39	0.76	<3.05	<0.55	<1.66	<0.6	2.57	3.33	49.24	3.33
	27.25-32.25	29.8	391.3	<2.22	4.85	9.64	5.13	12.26	1.98	0.59	<3.05	<0.55	<1.66	<0.6	1.66	2.22	36.06	2.43
	32.5-37.5	35.0	283.0	0.68	5.04	9.89	4.98	11.62	1.34	0.37	<2.93	0.05	<1.74	0.02	1.68	2.86	32.99	2.18
	37.75-42.75	40.3	185.6	0.54	3.24	6.78	3.11	6.64	0.96	0.22	<2.93	0.06	<1.74	0.02	1.12	1.56	23.65	1.31
	43-48	45.5	334.7	0.58	3.86	10.51	3.98	14.11	1.34	0.45	<2.93	0.06	<1.74	<0.05	1.81	2.86	43.57	2.99
	48.25-53.25	50.8	482.3	0.81	6.85	15.49	6.10	19.72	2.46	0.62	<2.93	0.06	<1.74	0.03	2.55	4.05	68.47	4.73
	53.5-58.5	56.0	313.9	0.54	3.61	9.27	4.29	12.87	1.46	0.43	<2.93	0.07	<1.74	0.03	1.43	2.61	38.59	2.61
MW-003-110	61.5-66.5	64.0	140.8	<2.23	<1.12	0.83	0.33	0.89	0.10	<0.56	<3.07	<0.56	<1.67	<0.6	0.16	0.19	1.95	<0.5
	66.75-71.75	69.3	186.9	<2.23	1.39	2.51	0.91	2.56	0.38	<0.56	<3.07	<0.56	<1.67	<0.6	0.51	0.53	7.67	0.57
	72-77	74.5	289.3	<2.23	2.65	5.78	2.51	8.14	0.94	0.38	<3.07	<0.56	<1.67	<0.6	1.19	1.74	22.32	1.19
	77.25-82.25	79.8	470.2	<2.23	4.74	10.39	4.74	15.12	1.57	0.50	<3.07	<0.56	<1.67	<0.6	1.88	3.21	44.64	3.21
	82.5-87.5	85.0	431.4	0.75	5.13	13.07	5.13	16.06	2.03	0.50	<2.94	0.06	<1.75	<0.1	2.25	3.44	46.91	4.13
	87.75-92.75	90.3	339.8	0.63	5.07	12.44	5.13	14.81	1.97	0.43	<2.94	0.06	<1.75	0.02	2.19	3.69	46.28	3.69
	93-98	95.5	432.7	0.57	4.44	12.44	5.82	16.06	2.16	0.53	<2.94	0.06	<1.75	0.03	2.38	3.88	52.54	4.50
	98.25-103.25	100.8	502.0	0.88	6.25	14.32	5.44	17.93	1.91	0.51	<2.94	0.06	<1.75	<0.1	2.75	4.38	55.04	4.88
	103.5-108.5	106.0	300.7	0.44	2.88	8.06	3.19	9.80	1.03	0.33	<2.94	0.06	<1.75	<0.1	1.63	2.56	35.02	2.75

Table 12. Passive Flux Meter Results – PFAS Mass Flux
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Depth interval (ft bgs)	Center Point of PFM Location (ft bgs)	Perfluorooctane sulfonic acid (PFOS) (µg/m²/day)	Perfluorononane sulfonic acid (PFNS) (µg/m²/day)	Perfluorodecane sulfonic acid (PFDS) (µg/m²/day)	Perfluorododecane sulfonic acid (PFDOS) (µg/m²/day)	4:2 Fluorotelomer sulfonate (4:2 FTS) (µg/m²/day)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (µg/m²/day)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (µg/m²/day)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (µg/m²/day)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (µg/m²/day)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (µg/m²/day)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (µg/m²/day)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (µg/m²/day)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (µg/m²/day)	Perfluorooctane sulfonamide (PFOSA) (µg/m²/day)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (µg/m²/day)
MW-001-060	11.5-16.5	14.0	7.66	<0.5	<0.5	<0.5	<2.1	5.05	<2.2	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	<0.3	<5.3
	16.75-21.75	19.3	21.59	<0.5	<0.5	<0.5	<2.1	<0.17	<2.2	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	0.15	<5.3
	22-27	24.5	160.19	<0.5	<0.5	<0.5	<2.1	14.80	2.37	<0.6	2.30	<5.6	<0.3	1.25	<5.6	1.25	<5.3
	27.25-32.25	29.8	188.05	0.17	<0.5	<0.5	<2.1	11.32	5.08	<0.6	1.88	<5.6	<0.3	2.09	<5.6	1.60	<5.3
	32.5-37.5	35.0	161.89	<0.5	<0.5	<0.5	<2.1	14.96	5.21	<0.6	1.83	<5.6	<0.3	1.62	<5.6	1.69	<5.3
	37.75-42.75	40.3	218.20	<0.5	<0.5	<0.5	<2.1	33.26	6.55	<0.6	2.89	<5.6	<0.3	3.03	<5.6	1.97	<5.3
	43-48	45.5	216.15	<0.5	<0.5	<0.5	<2.1	30.85	8.37	<0.6	3.07	<5.6	<0.3	2.79	<5.6	2.02	<5.3
	48.25-53.25	50.8	170.65	0.23	<0.5	<0.5	<2.0	21.82	4.53	<0.5	1.97	<5.3	<0.3	2.03	<5.3	1.38	<5.0
	53.5-58.5	56.0	150.96	<0.5	<0.5	<0.5	<2.0	18.54	4.79	<0.5	1.58	<5.3	<0.3	1.38	<5.3	1.25	<5.0
MW-001-110	61.5-66.5	64.0	76.60	<0.5	<0.5	<0.5	<2.1	8.53	<2.2	<0.6	0.70	<5.6	<0.3	0.42	<5.6	0.59	<5.3
	66.75-71.75	69.3	97.50	<0.5	<0.5	<0.5	<2.1	9.92	1.46	<0.6	0.77	<5.6	<0.3	0.97	<5.6	0.91	<5.3
	72-77	74.5	327.31	0.30	<0.5	<0.5	<2.1	24.55	8.36	<0.6	3.34	<5.6	<0.3	3.13	<5.6	2.44	<5.3
	77.25-82.25	79.8	445.69	0.45	<0.5	<0.5	<2.1	37.78	9.75	<0.6	5.01	<5.6	<0.3	4.25	<5.6	3.27	<5.3
	82.5-87.5	85.0	326.90	0.37	<0.5	<0.5	<2.1	30.78	8.35	<0.6	3.62	<5.6	<0.3	3.62	<5.6	2.85	<5.3
	87.75-92.75	90.3	306.04	0.33	<0.5	<0.5	<2.1	32.86	8.35	<0.6	3.76	<5.6	<0.3	3.20	<5.6	2.30	<5.3
	93-98	95.5	264.30	0.26	0.27	<0.5	<2.1	30.08	7.65	<0.6	2.92	<5.6	<0.3	3.06	<5.6	2.23	<5.3
	98.25-103.25	100.8	271.26	0.22	0.26	<0.5	<2.1	25.21	6.89	<0.6	3.76	<5.6	<0.3	2.99	<5.6	2.09	<5.3
	103.5-108.5	106.0	222.57	0.22	<0.5	<0.5	<2.1	23.13	5.29	<0.6	2.16	<5.6	<0.3	1.88	<5.6	1.67	<5.3
MW-001-160	112-117	114.5	10.44	<0.5	<0.5	<0.5	<2.1	<0.17	<2.2	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	0.16	<5.3
	117.25-122.25	119.8	19.49	<0.5	<0.5	<0.5	<2.1	2.26	0.97	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	<0.3	<5.3
	122.5-127.5	125.0	43.16	<0.5	<0.5	<0.5	<2.1	6.44	0.97	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	0.41	<5.3
	127.75-132.75	130.3	236.66	<0.5	<0.5	<0.5	<2.1	45.42	6.89	<0.6	2.30	<5.6	<0.3	1.74	<5.6	2.23	<5.3
	133-138	135.5	197.54	<0.5	<0.5	<0.5	<2.0	33.75	5.07	<0.5	2.04	<5.3	<0.3	1.38	<5.3	1.78	<5.0
	138.25-143.25	140.8	368.74	<0.5	<0.5	<0.5	0.72	62.72	8.56	<0.5	3.42	<5.3	<0.3	1.98	<5.3	3.75	<5.0
	143.5-148.5	146.0	428.00	<0.5	<0.5	<0.5	0.79	75.89	10.54	<0.5	4.15	<5.3	<0.3	2.77	<5.3	3.49	<5.0
	148.75-153.75	151.3	223.88	<0.5	<0.5	<0.5	<2.0	42.96	6.58	<0.5	1.98	<5.3	<0.3	1.38	<5.3	2.30	<5.0
	154-159	156.5	32.92	<0.5	<0.5	<0.5	<2.0	9.38	1.25	<0.5	<1.1	<5.3	<0.3	<0.5	<5.3	0.49	<5.0
MW-002-060	11.5-16.5	14.0	34.08	<0.5	<0.5	<0.5	<2.1	2.96	1.67	<0.6	<1.1	<5.6	<0.3	0.34	<5.6	0.44	<5.3
	16.75-21.75	19.3	36.16	<0.5	<0.5	<0.5	<2.1	0.87	<2.2	<0.6	0.52	<5.6	<0.3	0.32	<5.6	0.43	<5.3
	22-27	24.5	90.41	<0.5	<0.5	<0.5	<2.1	7.13	3.06	<0.6	1.04	<5.6	<0.3	0.77	<5.6	0.77	<5.3
	27.25-32.25	29.8	104.32	<0.5	<0.5	<0.5	<2.1	9.21	2.85	<0.6	1.04	<5.6	<0.3	1.11	<5.6	0.97	<5.3
	32.5-37.5	35.0	139.93	<0.5	<0.5	<0.5	<1.9	19.24	4.58	<0.5	1.46	<5.1	<0.3	1.65	<5.1	1.27	<4.8
	37.75-42.75	40.3	171.74	0.17	0.24	<0.5	<1.9	16.06	4.58	<0.5	2.04	<5.1	<0.3	2.23	<5.1	1.53	<4.8
	43-48	45.5	152.65	0.17	<0.5	<0.5	0.12	19.88	2.86	<0.5	1.65	<5.1	<0.3	1.78	<5.1	1.08	<0.5
	48.25-53.25	50.8	356.19	0.30	<0.5	<0.5	0.20	28.15	8.90	<0.1	4.01	<5.1	<0.03	4.26	<5.1	2.80	<0.5
	53.5-58.5	56.0	388.00	0.30	<0.0	<0.0	0.19	21.79	8.27	<0.1	3.75	<5.1	0.05	4.39	<5.1	2.48	<0.5
MW-002-110	61.5-66.5	64.1	83.28	<0.5	<0.5	<0.5	<2.1	9.89	2.01	<0.6	0.76	<5.6	<0.3	0.69	<5.6	0.58	<5.3
	66.75-71.75	69.3	131.87	<0.5	<0.5	<0.5	<2.1	14.75	4.16	<0.6	1.60	<5.6	<0.3	1.25	<5.6	0.90	<5.3
	72-77	74.5	159.63	<0.5	<0.5	<0.5	<2.1	7.81	3.40	<0.6	1.67	<5.6	<0.3	1.46	<5.6	1.04	<5.3
	77.25-82.25	79.8	159.63	0.18	<0.5	<0.5	<2.1	8.50	3.33	<0.6	1.39	<5.6	<0.3	1.46	<5.6	1.39	<5.3
	77.25-82.25	79.8	166.57	0.19	<0.53	<0.54	<2.08	9.20	3.61	<0.56	1.53	<5.55	<0.28	2.15	<5.55	0.97	<5.27
	82.5-87.5	85.0	117.63	0.06	<0.1	<0.1	0.08	4.08	2.81	<0.5	1.05	<5.2	<0.3	0.98	<5.2	0.65	<0.5
	87.75-92.75	90.3	156.84	0.12	<0.1	<0.1	0.10	8.66	3.99	<0.5	1.76	<5.2	<0.03	1.76	<5.2	1.05	<0.5
	93-98	95.5	124.17	<0.5	<0.5	<0.5	<2.0	12.58	2.68	<0.5	1.05	<5.2	<0.3	0.78	<5.2	0.72	<5.0
	98.25-103.25	100.8	254.87	0.12	<0.1	<0.1	0.14	14.54	4.38	<0.1	1.70	<5.2	0.03	1.83	<5.2	1.05	<0.5
	103.5-108.5	106.0	163.38	<0.5	<0.5	<0.5	0.12	8.01	3.59	<0.5	1.57	<5.2	<0.3	1.37	<5.2	0.91	<0.5
MW-002-160	111.5-116.5	114.0	83.43	<0.5	<0.5	<0.5	<2.1	6.43	2.16	<0.6	0.76	<5.6	<0.3	0.49	<5.6	<0.3	<5.3
	116.75-121.75	119.3	90.38	<0.5	<0.5	<0.5	<2.1	13.38	2.29	<0.6	0.66	<5.6	<0.3	<0.6	<5.6	0.65	<5.3
	122-127	124.5	97.33	<0.5	<0.5	<0.5	<2.1	9.91	2.85	<0.6	0.76	<5.6	<0.3	0.48	<5.6	0.44	<5.3
	127.25-132.25	129.8	90.38	<0.5	<0.5	<0.5	<2.1	11.30	2.09	<0.6	0.76	<5.6	<0.3	0.65	<5.6	<0.3	<5.3
	132.5-137.5	135.0	124.60	0.02	<0.1	<0.1	0.25	11.31	3.15	<0.1	1.05	<5.2	<0.03	0.63	<5.2	0.79	<0.5
	137.75-142.75	140.3	157.39	0.05	<0.1	<0.1	0.33	21.15	4.00	<0.1	1.44	<5.2	<0.03	0.85	<5.2	1.18	<0.5
	143-148	145.5	118.04	0.03	<0.1	<0.1	0.27	12.62	3.08	<0.1	1.11	<5.2	<0.03	0.57	<5.2	0.85	<0.5
	148.25-153.25	150.8	65.58	0.02	<0.1	<0.1	0.15	10.66	1.38	<0.1	0.52	<5.2	<0.03	0.39	<5.2	0.45	<0.5
	153.5-158.5	156.0	34.10	<0.1	<0.1	<0.1	0.09	<1.5	0.92	<0.1	0.31	<5.2	<0.03	0.17	<5.2	0.24	<0.5
MW-003-060	11.5-16.5	14.0	83.23	<0.5	<0.5	<0.5	<2.1	17.51	3.19	<0.6	0.69	<5.5	<0.3	0.83	<5.5	1.18	<5.3
	16.75-21.75	19.3	69.36	<0.5	<0.5	<0.5	<2.1	11.27	3.40	<0.6	0.69	<5.5	<0.3	0.83	<5.5	0.67	<5.3
	22-27	24.5	249.68	0.28	<0.5	<0.5	<2.1	24.45	7.63	<0.6	2.70	<5.5	<0.3	2.57	<5.5	2.29	<5.3
	27.25-32.25	29.8	166.45	<0.5	<0.5	<0.5	<2.1	20.29	5.76	<0.6	1.60	<5.5	<0.3	1.60	<5.5	1.25	<5.3
	32.5-37.5	35.0	161.83	0.14	<0.05	<0.05	0.07	11.98	6.85	<0.05	1.87	<5.0	0.04	1.68	<5.0	1.43	<0.5
	37.75-42.75	40.3	99.59	0.07	<0.05	<0.05	0.07	7.00	3.17	<0.05	1.24	<5.0	<0.02	0.93	<5.0	0.87	<0.5
	43-48	45.5	205.40	0.25	0.03	<0.05	0.11	10.11	4.67	<0.05	2.30	<5.0	0.02	2.37	<5.0	1.43	<0.5
	48.25-53.25	50.8	292.54	0.39	0.04	<0.05	0.17	17.58	7.47	<0.05	3.98	<5.0	<0.02	3.61	<5.0	2.18	<0.5
	53.5-58.5	56.0	192.96	0.22	0.03	<0.05	0.10	10.74	4.61	<0.05	2.12	<5.0	<0.02	2.12	<5.0	1.37	<0.5
MW-003-110	61.5-66.5	64.0	11.16	<0.5	<0.5	<0.5	<2.1	<0.17	<2.2	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	<0.3	<5.3
	66.75-71.75	69.3	43.24	<0.5	<0.5	<0.5	<2.1	5.75	0.70	<0.6	0.35	<5.6	<0.3	0.30	<5.6	0.32	<5.3
	72-77	74.5	104.62	<0.5	<0.5	<0.5	<2.1	12.73	2.93	<0.6	1.33	<5.6	<0.3	1.19	<5.6	1.05	<5.3
	77.25-82.25	79.8	230.17	0.29	<0.5	<0.5	<2.1	19.70	5.44	<0.6	2.65	<5.6	<0.3	2.44	<5.6	1.39	<5.3
	82.5-87.5	85.0	281.45	0.29	0.03	<0.05	0.15	13.92	6.25	<0.1	3.13	<5.0	<0.03	2.69	<5.0	1.75	<0.5
	87.75-92.75	90.3	187.63	0.31	0.03	<0.05	0.18	19.55	6.19	<0.1	3.06	<5.0	<0.03	2.56	<5.0	1.69	<0.5
	93-98	95.5	275.20	0.36	0.03	<0.05	0.19	14.54	6.88	<0.1	3.25	<5.0	0.02	2.81	<5.0	1.88	<0.5
	98.25-103.25	100.8	331.49	0.33	0.04	<0.05	0.23	18.29	6.88	<0.1	3.13	<5.0	0.02	2.94	<5.0	1.94	<0.5
	103.5-108.5	106.0	181.38	0.16	<0.05	<0.05	0.13	17.67	5.44	<0.1	2.06	<5.0	0.03	1.38	<5.0	1.13	<0.5

Table 12. Passive Flux Meter Results – PFAS Mass Flux
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Depth interval (ft bgs)	Center Point of PFM Location (ft bgs)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (µg/m²/day)	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA) (µg/m²/day)	Perfluoro-4-Methoxybutanic acid (PFMBA) (µg/m²/day)	Perfluoro-3-methoxypropanoic aci (PFMPA) (µg/m²/day)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (µg/m²/day)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (µg/m²/day)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (µg/m²/day)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (µg/m²/day)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (µg/m²/day)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (µg/m²/day)
MW-001-060	11.5-16.5	14.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	16.75-21.75	19.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	22-27	24.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	27.25-32.25	29.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	32.5-37.5	35.0	<5.6	<5.6	<2.3	<2.3	<5.3	<5.2	<2.0	<5.6	<28.2	<28.2
	37.75-42.75	40.3	<5.6	<5.6	<2.3	<2.3	<5.3	<5.3	<2.0	<5.6	<28.2	<28.2
	43-48	45.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	48.25-53.25	50.8	<5.3	<5.3	<2.1	<2.1	<5.0	<4.9	<1.8	<5.3	<26.3	<26.3
	53.5-58.5	56.0	<5.3	<5.3	<2.1	<2.1	<5.0	<4.9	<1.8	<5.3	<26.3	<26.3
MW-001-110	61.5-66.5	64.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.9	<27.9
	66.75-71.75	69.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.9	<27.9
	72-77	74.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.9	<27.9
	77.25-82.25	79.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.9	<27.9
	82.5-87.5	85.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	87.75-92.75	90.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	93-98	95.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	98.25-103.25	100.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	103.5-108.5	106.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
MW-001-160	112-117	114.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	117.25-122.25	119.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	122.5-127.5	125.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	127.75-132.75	130.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	133-138	135.5	<5.3	<5.3	<2.1	<2.1	<5.0	<4.9	<1.8	<5.3	<26.3	<26.3
	138.25-143.25	140.8	<5.3	<5.3	<2.1	<2.1	<5.0	<4.9	<1.8	<5.3	<26.3	<26.3
	143.5-148.5	146.0	<5.3	<5.3	<2.1	<2.1	<5.0	<4.9	<1.8	<5.3	<26.3	<26.3
	148.75-153.75	151.3	<5.3	<5.3	<2.1	<2.1	<5.0	<4.9	<1.8	<5.3	<26.3	<26.3
	154-159	156.5	<5.3	<5.3	<2.1	<2.1	<5.0	<4.9	<1.8	<5.3	<26.3	<26.3
MW-002-060	11.5-16.5	14.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	16.75-21.75	19.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	22-27	24.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	27.25-32.25	29.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	32.5-37.5	35.0	<5.1	<5.1	<2.0	<2.0	<4.8	<4.8	<1.8	<5.1	<25.4	<25.4
	37.75-42.75	40.3	<5.0	<5.0	<2.0	<2.0	<4.8	<4.6	<1.8	<5.0	<24.8	<24.8
	43-48	45.5	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	1.02	<2.5
	48.25-53.25	50.8	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	1.78	<2.5
	53.5-58.5	56.0	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	1.72	<2.5
MW-002-110	61.5-66.5	64.1	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	66.75-71.75	69.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	72-77	74.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	77.25-82.25	79.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	77.25-82.25	79.8	<5.55	<5.55	<2.22	<2.22	<5.27	<5.21	<1.94	<5.55	<27.76	<27.76
	82.5-87.5	85.0	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.6	<2.6
	87.75-92.75	90.3	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.6	<2.6
	93-98	95.5	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.1	<26.1
	98.25-103.25	100.8	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.6	<2.6
	103.5-108.5	106.0	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.6	<2.6
MW-002-160	111.5-116.5	114.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	116.75-121.75	119.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	122-127	124.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	127.25-132.25	129.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	132.5-137.5	135.0	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.6	<2.6
	137.75-142.75	140.3	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.6	<2.6
	143-148	145.5	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.6	<2.6
	148.25-153.25	150.8	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.6	<2.6
	153.5-158.5	156.0	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.6	<2.6
MW-003-060	11.5-16.5	14.0	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	16.75-21.75	19.3	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	22-27	24.5	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	27.25-32.25	29.8	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	32.5-37.5	35.0	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.5	<2.5
	37.75-42.75	40.3	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.5	<2.5
	43-48	45.5	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	1.00	<2.5
	48.25-53.25	50.8	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	1.56	<2.5
	53.5-58.5	56.0	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	0.93	<2.5
MW-003-110	61.5-66.5	64.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	66.75-71.75	69.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	72-77	74.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	77.25-82.25	79.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	82.5-87.5	85.0	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	1.25	<2.5
	87.75-92.75	90.3	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	1.19	<2.5
	93-98	95.5	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	1.25	<2.5
	98.25-103.25	100.8	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	1.31	<2.5
	103.5-108.5	106.0	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.5	<2.5

Table 12. Passive Flux Meter Results – PFAS Mass Flux
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Depth interval (ft bgs)	Center Point of PFM Location (ft bgs)	Total PFAS[1] (µg/m²/day)	Perfluorobutanoic acid (PFBA) (µg/m²/day)	Perfluoropentanoic acid (PFPeA) (µg/m²/day)	Perfluorohexanoic acid (PFHxA) (µg/m²/day)	Perfluoroheptanoic acid (PFHpA) (µg/m²/day)	Perfluorooctanoic acid (PFOA) (µg/m²/day)	Perfluorononanoic acid (PFNA) (µg/m²/day)	Perfluorodecanoic acid (PFDA) (µg/m²/day)	Perfluoroundecanoic acid (PFUdA) (µg/m²/day)	Perfluorododecanoic acid (PFDoA) (µg/m²/day)	Perfluorotridecanoic acid (PFTrDA) (µg/m²/day)	Perfluorotetradecanoic acid (PFTeDA) (µg/m²/day)	Perfluorobutane sulfonic acid (PFBS) (µg/m²/day)	Perfluoropentane sulfonate (PFPeS) (µg/m²/day)	Perfluorohexane sulfonic acid (PFHxS) (µg/m²/day)	Perfluoroheptane sulfonic acid (PFHpS) (µg/m²/day)
MW-003-160	111.5-116.5	114.0	136.7	<2.22	0.54	0.90	0.35	0.33	0.10	<0.55	<3.05	<0.55	<1.66	<0.6	0.27	0.39	2.63	<0.5
	116.75-121.75	119.3	166.1	<2.22	1.04	1.73	0.83	1.58	0.10	<0.55	<3.05	<0.55	<1.66	<0.6	0.66	0.90	7.62	0.50
	122-127	124.5	182.1	<2.22	1.32	2.35	1.38	2.96	0.31	<0.55	<3.05	<0.55	<1.66	<0.6	0.76	1.45	11.77	0.62
	103.5-108.5	106.0	511.2	0.78	5.71	13.55	5.51	15.35	1.98	<0.52	<3.05	<0.52	<1.82	<0.52	2.40	3.63	44.75	3.11
	127.25-132.25	129.8	227.9	<2.22	1.80	3.73	1.87	5.04	0.38	<0.55	<3.05	<0.55	<1.66	<0.6	1.38	2.01	20.77	0.97
	132.5-137.5	135.0	111.1	0.23	1.71	3.21	1.37	4.22	0.17	0.13	<3.21	0.06	<1.91	<0.1	1.09	1.78	15.03	0.89
	137.75-142.75	140.3	145.5	0.25	2.05	4.16	1.98	5.31	0.24	0.14	<3.21	0.05	<1.91	0.03	1.57	2.19	21.19	1.23
	143-148	145.5	131.9	0.22	1.78	3.62	1.57	4.01	0.10	0.13	<3.21	0.06	<1.91	0.02	1.16	1.98	17.08	1.23
	148.25-153.25	150.8	100.2	0.23	1.64	3.00	1.30	3.33	0.10	0.11	<3.21	0.06	<1.91	0.03	1.09	1.50	12.98	0.89
	153.5-158.5	156.0	170.2	<2.19	1.09	2.05	0.89	2.65	<0.10	<0.55	<3.21	<0.55	<1.91	<0.5	0.75	1.09	9.57	0.31
MW-004-060	11.5-16.5	14.0	170.6	<2.23	1.32	2.16	1.05	2.07	0.31	<0.56	<3.07	<0.56	<1.67	<0.6	0.39	0.60	6.76	0.31
	16.75-21.75	19.3	174.7	<2.23	1.32	2.71	0.98	2.49	0.52	<0.56	<3.07	<0.56	<1.67	<0.6	0.50	0.68	9.07	0.36
	22-27	24.5	326.8	<2.23	2.86	6.90	3.07	8.14	0.87	0.29	<3.07	<0.56	<1.67	<0.6	1.26	1.81	27.20	1.53
	27.25-32.25	29.8	755.3	0.91	7.67	18.06	9.07	25.58	3.59	0.98	<3.07	<0.56	<1.67	<0.6	3.35	4.95	76.71	5.51
	27.25-32.25	29.8	337.4	<2.23	3.28	7.60	2.93	8.14	1.29	0.46	<3.07	<0.56	<1.67	<0.56	1.19	1.88	30.68	1.88
	32.5-37.5	35.0	602.5	1.30	8.45	18.12	8.45	22.53	3.02	0.71	<3.05	<0.52	<1.82	<0.5	2.99	4.55	64.98	4.03
	37.75-42.75	40.3	522.0	0.65	6.43	14.22	6.50	17.98	2.24	0.61	<3.05	<0.52	<1.82	<0.5	2.40	4.29	57.83	3.12
	43-48	45.5	332.2	<2.08	3.44	7.73	3.31	8.89	1.01	0.46	<3.05	<0.52	<1.82	<0.5	1.43	1.82	28.59	1.75
	48.25-53.25	50.8	340.6	<2.08	2.79	7.73	3.12	9.54	1.01	<0.52	<3.05	<0.52	<1.82	<0.5	1.49	2.27	29.89	1.69
	53.5-58.5	56.0	443.1	<2.08	4.48	10.33	4.68	14.08	1.66	<0.52	<3.05	<0.52	<1.82	<0.5	1.82	2.92	38.99	2.47
	53.5-58.5	56.0	792.9	1.69	11.70	25.92	11.70	33.58	4.06	0.91	<3.05	<0.52	<1.82	<0.52	3.70	5.91	90.97	5.13
MW-004-110	61.5-66.5	64.0	324.8	<2.16	2.92	7.57	2.71	8.81	0.87	0.56	<3.06	<0.56	<1.67	<0.6	1.25	1.81	26.43	1.67
	66.75-71.75	69.3	441.0	0.76	5.35	11.75	4.66	11.60	1.77	0.52	<3.06	<0.56	<1.67	<0.6	2.23	2.92	42.42	2.64
	72-77	74.5	540.2	<2.23	5.01	12.44	5.49	15.77	2.19	0.54	<3.06	<0.56	<1.67	<0.6	2.50	3.89	54.24	3.34
	77.25-82.25	79.8	549.7	1.04	5.56	13.83	5.22	14.38	1.84	0.63	<3.06	<0.56	<1.67	<0.6	2.50	3.89	54.94	3.69
	77.25-82.25	79.8	636.0	<2.23	5.77	15.92	6.33	20.64	2.19	0.67	<3.06	<0.56	<1.67	<0.56	2.85	4.17	62.59	4.87
	82.5-87.5	85.0	587.5	0.97	6.47	14.80	6.01	17.90	1.78	0.65	<3.04	<0.52	<1.81	<0.5	2.85	4.27	56.91	4.01
	87.75-92.75	90.3	689.1	1.03	6.47	18.68	7.11	23.72	2.88	0.71	<3.04	<0.52	<1.81	<0.5	3.69	4.46	71.13	4.46
	93-98	95.5	544.8	1.03	5.17	12.86	5.50	15.96	1.84	0.47	<3.04	<0.52	<1.81	<0.5	2.46	3.94	50.44	3.69
	98.25-103.25	100.8	519.9	<2.07	5.11	13.51	5.24	15.96	2.10	0.52	<3.04	<0.52	<1.81	<0.5	2.65	4.01	50.44	3.23
	103.5-108.5	106.0	406.8	<2.07	3.88	8.98	4.14	12.72	1.78	<0.52	<3.04	<0.52	<1.81	<0.5	1.68	2.91	36.21	2.20
MW-004-160	111.5-116.5	114.0	249.8	<2.23	1.88	3.89	1.60	4.86	0.73	0.25	<3.06	<0.56	<1.67	<0.6	1.18	1.88	18.80	1.39
	116.75-121.75	119.3	241.7	<2.23	2.23	4.38	1.67	5.27	0.52	<0.56	<3.06	<0.56	<1.67	<0.6	1.53	1.67	18.10	1.25
	122-127	124.5	275.1	<2.23	2.44	5.36	2.37	6.04	0.24	<0.56	<3.06	<0.56	<1.67	<0.6	1.81	2.65	27.15	2.02
	127.25-132.25	129.8	272.6	<2.23	2.72	5.56	2.09	6.04	0.24	0.23	<3.06	<0.56	<1.67	<0.6	1.81	2.72	24.37	1.88
	132.5-137.5	135.0	276.7	<2.07	2.14	5.05	2.01	5.62	0.49	<0.52	<3.05	<0.52	<1.81	<0.5	1.68	2.53	23.97	1.88
	137.75-142.75	140.3	269.4	<2.07	2.20	5.05	1.94	5.62	0.42	<0.52	<3.05	<0.52	<1.81	<0.5	1.81	2.98	28.51	1.68
	143-148	145.5	231.9	<2.07	1.75	4.14	1.49	4.45	0.36	<0.52	<3.05	<0.52	<1.81	<0.5	1.43	2.07	21.38	1.17
	148.25-153.25	150.8	217.1	<2.07	1.81	4.01	1.49	4.26	0.23	<0.52	<3.05	<0.52	<1.81	<0.5	1.43	2.01	18.14	1.10
	153.5-158.5	156.0	159.1	<2.07	0.97	2.00	0.71	2.25	0.29	<0.52	<3.05	<0.52	<1.81	<0.5	0.71	0.97	7.77	0.49
MW-005-060	11.5-16.5	14.0	227.8	<2.22	1.95	3.75	1.67	5.12	0.66	<0.56	<3.06	<0.56	<1.67	<0.6	0.63	0.90	13.89	0.97
	16.75-21.75	19.3	238.9	<2.22	2.15	4.09	1.81	4.29	0.52	0.26	<3.06	<0.56	<1.67	<0.6	0.69	1.25	15.28	0.83
	22-27	24.5	430.1	<2.22	3.82	9.65	3.89	12.28	1.22	0.47	<3.06	<0.56	<1.67	<0.6	1.74	2.64	39.60	2.71
	27.25-32.25	29.8	501.1	<2.22	4.65	11.04	4.31	15.06	1.70	0.58	<3.06	<0.56	<1.67	<0.6	2.22	3.33	47.24	2.99
	32.5-37.5	35.0	368.7	<2.07	3.87	8.97	3.74	10.12	1.39	<0.52	<3.03	<0.52	<1.81	<0.5	1.55	2.19	33.56	2.07
	37.75-42.75	40.3	558.0	0.84	6.20	14.77	6.26	17.86	2.16	0.63	<3.03	<0.52	<1.81	<0.5	2.45	4.19	57.44	3.36
	43-48	45.5	463.1	0.65	4.58	11.55	4.90	13.99	1.52	0.51	<3.03	<0.52	<1.81	<0.5	2.07	3.23	46.47	2.58
	48.25-53.25	50.8	589.3	0.77	5.94	14.77	6.20	19.80	2.55	0.77	<3.03	<0.52	<1.81	<0.5	2.52	4.58	61.95	3.81
	53.5-58.5	56.0	661.1	0.90	6.45	18.00	7.74	22.38	3.13	0.71	<3.03	<0.52	<1.81	<0.5	3.03	4.71	64.53	4.65
MW-005-110	61.5-66.5	64.0	203.2	<2.22	1.60	3.47	1.18	3.80	0.17	<0.56	<3.05	<0.56	<1.67	<0.6	0.58	0.76	11.11	0.62
	66.75-71.75	69.3	460.9	<2.22	4.93	11.03	4.44	14.35	1.56	0.47	<3.05	<0.56	<1.67	<0.6	1.74	3.12	44.42	2.36
	72-77	74.5	1370.9	1.18	11.80	33.94	14.58	56.69	6.49	1.67	<3.05	<0.56	<1.67	<0.6	5.90	10.41	152.70	11.11
	77.25-82.25	79.8	765.1	0.76	6.73	17.28	8.33	30.31	3.16	0.97	<3.05	<0.56	<1.67	<0.6	2.92	5.55	76.35	5.21
	82.5-87.5	85.0	765.1	1.09	7.72	21.80	8.36	28.09	3.25	1.03	<3.02	<0.51	<1.80	<0.5	3.28	5.66	83.62	5.21
	87.75-92.75	90.3	1181.5	1.22	12.86	33.38	12.86	40.96	5.37	1.22	<3.02	<0.51	<1.80	<0.5	5.34	9.01	135.08	9.65
	93-98	95.5	753.8	1.09	6.43	20.51	8.36	25.52	2.93	0.96	<3.02	<0.51	<1.80	<0.5	3.92	4.95	77.19	4.44
	98.25-103.25	100.8	571.6	0.77	5.60	15.37	6.11	18.44	2.28	0.57	<3.02	<0.51	<1.80	<0.5	2.25	4.25	58.53	3.60
	103.5-108.5	106.0	301.7	<2.06	2.77	6.36	2.96	7.51	1.00	0.35	<3.02	<0.51	<1.80	<0.5	1.22	1.80	24.44	1.67
MW-005-160	111.5-116.5	114.0	169.5	<2.22	0.90	1.94	0.69	2.00	<0.10	<0.56	<3.05	<0.56	<1.67	<0.6	0.62	0.83	7.63	0.53
	116.75-121.75	118.8	179.2	<2.22	1.18	2.35	0.83	2.34	0.17	<0.56	<3.05	<0.56	<1.67	<0.6	0.76	0.97	9.02	0.83
	122-127	124.5	186.2	<2.22	1.18	2.35	0.90	2.55	0.17	<0.56	<3.05	<0.56	<1.67	<0.6	0.76	1.18	10.41	0.97
	127.25-132.25	129.8	161.4	<2.22	0.83	1.66	0.67	1.79	<0.10	<0.56	<3.05	<0.56	<1.67	<0.6	0.65	0.90	6.94	0.48
	127.25-132.25	129.8	177.6	<2.22	1.32	2.49	1.11	2.75	0.03	<0.55	<3.05	<0.55	<1.66	<0.55	0.90	1.18	10.39	0.57
	132.5-137.5	135.0	185.0	<2.06	1.35	2.70	1.16	3.27	0.10	<0.52	<3.03	<0.52	<1.80	<0.5	0.97	1.55	13.53	0.62
	137.75-142.75	140.3	181.6	<2.06	1.29	2.38	1.03	2.95	0.48	<0.52	<3.03	<0.52	<1.80	<0.5	1.03	1.22	12.24	0.63
	143-148	145.5	163.7	<2.06	<1.03	1.80	0.77	2.11	0.10	<0.52	<3.03	<0.52	<1.80	<0.5	0.71	0.84	8.37	0.43
	148.25-153.25	150.8	151.9	<2.06	0.90	1.61	0.61	1.14	0.03	<0.52	<3.03	<0.52	<1.80	<0.5	0.59	0.64	6.44	<0.5
	153.5-158.5	156.0	144.7	<2.06	0.71	1.09	0.49	0.95	<0.10	<0.52	<3.03	<0.52	<1.80	<0.5	0.44	0.52	5.15	<0.5
MW-006-060	11.5-16.5	14.0	180.6	<2.22	<1.11	2.21	1.18	1.92	0.24	<0.55	<3.05	<0.55	<1.66	<0.6	0.43	0.53	7.62	0.42
	16.75-21.75	19.3	199.8	<2.22	2.70	3.39	2.15	3.59	0.38	0.22	<3.05	<0.55	<1.66	<0.6	0.76	0.97	11.78	0.50
	22-27	24.5	229.7	<2.22	2.29	4.36	2.36	5.25	0.66	<0.55	<3.05	<0.55	<1.66	<0.6	0.76	1.32	17.32	0.90
	27.25-32.25	29.8	578.9	1.39	8.31	17.25	7.62	21.95	2.60	0.69	<3.05	<0.55	<1.66	<0.6	2.63	4.37	60.97	3.26
	27.25-32.25	29.8	192.3	<2.22	1.87	3.39	1.46	3.52	0.45	<0.55	<3.05	<0.55	<1.66	<0.55	0.57	0.83	10.39	0.55
	32.5-37.5	35.0	755.1	1.11	8.67	20.36	9.29	27.65	3.25	0.80	<2.91	<0.50	<1.73	<0.5	3.59	5.01	80.47	4.64
	37.75-42.75	40.3	732.6	1.24	9.29	21.60	10.52	28.27	3.62	0.68	<2.91	<0.50	<1.73	<0.5	3.78	5.45	86.66	4.64
	43-48	45.5	916.9	1.61	11.76	26.55	13.00	35.70	4.24	1.24	<2.91	<0.50	<1.73	<0.5	4.70	6.81	99.04	5.82
	48.25-53.25	50.8	1184.6	1.18	14.24	40.79	18.57	48.08	5.11	1.42	<2.91	<0.50	<1.73	<0.5	6.19	8.67	142.37	8.67
	53.5-58.5	56.0	265.4	<1.98	2.79	6.06	2.97	7.85	0.77	0.24	<2.91	<0.50	<1.73	<0.5	1.24	1.55	21.67	1.05

Table 12. Passive Flux Meter Results – PFAS Mass Flux
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Depth interval (ft bgs)	Center Point of PFM Location (ft bgs)	Perfluorooctane sulfonic acid (PFOS) (µg/m²/day)	Perfluorononane sulfonic acid (PFNS) (µg/m²/day)	Perfluorodecane sulfonic acid (PFDS) (µg/m²/day)	Perfluorododecane sulfonic acid (PFDOS) (µg/m²/day)	4:2 Fluorotelomer sulfonate (4:2 FTS) (µg/m²/day)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (µg/m²/day)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (µg/m²/day)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (µg/m²/day)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (µg/m²/day)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (µg/m²/day)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (µg/m²/day)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (µg/m²/day)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (µg/m²/day)	Perfluorooctane sulfonamide (PFOSA) (µg/m²/day)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (µg/m²/day)
MW-003-160	111.5-116.5	114.0	8.31	<0.5	<0.5	<0.5	<2.1	<0.17	<2.1	<0.6	<1.1	<5.5	<0.3	<0.6	<5.5	<0.3	<5.3
	116.75-121.75	119.3	22.85	<0.5	<0.5	<0.5	<2.1	6.41	<2.1	<0.6	<1.1	<5.5	<0.3	0.28	<5.5	0.26	<5.3
	122-127	124.5	31.85	<0.5	<0.5	<0.5	<2.1	7.10	0.64	<0.6	0.46	<5.5	<0.3	<0.6	<5.5	0.42	<5.3
	103.5-108.5	106.0	265.91	0.20	<0.50	<0.51	<1.95	25.46	6.49	<0.52	2.92	<5.19	<0.26	2.98	<5.19	1.75	<4.93
	127.25-132.25	129.8	47.09	<0.5	<0.5	<0.5	<2.1	21.64	1.32	<0.6	0.76	<5.5	<0.3	0.42	<5.5	0.61	<5.3
	132.5-137.5	135.0	47.15	0.02	<0.1	<0.1	0.15	5.64	1.37	<0.1	0.53	<5.5	<0.03	0.33	<5.5	0.48	<0.5
	137.75-142.75	140.3	66.29	0.02	<0.1	<0.1	0.19	9.06	2.05	<0.1	0.89	<5.5	<0.03	0.47	<5.5	0.66	<0.5
	143-148	145.5	60.82	0.02	<0.1	<0.1	0.15	9.06	1.78	<0.1	0.64	<5.5	<0.03	0.40	<5.5	0.57	<0.5
	148.25-153.25	150.8	42.37	<0.1	<0.1	<0.1	0.13	8.37	1.37	<0.1	0.46	<5.5	<0.03	0.27	<0.5	0.40	<0.5
	153.5-158.5	156.0	27.34	<0.5	<0.5	<0.5	<2.1	4.27	1.03	<0.5	<1.1	<5.5	<0.3	<0.5	<5.5	<0.3	<5.2
MW-004-060	11.5-16.5	14.0	32.78	<0.5	<0.5	<0.5	<2.1	<0.17	0.68	<0.6	0.47	<5.6	<0.3	0.40	<5.6	0.29	<5.4
	16.75-21.75	19.3	34.87	<0.5	<0.5	<0.5	<2.1	0.17	0.91	<0.6	0.57	<5.6	<0.3	0.39	<5.6	0.29	<5.3
	22-27	24.5	139.47	<0.5	<0.5	<0.5	<2.1	9.24	3.91	<0.6	1.39	<5.6	<0.3	1.46	<5.6	1.05	<5.2
	27.25-32.25	29.8	432.36	0.38	<0.5	<0.5	<2.1	28.77	11.16	<0.6	5.09	<5.6	0.11	4.53	<5.6	3.28	<5.2
	27.25-32.25	29.8	139.47	<0.54	<0.54	<0.54	<2.09	12.03	3.91	<0.56	1.53	<5.58	<0.28	1.60	<5.58	0.98	<5.30
	32.5-37.5	35.0	305.38	0.30	<0.5	<0.5	<1.9	30.70	9.10	<0.5	3.31	<5.2	<0.3	3.51	<5.2	2.79	<4.9
	37.75-42.75	40.3	246.91	0.24	<0.5	<0.5	<1.9	33.95	7.80	<0.5	2.79	<5.2	<0.3	3.51	<5.2	2.21	<4.9
	43-48	45.5	136.45	<0.5	<0.5	<0.5	<1.9	18.36	3.64	<0.5	1.62	<5.2	<0.3	1.62	<5.2	1.23	<4.9
	48.25-53.25	50.8	142.95	<0.5	<0.5	<0.5	<1.9	18.36	3.64	<0.5	1.75	<5.2	<0.3	1.82	<5.2	1.17	<4.9
	53.5-58.5	56.0	214.42	<0.5	<0.5	<0.5	<1.9	23.55	5.65	<0.5	2.47	<5.2	<0.3	2.47	<5.2	1.69	<4.9
	53.5-58.5	56.0	402.85	0.25	<0.50	<0.51	<1.95	55.39	15.59	<0.52	5.39	<5.20	<0.26	5.98	<5.20	4.09	<4.94
MW-004-110	61.5-66.5	64.0	139.08	<0.5	<0.5	<0.5	<2.0	8.52	2.85	<0.6	1.60	<5.6	<0.3	1.39	<5.6	1.04	<5.1
	66.75-71.75	69.3	215.57	0.17	<0.5	<0.5	<2.1	13.39	5.49	<0.6	2.16	<5.6	<0.3	2.50	<5.6	1.46	<5.2
	72-77	74.5	285.11	0.23	<0.5	<0.5	<2.1	17.56	6.40	<0.6	2.99	<5.6	<0.3	2.78	<5.6	1.88	<5.3
	77.25-82.25	79.8	285.11	<0.5	<0.5	<0.5	<2.1	25.90	6.61	<0.6	3.20	<5.6	<0.3	3.27	<5.6	2.02	<5.3
	77.25-82.25	79.8	347.70	0.33	<0.54	<0.54	<2.09	26.60	7.65	<0.56	3.62	<5.56	<0.28	3.89	<5.56	2.50	<5.29
	82.5-87.5	85.0	316.87	0.32	0.27	<0.5	<1.9	29.91	7.11	<0.5	3.69	<5.2	<0.3	3.17	<5.2	2.00	<4.9
	87.75-92.75	90.3	375.08	0.43	0.25	<0.5	<1.9	42.20	8.41	<0.5	4.07	<5.2	<0.3	4.33	<5.2	2.39	<4.9
	93-98	95.5	291.01	0.31	<0.5	<0.5	<1.9	27.32	6.47	<0.5	2.91	<5.2	<0.3	3.36	<5.2	1.94	<4.9
	98.25-103.25	100.8	271.61	0.38	<0.5	<0.5	<1.9	21.50	5.95	<0.5	2.91	<5.2	<0.3	2.85	<5.2	1.81	<4.9
	103.5-108.5	106.0	194.00	0.50	<0.5	<0.5	<1.9	16.33	5.30	<0.5	2.13	<5.2	<0.3	2.07	<5.2	1.29	<4.9
MW-004-160	111.5-116.5	114.0	76.58	<0.5	<0.5	<0.5	<2.1	15.49	1.60	<0.6	0.48	<5.6	<0.3	0.55	<5.6	0.35	<5.3
	116.75-121.75	119.3	69.62	<0.5	<0.5	<0.5	<2.1	14.10	1.04	<0.6	0.52	<5.6	<0.3	0.52	<5.6	0.37	<5.3
	122-127	124.5	90.50	<0.5	<0.5	<0.5	<2.1	11.31	2.51	<0.6	0.68	<5.6	<0.3	0.63	<5.6	0.53	<5.3
	127.25-132.25	129.8	90.50	<0.5	<0.5	<0.5	<2.1	12.01	2.37	<0.6	0.55	<5.6	<0.3	0.63	<5.6	0.54	<5.3
	132.5-137.5	135.0	97.18	<0.5	<0.5	<0.5	<1.9	18.30	2.27	<0.5	0.84	<5.2	<0.3	0.65	<5.2	0.91	<4.9
	137.75-142.75	140.3	84.23	<0.5	<0.5	<0.5	<1.9	18.95	2.53	<0.5	0.84	<5.2	<0.3	0.71	<5.2	0.71	<4.9
	143-148	145.5	64.79	<0.5	<0.5	<0.5	<1.9	14.42	1.88	<0.5	0.52	<5.2	<0.3	0.36	<5.2	0.53	<4.9
	148.25-153.25	150.8	53.78	<0.5	<0.5	<0.5	<1.9	14.42	2.14	<0.5	0.37	<5.2	<0.3	0.34	<5.2	0.44	<4.9
	153.5-158.5	156.0	23.97	<0.5	<0.5	<0.5	<1.9	5.35	0.59	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	<0.3	<4.9
MW-005-060	11.5-16.5	14.0	69.47	<0.5	<0.5	<0.5	<2.1	6.43	1.53	<0.6	0.83	<5.6	<0.3	0.69	<5.6	0.40	<5.3
	16.75-21.75	19.3	76.42	<0.5	<0.5	<0.5	<2.1	9.21	1.53	<0.6	0.90	<5.6	<0.3	0.83	<5.6	0.49	<5.3
	22-27	24.5	201.48	<0.5	<0.5	<0.5	<2.1	21.71	4.52	<0.6	2.22	<5.6	<0.3	2.43	<5.6	1.39	<5.3
	27.25-32.25	29.8	250.11	0.17	<0.5	<0.5	<2.1	27.27	5.49	<0.6	2.78	<5.6	<0.3	2.57	<5.6	1.74	<5.3
	32.5-37.5	35.0	161.34	0.19	<0.5	<0.5	<1.9	18.88	4.97	<0.5	2.19	<5.2	<0.3	1.94	<5.2	1.36	<4.9
	37.75-42.75	40.3	290.41	0.39	<0.5	<0.5	<1.9	27.91	7.10	<0.5	3.23	<5.2	<0.3	2.97	<5.2	2.07	<4.9
	43-48	45.5	232.33	<0.5	<0.5	<0.5	<1.9	17.59	5.94	<0.5	2.32	<5.2	<0.3	3.03	<5.2	1.61	<4.9
	48.25-53.25	50.8	309.77	0.28	<0.5	<0.5	<1.9	29.20	9.03	<0.5	3.42	<5.2	<0.3	3.94	<5.2	2.19	<4.9
	53.5-58.5	56.0	367.85	0.46	<0.5	<0.5	<1.9	29.85	8.39	<0.5	4.07	<5.2	<0.3	3.87	<5.2	2.65	<4.9
MW-005-110	61.5-66.5	64.0	52.06	<0.5	<0.5	<0.5	<2.1	6.42	0.90	<0.6	0.67	<5.6	<0.3	0.62	<5.6	0.34	<5.3
	66.75-71.75	69.3	222.11	0.24	<0.5	<0.5	<2.1	20.30	5.21	<0.6	2.50	<5.6	<0.3	2.78	<5.6	1.53	<5.3
	72-77	74.5	832.92	0.97	<0.5	<0.5	<2.1	66.11	20.13	<0.6	11.11	<5.6	<0.3	11.11	<5.6	6.52	<5.3
	77.25-82.25	79.8	437.28	0.39	<0.5	<0.5	<2.1	31.41	9.72	<0.6	5.00	<5.6	<0.3	5.00	<5.6	3.19	<5.3
	82.5-87.5	85.0	424.53	0.39	<0.5	<0.5	<1.9	41.97	9.01	<0.5	4.76	<5.1	<0.3	5.15	<5.1	3.15	<4.9
	87.75-92.75	90.3	707.55	0.57	<0.5	<0.5	<1.9	61.27	17.37	<0.5	7.72	<5.1	<0.3	7.72	<5.1	5.34	<4.9
	93-98	95.5	430.96	<0.5	<0.5	<0.5	<1.9	35.54	9.65	<0.5	5.40	<5.1	<0.3	5.27	<5.1	3.15	<4.9
	98.25-103.25	100.8	302.32	0.47	<0.5	<0.5	<1.9	25.89	7.72	<0.5	4.57	<5.1	<0.3	3.80	<5.1	2.06	<4.9
	103.5-108.5	106.0	122.21	0.23	<0.5	<0.5	<1.9	13.03	3.34	<0.5	1.48	<5.1	<0.3	1.35	<5.1	0.90	<4.9
MW-005-160	111.5-116.5	114.0	29.15	<0.5	<0.5	<0.5	<2.1	2.26	<2.2	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	0.10	<5.3
	116.75-121.75	118.8	36.09	<0.5	<0.5	<0.5	<2.1	3.64	1.04	<0.6	0.31	<5.6	<0.3	<0.6	<5.6	0.14	<5.3
	122-127	124.5	39.56	<0.5	<0.5	<0.5	<2.1	5.03	0.61	<0.6	<1.1	<5.6	<0.3	0.28	<5.6	0.25	<5.3
	127.25-132.25	129.8	24.29	<0.5	<0.5	<0.5	<2.1	<0.17	<2.2	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	0.19	<5.3
	127.25-132.25	129.8	29.78	<0.53	<0.53	<0.54	<2.08	6.41	1.04	<0.55	0.50	<5.54	<0.28	<0.55	<5.54	0.28	<5.26
	132.5-137.5	135.0	41.22	<0.5	<0.5	<0.5	<1.9	4.67	1.10	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	0.43	<4.9
	137.75-142.75	140.3	39.94	<0.5	<0.5	<0.5	<1.9	5.31	1.10	<0.5	0.30	<5.2	<0.3	<0.5	<5.2	0.41	<4.9
	143-148	145.5	28.99	<0.5	<0.5	<0.5	<1.9	4.67	1.22	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	<0.3	<4.9
	148.25-153.25	150.8	21.90	<0.5	<0.5	<0.5	<1.9	4.03	0.84	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	<0.3	<4.9
	153.5-158.5	156.0	14.17	<0.5	<0.5	<0.5	<1.9	5.96	<2.0	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	<0.3	<4.9
MW-006-060	11.5-16.5	14.0	42.27	<0.5	<0.5	<0.5	<2.1	1.56	0.97	<0.6	<1.1	<5.5	<0.3	<0.6	<5.5	<0.3	<5.3
	16.75-21.75	19.3	45.04	<0.5	<0.5	<0.5	<2.1	7.79	1.59	<0.6	0.44	<5.5	<0.3	<0.6	<5.5	0.37	<5.3
	22-27	24.5	64.44	<0.5	<0.5	<0.5	<2.1	7.79	2.22	<0.6	0.76	<5.5	<0.3	0.56	<5.5	0.60	<5.3
	27.25-32.25	29.8	284.08	0.28	<0.5	<0.5	<2.1	30.66	8.31	<0.6	3.53	<5.5	<0.3	3.60	<5.5	2.56	<5.3
	27.25-32.25	29.8	47.81	<0.53	<0.53	<0.54	<2.08	<0.17	1.39	<0.55	0.62	<5.54	<0.28	0.58	<5.54	0.35	<5.27
	32.5-37.5	35.0	414.74	0.37	<0.5	<0.5	<1.9	46.58	11.14	<0.5	4.70	<5.0	<0.2	5.63	<5.0	3.53	<4.7
	37.75-42.75	40.3	383.79	0.36	<0.5	<0.5	<1.9	46.58	9.29	<0.5	4.58	<5.0	<0.2	5.39	<5.0	3.34	<4.7
	43-48	45.5	526.17	0.45	<0.5	<0.5	<1.9	46.58	13.00	<0.5	6.00	<5.0	<0.2	6.19	<5.0	4.52	<4.7
	48.25-53.25	50.8	680.92	0.74	<0.5	<0.5	<1.9	65.15	17.33	<0.5	8.67	<5.0	0.12	9.90	1.36	6.81	<4.7
	53.5-58.5	56.0	99.04	<0.5	<0.5	<0.5	<1.9	8.20	2.54	<0.5	1.18	<5.0	<0.2	1.30	<5.0	0.93	<4.7

Table 12. Passive Flux Meter Results – PFAS Mass Flux
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Depth interval (ft bgs)	Center Point of PFM Location (ft bgs)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (µg/m²/day)	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA) (µg/m²/day)	Perfluoro-4-Methoxybutanic acid (PFMBA) (µg/m²/day)	Perfluoro-3-methoxypropanoic aci (PFMPA) (µg/m²/day)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (µg/m²/day)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (µg/m²/day)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (µg/m²/day)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (µg/m²/day)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (µg/m²/day)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (µg/m²/day)
MW-003-160	111.5-116.5	114.0	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	116.75-121.75	119.3	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	122-127	124.5	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	103.5-108.5	106.0	<5.19	<5.19	<2.08	<2.08	<4.93	<4.86	<1.82	<5.19	<25.94	<25.94
	127.25-132.25	129.8	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	132.5-137.5	135.0	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.7	<2.7
	137.75-142.75	140.3	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.7	<2.7
	143-148	145.5	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.7	<2.7
	148.25-153.25	150.8	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.2	<0.5	<2.7	<2.7
	153.5-158.5	156.0	<5.5	<5.5	<2.2	<2.2	<5.2	<5.1	<1.9	<5.5	<27.3	<27.3
MW-004-060	11.5-16.5	14.0	<5.6	<5.6	<2.2	<2.2	<5.4	<5.2	<2.0	<5.6	<28.6	<28.6
	16.75-21.75	19.3	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<2.0	<5.5	<27.9	<27.9
	22-27	24.5	<5.4	<5.4	<2.2	<2.2	<5.2	<5.1	<2.0	<5.4	<27.2	<27.2
	27.25-32.25	29.8	<5.4	<5.4	<2.2	<2.2	<5.2	<5.1	<2.0	<5.4	<27.2	<27.2
	27.25-32.25	29.8	<5.58	<5.58	<2.23	<2.23	<5.30	<5.23	<1.95	<5.58	<27.89	<27.89
	32.5-37.5	35.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	37.75-42.75	40.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	43-48	45.5	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	48.25-53.25	50.8	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	53.5-58.5	56.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	53.5-58.5	56.0	<5.13	<5.13	<2.08	<2.08	<4.94	<4.81	<1.82	<5.13	<25.99	<25.99
MW-004-110	61.5-66.5	64.0	<5.4	<5.4	<2.2	<2.2	<5.1	<5.1	<1.9	5.42	<27.1	<27.1
	66.75-71.75	69.3	<5.5	<5.5	<2.2	<2.2	<5.2	<5.1	<1.9	<5.5	<27.1	<27.1
	72-77	74.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	77.25-82.25	79.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	77.25-82.25	79.8	<5.56	<5.56	<2.23	<2.23	<5.29	<5.22	<1.95	<5.56	<27.82	<27.82
	82.5-87.5	85.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
	87.75-92.75	90.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
	93-98	95.5	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
	98.25-103.25	100.8	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
	103.5-108.5	106.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
MW-004-160	111.5-116.5	114.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	116.75-121.75	119.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	122-127	124.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	127.25-132.25	129.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	132.5-137.5	135.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
	137.75-142.75	140.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
	143-148	145.5	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
	148.25-153.25	150.8	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
	153.5-158.5	156.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
MW-005-060	11.5-16.5	14.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	16.75-21.75	19.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	22-27	24.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	27.25-32.25	29.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	32.5-37.5	35.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.8	<1.8	<5.2	<25.8	<25.8
	37.75-42.75	40.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.8	<1.8	<5.2	<25.8	<25.8
	43-48	45.5	<5.2	<5.2	<2.1	<2.1	<4.9	<4.8	<1.8	<5.2	<25.8	<25.8
	48.25-53.25	50.8	<5.2	<5.2	<2.1	<2.1	<4.9	<4.8	<1.8	<5.2	<25.8	<25.8
	53.5-58.5	56.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.8	<1.8	<5.2	<25.8	<25.8
MW-005-110	61.5-66.5	64.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	66.75-71.75	69.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	72-77	74.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	77.25-82.25	79.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	82.5-87.5	85.0	<5.1	<5.1	<2.1	<2.1	<4.9	<4.8	<1.8	<5.1	<25.7	<25.7
	87.75-92.75	90.3	<5.1	<5.1	<2.1	<2.1	<4.9	<4.8	<1.8	<5.1	<25.7	<25.7
	93-98	95.5	<5.1	<5.1	<2.1	<2.1	<4.9	<4.8	<1.8	<5.1	<25.7	<25.7
	98.25-103.25	100.8	<5.1	<5.1	<2.1	<2.1	<4.9	<4.8	<1.8	<5.1	<25.7	<25.7
	103.5-108.5	106.0	<5.1	<5.1	<2.1	<2.1	<4.9	<4.8	<1.8	<5.1	<25.7	<25.7
MW-005-160	111.5-116.5	114.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	116.75-121.75	118.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	122-127	124.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	127.25-132.25	129.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	127.25-132.25	129.8	<5.54	<5.54	<2.22	<2.22	<5.26	<5.19	<1.94	<5.54	<27.70	<27.70
	132.5-137.5	135.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.8	<1.8	<5.2	<25.8	<25.8
	137.75-142.75	140.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.8	<1.8	<5.2	<25.8	<25.8
	143-148	145.5	<5.2	<5.2	<2.1	<2.1	<4.9	<4.8	<1.8	<5.2	<25.8	<25.8
	148.25-153.25	150.8	<5.2	<5.2	<2.1	<2.1	<4.9	<4.8	<1.8	<5.2	<25.8	<25.8
	153.5-158.5	156.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.8	<1.8	<5.2	<25.8	<25.8
MW-006-060	11.5-16.5	14.0	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	16.75-21.75	19.3	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	22-27	24.5	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	27.25-32.25	29.8	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	27.25-32.25	29.8	<5.54	<5.54	<2.22	<2.22	<5.27	<5.20	<1.94	<5.54	<27.71	<27.71
	32.5-37.5	35.0	<5.0	<5.0	<2.0	<2.0	<4.7	<4.6	<1.7	<5.0	<24.8	<24.8
	37.75-42.75	40.3	<5.0	<5.0	<2.0	<2.0	<4.7	<4.6	<1.7	<5.0	<24.8	<24.8
	43-48	45.5	<5.0	<5.0	<2.0	<2.0	<4.7	<4.6	<1.7	<5.0	<24.8	<24.8
	48.25-53.25	50.8	<5.0	<5.0	<2.0	<2.0	<4.7	<4.6	<1.7	<5.0	<24.8	<24.8
	53.5-58.5	56.0	<5.0	<5.0	<2.0	<2.0	<4.7	<4.6	<1.7	<5.0	<24.8	<24.8

Table 12. Passive Flux Meter Results – PFAS Mass Flux
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Depth interval (ft bgs)	Center Point of PFM Location (ft bgs)	Total PFAS[1] (µg/m²/day)	Perfluorobutanoic acid (PFBA) (µg/m²/day)	Perfluoropentanoic acid (PFPeA) (µg/m²/day)	Perfluorohexanoic acid (PFHxA) (µg/m²/day)	Perfluoroheptanoic acid (PFHpA) (µg/m²/day)	Perfluorooctanoic acid (PFOA) (µg/m²/day)	Perfluorononanoic acid (PFNA) (µg/m²/day)	Perfluorodecanoic acid (PFDA) (µg/m²/day)	Perfluoroundecanoic acid (PFUdA) (µg/m²/day)	Perfluorododecanoic acid (PFDoA) (µg/m²/day)	Perfluorotridecanoic acid (PFTrDA) (µg/m²/day)	Perfluorotetradecanoic acid (PFTeDA) (µg/m²/day)	Perfluorobutane sulfonic acid (PFBS) (µg/m²/day)	Perfluoropentane sulfonate (PFPeS) (µg/m²/day)	Perfluorohexane sulfonic acid (PFHxS) (µg/m²/day)	Perfluoroheptane sulfonic acid (PFHpS) (µg/m²/day)
MW-006-110	61.5-66.5	64.0	238.6	<2.23	1.88	3.97	1.74	5.49	0.52	0.28	<3.07	<0.56	<1.67	<0.6	0.77	1.32	16.02	0.84
	66.75-71.75	69.3	367.2	0.77	3.55	7.59	3.20	10.22	0.80	0.33	<3.07	<0.56	<1.67	<0.6	1.46	2.09	32.75	1.95
	72-77	74.5	627.7	<2.23	5.71	14.56	6.48	19.28	2.19	0.70	<3.07	<0.56	<1.67	<0.6	3.00	4.18	61.31	4.18
	77.25-82.25	79.8	528.3	0.98	6.90	14.56	5.43	16.49	1.99	0.57	<3.07	<0.56	<1.67	<0.6	2.79	3.76	48.07	3.48
	77.25-82.25	79.8	274.8	<2.23	2.30	5.15	1.88	5.49	0.45	<0.56	3.07	<0.56	<1.67	<0.56	1.05	1.60	17.42	1.32
	82.5-87.5	85.0	546.9	1.04	5.53	14.90	5.60	16.06	1.66	0.59	<3.06	<0.52	<1.82	<0.5	2.67	3.91	55.97	3.51
	87.75-92.75	90.3	600.1	<2.08	5.73	15.55	5.86	18.01	1.66	0.64	<3.06	<0.52	<1.82	<0.5	2.99	4.17	57.28	3.45
	93-98	95.5	483.2	<2.08	4.88	11.65	4.95	14.76	1.53	0.60	<3.06	<0.52	<1.82	<0.5	2.67	3.32	47.51	2.73
	98.25-103.25	100.8	595.9	0.98	6.38	14.90	6.51	18.66	2.31	0.61	<3.06	<0.52	<1.82	<0.5	3.06	4.49	60.53	3.64
	103.5-108.5	106.0	357.5	<2.08	3.45	9.04	3.84	10.20	1.20	0.27	<3.06	<0.52	<1.82	<0.5	1.82	1.95	30.59	1.95
MW-006-160	111.5-116.5	114.0	164.9	<2.23	0.98	1.88	0.77	1.45	0.17	<0.56	<3.07	<0.56	<1.67	<0.6	0.69	0.91	7.67	0.44
	116.75-121.75	118.8	174.1	<2.23	<1.12	2.44	0.91	1.93	0.03	0.28	<3.07	<0.56	<1.67	<0.6	0.84	1.05	9.06	0.62
	122-127	124.5	186.7	<2.23	1.32	2.44	1.05	2.63	0.10	<0.56	<3.07	<0.56	<1.67	<0.6	0.98	0.91	9.06	0.77
	127.25-132.25	129.8	163.2	<2.23	<1.12	1.74	0.77	1.66	0.03	<0.56	<3.07	<0.56	<1.67	<0.6	0.69	0.84	6.62	0.45
	132.5-137.5	135.0	176.8	<2.09	1.17	2.15	0.91	2.46	0.16	<0.52	<3.06	<0.52	<1.82	<0.5	0.98	1.11	9.77	0.58
	137.75-142.75	140.3	204.0	<2.09	1.76	3.38	1.37	3.89	0.29	<0.52	<3.06	<0.52	<1.82	<0.5	1.30	1.56	15.64	0.91
	143-148	145.5	202.7	<2.09	1.63	3.19	1.30	3.83	0.36	<0.52	<3.06	<0.52	<1.82	<0.5	1.43	1.69	14.34	0.63
	148.25-153.25	150.8	190.4	<2.09	1.63	2.86	1.50	3.37	0.16	<0.52	<3.06	<0.52	<1.82	<0.5	1.17	1.69	14.34	0.54
	153.5-158.5	156.0	150.9	<2.09	0.78	1.43	0.61	1.42	<0.10	<0.52	<3.06	<0.52	<1.82	<0.5	0.61	0.78	6.52	<1.3
MW-007-060	11.5-16.5	14.0	421.5	2.37	3.07	5.92	2.72	7.45	0.94	0.22	<3.07	<0.56	<1.67	<0.6	3.00	1.39	19.53	0.91
	16.75-21.75	19.3	200.4	<2.23	2.02	3.27	1.53	3.40	0.45	<0.56	<3.07	<0.56	<1.67	<0.6	0.59	0.91	11.16	0.54
	22-27	24.5	282.9	<2.16	2.93	6.34	2.79	10.24	0.87	0.27	<3.07	<0.56	<1.67	<0.6	1.05	1.67	22.32	1.12
	27.25-32.25	29.8	187.7	<2.23	1.67	2.85	1.26	3.61	0.45	<0.56	<3.07	<0.56	<1.67	<0.6	0.47	0.84	9.76	0.54
	32.5-37.5	35.0	348.0	<2.08	3.90	8.39	4.29	10.20	0.94	0.44	<3.06	<0.52	<1.82	<0.5	1.56	1.95	31.88	1.69
	37.75-42.75	40.3	697.0	0.85	7.81	20.10	9.11	23.86	3.03	0.72	<3.06	<0.52	<1.82	<0.5	3.77	5.33	78.07	4.29
	43-48	45.5	984.3	1.24	9.76	26.60	12.36	35.57	4.46	1.11	<3.06	<0.52	<1.82	<0.5	4.55	7.16	110.60	6.25
	48.25-53.25	50.8	399.8	0.85	4.81	10.34	4.42	12.15	1.40	0.38	<3.06	<0.52	<1.82	<0.5	1.95	2.41	33.83	2.21
	53.5-58.5	56.0	337.6	<2.08	3.45	8.39	3.25	9.55	1.14	<0.52	<3.06	<0.52	<1.82	<0.5	1.63	1.76	29.28	1.63
MW-007-110	61.5-66.5	64.0	378.3	<2.22	3.40	7.56	3.61	10.88	1.70	0.33	<3.06	<0.56	<1.67	<0.6	1.39	2.36	28.47	2.01
	66.75-71.75	69.3	418.3	<2.22	3.96	9.65	3.96	11.58	1.35	<0.56	<3.06	<0.56	<1.67	<0.6	1.87	2.64	35.41	2.71
	72-77	74.5	615.2	0.97	6.74	15.90	6.32	20.61	2.40	0.62	<3.06	<0.53	<1.67	<0.5	3.06	4.72	60.41	4.24
	77.25-82.25	79.8	416.3	<2.22	3.75	8.95	3.33	11.58	1.08	0.40	<3.06	<0.56	<1.67	<0.6	1.81	3.06	42.36	2.57
	77.25-82.25	79.8	389.2	<2.22	3.54	7.56	3.12	10.88	1.22	0.46	<3.06	<0.56	<1.67	<0.56	1.67	2.15	32.64	2.22
	82.5-87.5	85.0	710.1	1.05	7.19	17.58	7.19	22.02	2.32	0.85	<3.07	<0.52	<1.83	<0.5	3.99	4.97	71.91	4.38
	87.75-92.75	90.3	633.8	0.92	6.47	15.62	6.08	19.40	2.12	0.62	<3.07	<0.52	<1.83	<0.5	3.27	4.97	62.11	3.53
	93-98	95.5	459.8	0.65	4.05	9.74	4.18	12.21	1.14	0.48	<3.07	<0.52	<1.83	<0.5	2.16	3.33	44.46	2.62
	98.25-103.25	100.8	417.9	0.78	4.31	10.39	3.99	10.90	1.01	<0.52	<3.07	<0.52	<1.83	<0.5	2.22	2.42	34.00	2.09
	103.5-108.5	106.0	332.4	<2.09	2.75	7.12	3.07	8.29	0.88	0.41	<3.07	<0.52	<1.83	<0.5	1.50	2.03	26.15	1.57
MW-007-160	111.5-116.5	114.0	191.9	<2.22	1.39	2.57	1.04	2.62	0.31	0.23	<3.06	<0.56	<1.67	<0.6	0.97	1.18	10.42	0.90
	116.75-121.75	118.8	192.7	<2.22	1.46	2.64	1.04	2.48	0.31	0.24	<3.06	<0.56	<1.67	<0.6	0.90	1.04	9.73	0.76
	122-127	124.5	203.8	<2.22	1.32	2.84	0.97	3.53	0.10	<0.56	<3.06	<0.56	<1.67	<0.6	0.97	1.53	12.51	0.83
	127.25-132.25	129.8	183.2	<2.22	1.32	2.57	0.97	3.25	0.24	<0.56	<3.06	<0.56	<1.67	<0.6	0.83	1.18	10.42	0.69
	132.5-137.5	135.0	177.2	<2.08	1.17	2.14	0.84	2.52	<0.10	<0.52	<3.05	<0.52	<1.82	<0.5	0.84	1.17	9.74	0.49
	137.75-142.75	140.3	170.9	<2.08	<1.04	2.14	0.52	2.39	0.23	<0.52	<3.05	<0.52	<1.82	<0.5	0.91	0.49	9.74	0.49
	143-148	145.5	168.0	<2.08	1.10	2.01	0.78	2.13	0.03	<0.52	<3.05	<0.52	<1.82	<0.5	0.71	0.91	9.09	0.48
	148.25-153.25	150.8	136.5	<2.08	<1.04	0.57	<1.30	0.50	<0.10	<0.52	<3.05	<0.52	<1.82	<0.5	0.20	<1.3	1.62	<1.3
	153.5-158.5	156.0	147.3	<2.08	0.62	1.03	0.33	1.48	0.29	<0.52	<3.05	<0.52	<1.82	<0.5	0.38	0.48	4.28	<1.3
	153.5-158.5	156.0	169.7	<2.08	<1.04	1.88	0.71	1.67	0.16	<0.52	<3.05	<0.52	<1.82	<0.52	0.60	1.04	9.09	0.49
MW-008-060	11.5-16.5	14.0	151.6	<2.22	1.25	1.59	0.67	1.23	0.24	<0.55	<3.05	<0.55	<1.66	<0.6	0.27	0.32	4.44	0.26
	16.75-21.75	19.3	184.3	<2.15	1.80	2.70	1.39	3.86	0.38	<1.39	<0.53	<0.53	<1.66	<0.5	0.48	0.69	9.01	0.55
	22-27	24.5	246.8	<2.15	2.91	5.12	2.50	5.67	0.66	0.21	<3.05	<0.53	<1.66	<0.5	0.90	1.18	15.25	0.97
	27.25-32.25	29.8	344.0	<2.15	4.16	9.63	3.74	11.56	1.21	0.42	<3.05	<0.53	<1.66	<0.5	1.39	1.87	29.11	1.87
	32.5-37.5	34.8	526.9	1.04	7.15	16.82	7.15	19.93	2.50	0.57	<3.05	<0.52	<1.82	<0.5	2.79	3.44	57.17	3.05
	37.75-42.75	40.3	896.4	2.01	9.75	24.62	13.64	34.87	4.65	1.17	<3.05	<0.52	<1.82	<0.5	4.29	7.15	103.95	5.91
	43-48	45.5	1276.0	1.69	18.84	41.51	19.49	55.66	6.72	1.56	<3.05	<0.52	<1.82	<0.5	7.15	10.40	149.43	9.10
	48.25-53.25	50.8	1260.0	2.01	16.89	42.81	17.54	51.76	7.37	1.75	<3.05	<0.52	<1.82	<0.5	7.15	9.75	149.43	9.10
	53.5-58.5	56.0	286.7	<2.08	2.92	6.43	3.05	8.88	1.20	<0.52	<3.05	<0.52	<1.82	<0.5	1.04	1.49	22.09	1.36
MW-008-110	61.5-66.5	64.0	340.1	<2.21	3.39	7.53	3.11	9.45	1.21	0.34	<3.04	<0.55	<1.66	<0.6	1.31	1.80	26.27	1.80
	66.75-71.75	69.3	550.1	0.83	4.98	13.75	5.67	17.75	2.32	0.44	<3.04	<0.55	<1.66	<0.6	2.49	4.01	56.68	3.11
	72-77	74.5	670.3	0.69	6.36	15.82	6.91	22.59	1.90	0.56	<3.04	<0.55	<1.66	<0.6	3.04	5.25	65.67	4.98
	77.25-82.25	79.8	337.8	1.11	3.73	8.22	3.04	10.14	1.07	0.39	<3.04	<0.55	<1.66	<0.6	1.52	2.00	27.65	1.73
	82.5-87.5	85.0	571.8	0.84	5.51	14.20	5.58	17.95	1.91	0.62	<3.05	<0.52	<1.82	<0.5	2.59	4.09	56.42	3.76
	87.75-92.75	90.3	549.7	0.91	6.49	15.50	5.90	17.95	2.04	<0.52	<3.05	<0.52	<1.82	<0.5	2.79	3.89	49.94	3.63
	93-98	95.5	534.6	0.71	5.25	13.55	5.32	16.65	2.50	<0.52	<3.05	<0.52	<1.82	<0.5	2.46	3.83	51.24	3.11
	98.25-103.25	100.8	429.9	<2.08	3.89	10.96	4.28	13.41	1.39	0.40	<3.05	<0.52	<1.82	<0.5	1.75	3.18	42.16	2.14
	103.5-108.5	106.0	294.6	<2.08	2.85	6.42	2.59	7.57	0.88	0.34	<3.05	<0.52	<1.82	<0.5	1.30	1.88	22.05	1.43
MW-008-160	111.5-116.5	114.0	185.5	<2.22	1.18	2.28	0.97	2.27	<0.10	<0.55	<3.05	<0.55	<1.66	<0.6	0.76	0.97	9.00	0.83
	116.75-121.75	119.3	190.9	<2.22	1.25	2.76	0.69	2.41	<0.10	<0.55	<3.05	<0.55	<1.66	<0.6	0.83	0.90	10.38	0.76
	122-127	124.5	228.2	<2.22	1.73	3.66	1.52	3.72	0.38	<0.55	<3.05	<0.55	<1.66	<0.6	1.25	1.66	15.23	0.97
	127.25-132.25	129.8	188.0	<2.22	1.32	2.35	0.97	2.20	<0.10	<0.55	<3.05	<0.55	<1.66	<0.6	0.90	1.18	10.38	0.53
	132.5-137.5	135.0	209.5	<2.08	1.43	3.37	1.17	4.33	0.29	<0.52	<3.05	<0.52	<1.82	<0.5	1.30	1.75	15.58	0.91
	137.75-142.75	140.3	217.8	<2.08	1.43	3.50	1.43	3.75	0.42	0.19	<3.05	<0.52	<1.82	<0.5	1.23	1.88	16.23	1.10
	143-148	145.5	183.3	<2.08	<1.04	2.53	1.04	2.97	0.29	0.21	<3.05	<0.52	<1.82	<0.5	0.91	1.43	11.68	0.78
	148.25-153.25	150.8	174.9	<2.08	<1.04	2.07	0.84	2.13	0.23	<0.52	<3.05	<0.52	<1.82	<0.5	0.71	0.91	9.74	0.64
	153.5-158.5	156.0	136.5	<2.08	<1.04	0.97	0.33	0.76	<0.10	<0.52	<3.05	<0.52	<1.82	<0.5	0.30	0.36	3.76	<0.5

Table 12. Passive Flux Meter Results – PFAS Mass Flux
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Depth interval (ft bgs)	Center Point of PFM Location (ft bgs)	Perfluorooctane sulfonic acid (PFOS) (µg/m²/day)	Perfluorononane sulfonic acid (PFNS) (µg/m²/day)	Perfluorodecane sulfonic acid (PFDS) (µg/m²/day)	Perfluorododecane sulfonic acid (PFDOS) (µg/m²/day)	4:2 Fluorotelomer sulfonate (4:2 FTS) (µg/m²/day)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (µg/m²/day)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (µg/m²/day)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (µg/m²/day)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (µg/m²/day)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (µg/m²/day)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (µg/m²/day)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (µg/m²/day)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (µg/m²/day)	Perfluorooctane sulfonamide (PFOSA) (µg/m²/day)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (µg/m²/day)
MW-006-110	61.5-66.5	64.0	83.60	<0.5	<0.5	<0.5	<2.1	0.17	1.18	<0.6	0.84	<5.6	<0.3	0.77	<5.6	0.58	<5.3
	66.75-71.75	69.3	167.21	0.18	<0.5	<0.5	<2.1	11.32	3.48	<0.6	1.67	<5.6	<0.3	1.60	<5.6	1.11	<5.3
	72-77	74.5	348.35	0.33	<0.5	<0.5	<2.1	22.47	7.66	<0.6	3.27	<5.6	<0.3	3.69	<5.6	2.16	<5.3
	77.25-82.25	79.8	271.72	0.22	<0.5	<0.5	<2.1	22.47	6.27	<0.6	3.07	<5.6	<0.3	2.44	<5.6	1.74	<5.2
	77.25-82.25	79.8	97.54	<0.54	<0.54	<0.54	<2.09	16.90	2.30	<0.56	1.11	<5.57	<0.28	0.77	<5.57	0.54	<5.29
	82.5-87.5	85.0	292.89	0.29	<0.5	<0.5	<2.0	20.34	5.27	<0.5	2.80	<5.2	<0.3	3.51	<5.2	1.95	<4.9
	87.75-92.75	90.3	325.43	0.31	<0.5	<0.5	<2.0	32.71	7.16	<0.5	3.32	<5.2	<0.3	3.06	<5.2	2.28	<4.9
	93-98	95.5	247.33	0.23	<0.5	<0.5	<2.0	16.43	6.31	<0.5	3.45	<5.2	<0.3	2.54	<5.2	1.82	<4.9
	98.25-103.25	100.8	312.41	0.35	<0.5	<0.5	<2.0	35.96	7.81	<0.5	3.19	<5.2	<0.3	3.45	<5.2	2.21	<4.9
	103.5-108.5	106.0	162.72	<0.5	<0.5	<0.5	<2.0	10.58	3.58	<0.5	2.02	<5.2	<0.3	2.02	<5.2	1.24	<4.9
MW-006-160	111.5-116.5	114.0	23.01	<0.5	<0.5	<0.5	<2.1	3.66	<2.2	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	0.19	<5.3
	116.75-121.75	118.8	30.68	<0.5	<0.5	<0.5	<2.1	4.36	<2.1	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	0.24	<5.2
	122-127	124.5	35.56	<0.5	<0.5	<0.5	<2.1	8.54	<2.2	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	0.27	<5.3
	127.25-132.25	129.8	23.01	<0.5	<0.5	<0.5	<2.1	2.96	<2.2	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	0.18	<5.3
	132.5-137.5	135.0	33.89	<0.5	<0.5	<0.5	<2.0	9.29	1.30	<0.5	0.29	<5.2	<0.3	<0.5	<5.2	<0.3	<5.0
	137.75-142.75	140.3	50.83	<0.5	<0.5	<0.5	<2.0	7.98	1.24	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	0.47	<5.0
	143-148	145.5	45.62	<0.5	<0.5	<0.5	<2.0	13.85	1.56	<0.5	0.51	<5.2	<0.3	<0.5	<5.2	<0.3	<5.0
	148.25-153.25	150.8	41.71	<0.5	<0.5	<0.5	<2.0	6.03	1.50	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	0.46	<5.0
	153.5-158.5	156.0	20.20	<0.5	<0.5	<0.5	<2.0	1.47	<2.0	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	<0.3	<5.0
MW-007-060	11.5-16.5	14.0	76.72	<0.5	<0.5	<0.5	<2.1	178.03	2.30	<0.6	0.98	<5.6	<0.3	0.77	<5.6	0.67	<5.2
	16.75-21.75	19.3	48.13	<0.5	<0.5	<0.5	<2.1	6.45	1.88	<0.6	0.54	<5.6	<0.3	0.37	<5.6	0.45	<5.2
	22-27	24.5	97.65	<0.5	<0.5	<0.5	<2.0	12.73	3.56	<0.6	1.26	<5.6	<0.3	1.12	<5.6	0.84	<5.2
	27.25-32.25	29.8	41.15	<0.5	<0.5	<0.5	<2.1	5.06	1.39	<0.6	0.58	<5.6	<0.3	0.36	<5.6	0.45	<5.2
	32.5-37.5	35.0	143.13	<0.5	<0.5	<0.5	<2.0	19.03	4.23	<0.5	1.95	<5.2	<0.3	2.08	<5.2	1.30	<4.9
	37.75-42.75	40.3	370.84	0.44	<0.5	<0.5	<2.0	35.95	11.06	<0.5	4.81	<5.2	<0.3	5.20	<5.2	3.32	<4.9
	43-48	45.5	559.51	0.51	<0.5	<0.5	<2.0	61.97	15.61	<0.5	6.12	<5.2	<0.3	7.81	<5.2	4.75	<4.9
	48.25-53.25	50.8	188.67	<0.5	<0.5	<0.5	<2.0	17.08	4.36	<0.5	2.08	<5.2	<0.3	2.47	<5.2	1.43	<4.9
	53.5-58.5	56.0	149.64	<0.5	<0.5	<0.5	<2.0	8.62	3.45	<0.5	1.63	<5.2	<0.3	1.76	<5.2	0.98	<4.9
MW-007-110	61.5-66.5	64.0	173.59	<0.5	<0.5	<0.5	<2.1	18.23	3.33	<0.6	1.67	<5.6	<0.3	2.22	<5.6	1.18	<5.2
	66.75-71.75	69.3	194.42	0.30	<0.5	<0.5	<2.1	20.31	5.55	<0.6	2.01	<5.6	<0.3	2.78	<5.6	1.39	<5.3
	72-77	74.5	326.35	0.29	<0.5	<0.5	2.01	36.28	6.94	<0.5	3.61	<5.3	<0.3	3.12	<5.3	2.29	<5.1
	77.25-82.25	79.8	194.42	0.19	<0.5	<0.5	<2.1	14.06	4.93	<0.6	2.22	<5.6	<0.3	2.57	<5.6	1.25	<5.3
	77.25-82.25	79.8	180.54	<0.53	<0.53	<0.54	<2.08	16.84	3.75	<0.56	1.74	<5.55	0.10	1.87	<5.55	1.11	<5.28
	82.5-87.5	85.0	411.87	0.35	<0.5	<0.5	<2.0	25.66	8.50	<0.5	4.71	<5.2	<0.3	4.05	<5.2	2.48	<5.0
	87.75-92.75	90.3	353.03	0.30	<0.5	<0.5	<2.0	28.28	8.50	<0.5	3.53	<5.2	<0.3	3.79	<5.2	2.29	<5.0
	93-98	95.5	235.35	0.22	<0.5	<0.5	<2.0	18.47	5.03	<0.5	2.62	<5.2	<0.3	2.55	<5.2	1.57	<5.0
	98.25-103.25	100.8	209.20	<0.5	<0.5	<0.5	<2.0	17.16	3.60	<0.5	2.35	<5.2	<0.3	2.29	<5.2	1.18	<5.0
	103.5-108.5	106.0	150.36	<0.5	<0.5	<0.5	<2.0	9.97	2.55	<0.5	1.50	<5.2	<0.3	1.77	<5.2	0.92	<5.0
MW-007-160	111.5-116.5	114.0	45.17	<0.5	<0.5	<0.5	<2.1	7.12	0.69	<0.6	0.33	<5.6	<0.3	0.42	<5.6	0.23	<5.2
	116.75-121.75	118.8	47.25	<0.5	<0.5	<0.5	<2.1	4.34	0.76	<0.6	<1.1	<5.6	<0.3	<0.6	<5.6	0.30	<5.2
	122-127	124.5	56.28	<0.5	<0.5	<0.5	<2.1	2.26	0.83	<0.6	0.31	<5.6	<0.3	0.33	<5.6	<0.3	<5.3
	127.25-132.25	129.8	37.52	<0.5	<0.5	<0.5	<2.1	3.65	0.76	<0.6	0.37	<5.6	<0.3	0.33	<5.6	0.17	<5.3
	132.5-137.5	135.0	33.75	<0.5	<0.5	<0.5	<1.9	9.25	<2.0	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	0.26	<4.9
	137.75-142.75	140.3	31.81	<0.5	<0.5	<0.5	<1.9	6.00	2.01	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	0.26	<4.9
	143-148	145.5	27.91	<0.5	<0.5	<0.5	<1.9	6.65	2.01	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	<1.3	<4.9
	148.25-153.25	150.8	5.06	<0.5	<0.5	<0.5	<1.9	4.06	<5.2	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	<1.3	<4.9
	153.5-158.5	156.0	11.68	<0.5	<0.5	<0.5	<1.9	6.00	<5.2	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	<1.3	<4.9
	153.5-158.5	156.0	29.86	<0.45	<0.50	<0.51	<1.95	9.90	0.58	<0.52	<1.04	<5.19	<0.26	<0.52	<5.19	<0.26	<4.87
MW-008-060	11.5-16.5	14.0	20.10	<0.5	<0.5	<0.5	<2.1	0.87	0.57	<0.6	<1.1	<5.5	<0.3	0.32	<5.5	<0.3	<5.3
	16.75-21.75	19.3	45.05	<0.5	<0.5	<0.5	<2.0	4.33	1.11	<0.5	0.59	<5.3	<0.3	<0.5	<5.3	0.35	<5.1
	22-27	24.5	83.17	<0.5	<0.5	<0.5	<2.0	9.18	2.50	<0.5	0.83	<5.3	<0.3	0.69	<5.3	0.68	<5.1
	27.25-32.25	29.8	145.55	<0.5	<0.5	<0.5	<2.0	11.26	4.92	<0.5	1.52	<5.3	<0.3	1.59	<5.3	1.25	<5.1
	32.5-37.5	34.8	253.38	0.23	<0.5	<0.5	<1.9	27.45	6.50	<0.5	3.25	<5.2	<0.3	3.83	<5.2	2.34	<4.9
	37.75-42.75	40.3	493.77	0.58	<0.5	<0.5	<1.9	48.89	15.59	<0.5	6.37	<5.2	<0.3	6.43	<5.2	4.48	<4.9
	43-48	45.5	714.66	0.65	<0.5	<0.5	<1.9	81.37	24.69	<0.5	10.40	<5.2	0.21	11.04	1.49	7.15	<4.9
	48.25-53.25	50.8	714.66	0.71	0.25	<0.5	<1.9	81.37	20.79	<0.5	8.45	<5.2	0.31	9.75	1.62	6.30	<4.9
	53.5-58.5	56.0	97.45	<0.5	<1.3	<0.5	<1.9	23.55	3.70	<0.5	1.10	<5.2	<0.3	1.23	<5.2	1.04	<4.9
MW-008-110	61.5-66.5	64.0	152.08	<0.5	<0.5	<0.5	<2.1	7.78	2.42	<0.6	1.94	<5.5	<0.3	1.11	<5.5	1.04	<5.3
	66.75-71.75	69.3	283.42	0.32	<0.5	<0.5	<2.1	25.75	5.60	<0.6	3.04	<5.5	<0.3	3.04	<5.5	2.00	<5.3
	72-77	74.5	373.29	0.27	<0.5	<0.5	<2.1	29.21	8.30	<0.6	3.80	<5.5	<0.3	4.08	<5.5	2.70	<5.3
	77.25-82.25	79.8	145.17	<0.5	<0.5	<0.5	<2.1	8.47	3.80	<0.6	1.66	<5.5	<0.3	1.59	<5.5	1.11	<5.3
	82.5-87.5	85.0	317.79	0.31	<0.5	<0.5	<1.9	17.67	6.10	<0.5	3.31	<5.2	<0.3	2.98	<5.2	2.08	<4.9
	87.75-92.75	90.3	291.85	0.36	0.25	<0.5	<1.9	24.16	7.78	<0.5	3.11	<5.2	<0.3	3.18	<5.2	1.88	<4.9
	93-98	95.5	278.88	0.28	<0.5	<0.5	<1.9	28.05	6.42	<0.5	3.18	<5.2	<0.3	3.18	<5.2	1.75	<4.9
	98.25-103.25	100.8	201.05	0.23	<0.5	<0.5	<1.9	24.16	4.86	<0.5	2.33	<5.2	<0.3	2.59	<5.2	1.36	<4.9
	103.5-108.5	106.0	123.23	<0.5	<0.5	<0.5	<1.9	7.94	3.76	<0.5	1.10	<5.2	<0.3	1.36	<5.2	0.84	<4.9
MW-008-160	111.5-116.5	114.0	41.54	<0.5	<0.5	<0.5	<2.1	5.71	0.64	<0.6	0.33	<5.5	<0.3	<0.6	<5.5	0.19	<5.3
	116.75-121.75	119.3	49.16	<0.5	<0.5	<0.5	<2.1	<0.17	<2.1	<0.6	0.31	<5.5	<0.3	<0.6	<5.5	<0.3	<5.3
	122-127	124.5	63.00	<0.5	<0.5	<0.5	<2.1	13.33	<2.1	<0.6	0.51	<5.5	<0.3	<0.6	<5.5	0.39	<5.3
	127.25-132.25	129.8	39.46	<0.5	<0.5	<0.5	<2.1	6.40	<2.1	<0.6	<1.1	<5.5	<0.3	<0.6	<5.5	<0.3	<5.3
	132.5-137.5	135.0	53.87	<0.5	<0.5	<0.5	<1.9	11.84	1.17	<0.5	0.39	<5.2	<0.3	0.31	<5.2	0.39	<4.9
	137.75-142.75	140.3	55.17	<0.5	<0.5	<0.5	<1.9	17.69	1.62	<0.5	0.41	<5.2	<0.3	<0.5	<5.2	0.36	<4.9
	143-148	145.5	39.59	<0.5	<0.5	<0.5	<1.9	8.60	0.91	<0.5	0.31	<5.2	<0.3	0.29	<5.2	0.28	<4.9
	148.25-153.25	150.8	30.50	<0.5	<0.5	<0.5	<1.9	12.49	0.84	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	0.24	<4.9
	153.5-158.5	156.0	10.38	<0.5	<0.5	<0.5	<1.9	2.76	<2.0	<0.5	<1.0	<5.2	<0.3	<0.5	<5.2	<0.3	<4.9

Table 12. Passive Flux Meter Results – PFAS Mass Flux
Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P
Eielson Air Force Base, Alaska

Well ID	Depth interval (ft bgs)	Center Point of PFM Location (ft bgs)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (µg/m²/day)	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA) (µg/m²/day)	Perfluoro-4-Methoxybutanic acid (PFMBA) (µg/m²/day)	Perfluoro-3-methoxypropanoic aci (PFMPA) (µg/m²/day)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (µg/m²/day)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (µg/m²/day)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (µg/m²/day)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (µg/m²/day)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (µg/m²/day)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (µg/m²/day)
MW-006-110	61.5-66.5	64.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	66.75-71.75	69.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	72-77	74.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	77.25-82.25	79.8	<5.5	<5.5	<2.2	<2.2	<5.2	<5.2	<2.0	<5.5	<27.9	<27.9
	77.25-82.25	79.8	<5.57	<5.57	<2.23	<2.23	<5.29	<5.23	<1.95	<5.57	<27.87	<27.87
	82.5-87.5	85.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	87.75-92.75	90.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	93-98	95.5	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	98.25-103.25	100.8	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	103.5-108.5	106.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
MW-006-160	111.5-116.5	114.0	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	116.75-121.75	118.8	<5.5	<5.5	<2.2	<2.2	<5.2	<5.2	<2.0	<5.5	<27.2	<27.2
	122-127	124.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	127.25-132.25	129.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<2.0	<5.6	<27.9	<27.9
	132.5-137.5	135.0	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.1	<26.1
	137.75-142.75	140.3	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.1	<26.1
	143-148	145.5	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.1	<26.1
	148.25-153.25	150.8	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.1	<26.1
	153.5-158.5	156.0	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.1	<26.1
MW-007-060	11.5-16.5	14.0	<5.5	<5.5	<2.2	<2.2	<5.2	<5.2	<2.0	<5.5	<27.2	<27.2
	16.75-21.75	19.3	<5.5	<5.5	<2.2	<2.2	<5.2	<5.2	<2.0	<5.5	<27.9	<27.9
	22-27	24.5	<5.4	<5.4	<2.2	<2.2	<5.2	<5.1	<2.0	<5.4	<27.2	<27.2
	27.25-32.25	29.8	<5.5	<5.5	<2.2	<2.2	<5.2	<5.2	<2.0	<5.5	<27.2	<27.2
	32.5-37.5	35.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	37.75-42.75	40.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	43-48	45.5	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	48.25-53.25	50.8	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	53.5-58.5	56.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
MW-007-110	61.5-66.5	64.0	<5.5	<5.5	<2.2	<2.2	<5.2	<5.1	<1.9	<5.5	<27.1	<27.1
	66.75-71.75	69.3	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	72-77	74.5	<5.3	<5.3	<2.2	<2.2	<5.1	<5.0	<1.9	<5.3	<26.4	<26.4
	77.25-82.25	79.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	77.25-82.25	79.8	<5.55	<5.55	<2.22	<2.22	<5.28	<5.21	<1.94	<5.55	<27.77	<27.77
	82.5-87.5	85.0	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.2	<26.2
	87.75-92.75	90.3	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.2	<26.2
	93-98	95.5	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.2	<26.2
	98.25-103.25	100.8	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.2	<26.2
	103.5-108.5	106.0	<5.2	<5.2	<2.1	<2.1	<5.0	<4.9	<1.8	<5.2	<26.2	<26.2
MW-007-160	111.5-116.5	114.0	<5.5	<5.5	<2.2	<2.2	<5.2	<5.1	<1.9	<5.5	<27.1	<27.1
	116.75-121.75	118.8	<5.5	<5.5	<2.2	<2.2	<5.2	<5.1	<1.9	<5.5	<27.8	<27.8
	122-127	124.5	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	127.25-132.25	129.8	<5.6	<5.6	<2.2	<2.2	<5.3	<5.2	<1.9	<5.6	<27.8	<27.8
	132.5-137.5	135.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	137.75-142.75	140.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	143-148	145.5	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	148.25-153.25	150.8	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	153.5-158.5	156.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	153.5-158.5	156.0	<5.13	<5.13	<2.08	<2.08	<4.87	<4.80	<1.82	<5.13	<25.96	<25.96
MW-008-060	11.5-16.5	14.0	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	16.75-21.75	19.3	<5.3	<5.3	<2.1	<2.1	<5.1	<5.0	<1.9	<5.3	<26.3	<26.3
	22-27	24.5	<5.4	<5.4	<2.1	<2.1	<5.1	<5.1	<1.9	<5.4	<27.0	<27.0
	27.25-32.25	29.8	<5.4	<5.4	<2.1	<2.1	<5.1	<5.1	<1.9	<5.4	<26.3	<26.3
	32.5-37.5	34.8	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	37.75-42.75	40.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	43-48	45.5	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	48.25-53.25	50.8	<5.1	<5.1	<2.0	<2.0	<4.9	<4.7	<1.8	<5.1	<25.3	<25.3
	53.5-58.5	56.0	<5.1	<5.1	<2.0	<2.0	<4.9	<4.7	<1.8	<5.1	<25.3	<25.3
MW-008-110	61.5-66.5	64.0	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	66.75-71.75	69.3	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	72-77	74.5	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	77.25-82.25	79.8	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	82.5-87.5	85.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
	87.75-92.75	90.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<25.9	<25.9
	93-98	95.5	<5.1	<5.1	<2.1	<2.1	<4.9	<4.8	<1.8	<5.1	<25.9	<25.9
	98.25-103.25	100.8	<5.1	<5.1	<2.1	<2.1	<4.9	<4.8	<1.8	<5.1	<25.9	<25.9
	103.5-108.5	106.0	<5.1	<5.1	<2.1	<2.1	<4.9	<4.8	<1.8	<5.1	<25.3	<25.3
MW-008-160	111.5-116.5	114.0	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	116.75-121.75	119.3	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	122-127	124.5	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	127.25-132.25	129.8	<5.5	<5.5	<2.2	<2.2	<5.3	<5.2	<1.9	<5.5	<27.7	<27.7
	132.5-137.5	135.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	137.75-142.75	140.3	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0
	143-148	145.5	<5.1	<5.1	<2.1	<2.1	<4.9	<4.8	<1.8	<5.1	<26.0	<26.0
	148.25-153.25	150.8	<5.1	<5.1	<2.1	<2.1	<4.9	<4.8	<1.8	<5.1	<26.0	<26.0
	153.5-158.5	156.0	<5.2	<5.2	<2.1	<2.1	<4.9	<4.9	<1.8	<5.2	<26.0	<26.0

Notes:

[1]Total PFAS is the total PFAS mass flux calculated by summing the mass flux of all 40 constituents analyzed. Non-detects assumed to be equal to the LOD.

Parent sample IDs to field duplicate samples are shown in brackets

µg/m^2/day = micrograms per square meter per day

ft bgs = feet below ground surface

< = less than the limit of detection shown

LOD = limit of detection

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Appendix A

Field Records

A1: Photographic Log

A2: Weekly Field Reports

A3: Boring Logs

A4: Well Development Logs

A5: Groundwater Gauging and Sampling Logs

A6: Slug Test Field Logs

A7: PFM Sampling Logs

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Photo 1: Well cluster locations CACMW-001, CACMW-002, and CACMW-003 cleared of brush.

Photo 2: Northern Sonic set up at CACMW-001 well cluster.

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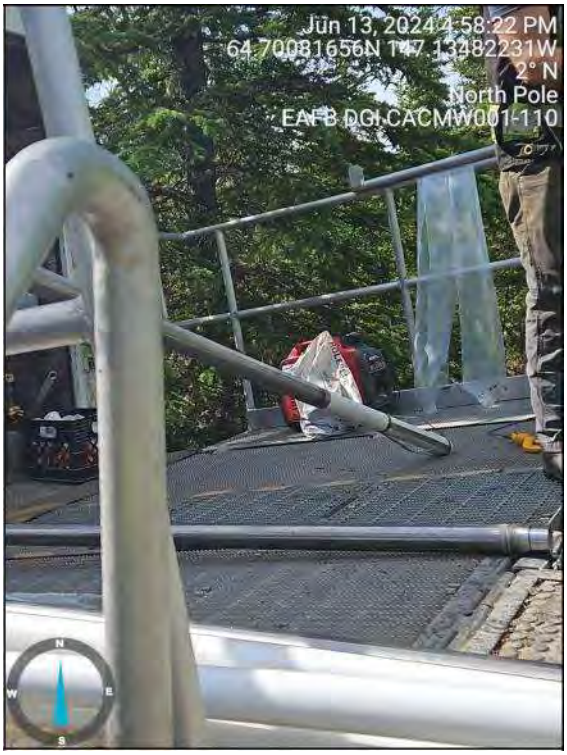

Photo 3: Sump and centralizer installed on CACMW-001-110.

Photo 4: Well cluster CACMW-001 completed with stick up monuments set in grout.

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Photo 5: Northern Sonic set up at CACMW-002 well cluster.

Photo 6: Soil cuttings stored in the onsite secondary containment.

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Photo 1: Northern Sonic decontaminating drill tooling before moving drill rig tooling.

Photo 2: CACMW-005-160 soil recovery laid out for logging and sampling.

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Photo 3: CACMW-005 well cluster.

Photo 4: Northern Sonic leveling the ground around CACMW-007 cluster to accommodate sonic drill rig and support vehicles.

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Photo 5: CACMW-007 well cluster.

Photo 6: A-A 8(a) JV preparing to develop CACMW-001-060 with inertia pump.

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Photo 3: Northern Sonic drilling CACMW-004-160.

Photo 4: Northern Sonic loading bulk bags of drill cuttings into 20-CY container.

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Photo 5: A-A 8(a) JV field team developing CACMW-004-060.

Photo 6: Bollards installed around CACMW clusters -005, -006, -007, and -008.

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Photo 1: A-A 8(a) JV field team collecting turbidity sample from CACMW-004-110

Photo 2: A-A 8(a) JV field team measuring depth to water during well development at CACMW-008-060.

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Photo 3: Purge water generated during well development of CACMW-005-160.

Photo 4: 20-ton soil IDW container staged at LF003 Cell #1; container label on front of trailer.

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Photo 1: A-A 8(a) JV field team sampling CACMW-001-160.

Photo 2: A-A 8(a) JV field team measuring Ferrous Iron using the Hach DR900 at CACMW-005-060.

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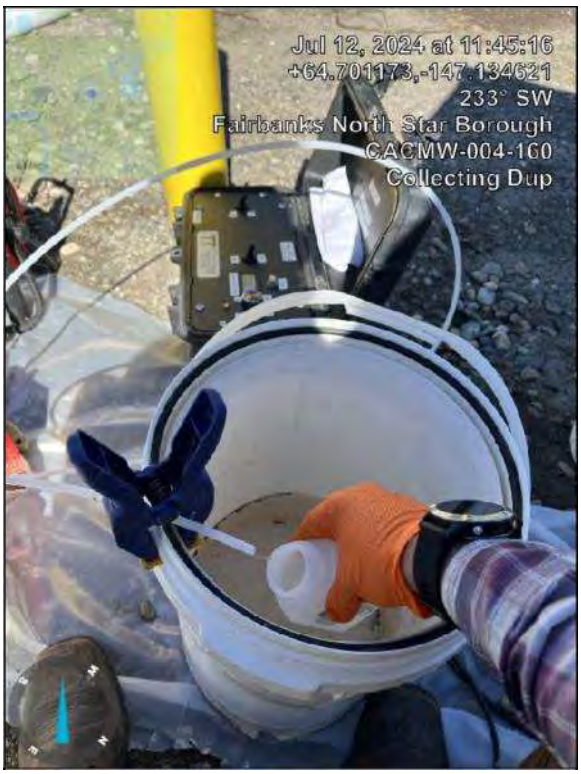

Photo 3: A-A 8(a) JV field team collecting duplicate sample at CACMW-004-160.

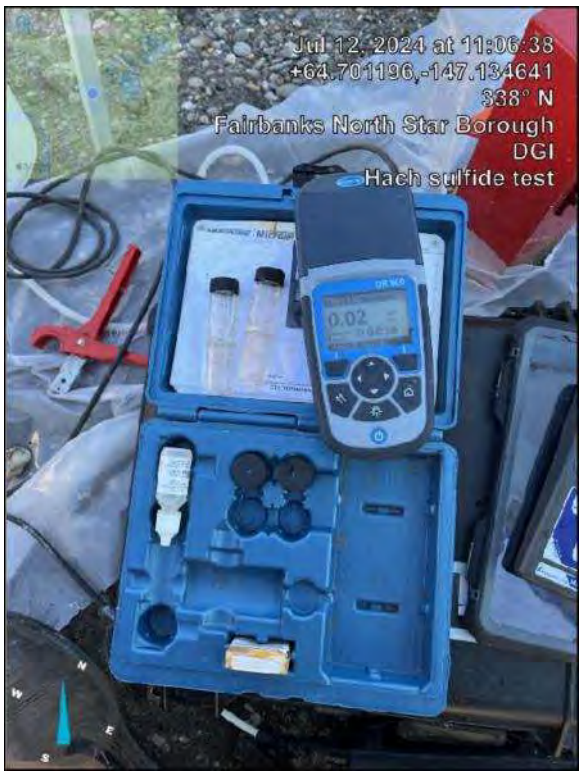

Photo 4: A-A 8(a) JV field team measuring Sulfide using the Hach DR900.

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Photo 1: A-A 8(a) JV field team collecting an equipment blank sample at the conclusion of the groundwater sampling effort.

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Photo 1: Pneumatic slug test manifold set up at CACMW-001-060.

Photo 2: A-A 8(a) JV field team deploying inflatable packers for slug test.

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Photo 3: Pneumatic slug test pressure transducer data plot.

Photo 4: Design Alaska performing monitoring well top-of-casing elevation survey.

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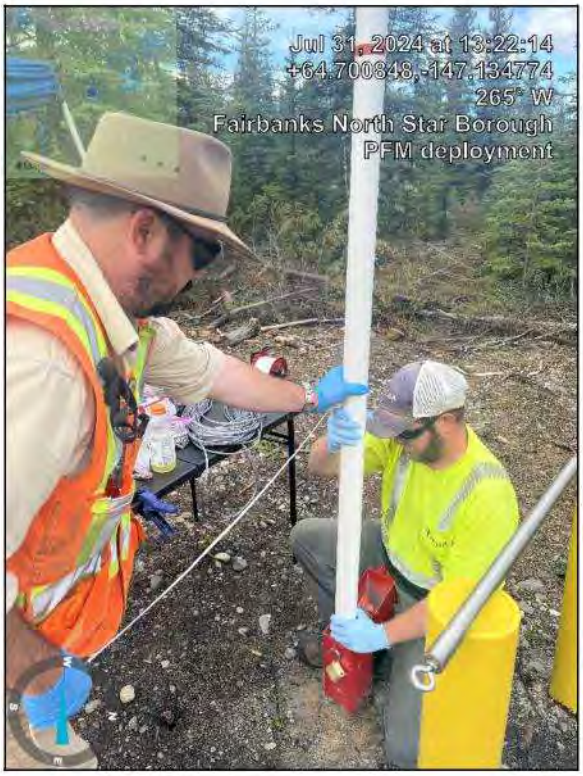

Photo 1: A-A 8(a) JV field team deploying PFM.

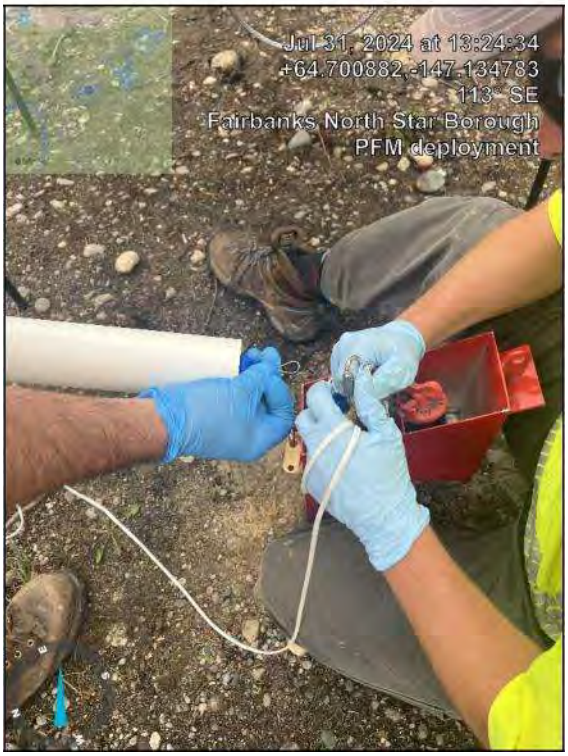

Photo 2: A-A 8(a) JV field team linking PFMs for deployment.

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Photo 3: Stainless steel weight set at the top of the PFM string to aid with PFM deployment.

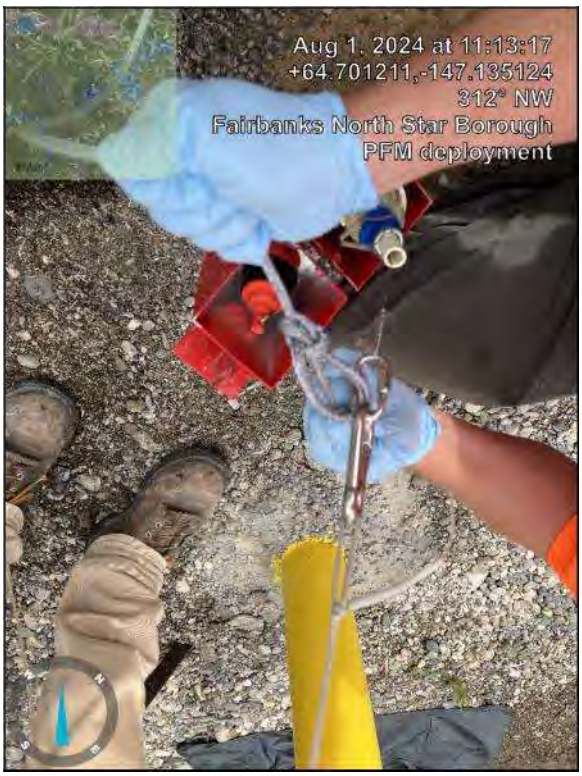

Photo 4: A-A 8(a) JV field team securing PFM string to Kevlar rope tether prior to deployment.

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Photo 1: Field team retrieving PFM from CACMW-001-110.

Photo 2: Collecting resin from PFM for homogenization and sample collection.

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Photo 3: Collecting GAC from PFM for homogenization and sample collection.

Photo 4: Damaged PFM retrieved from CACMW-002-160; the only damaged PFM out of 120 retrieved.

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Photo 5: Field team collecting GAC and resin from PFMs for homogenization and sample collection.

Photo 6: Excess GAC and resin (solid IDW) generated during PFM retrieval and sampling.

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Photo 1: Field team tethering two PFMs together for deployment.

Photo 2: Stainless steel weight placed at the top of the PFM string to assist deployment at target depth.

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Photo 3: Field team preparing to deploy PFMs to CACMW-007-110.

Photo 4: Field team preparing to deploy PFMs.

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Photo 1: Retrieving PFM from CACMW-001-060.

Photo 2: Tethering PFM's remaining in well to bollard to enable secure removal of the top PFM.

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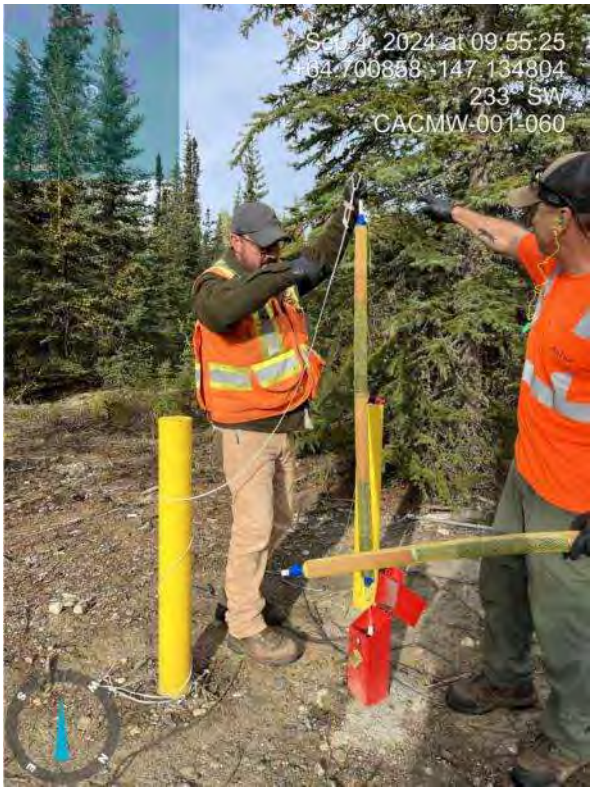

Photo 3: Retrieving second PFM from CACMW-001-060.

Photo 4: Preparing to collect resin sample from PFM retrieved from CACMW-003-060.

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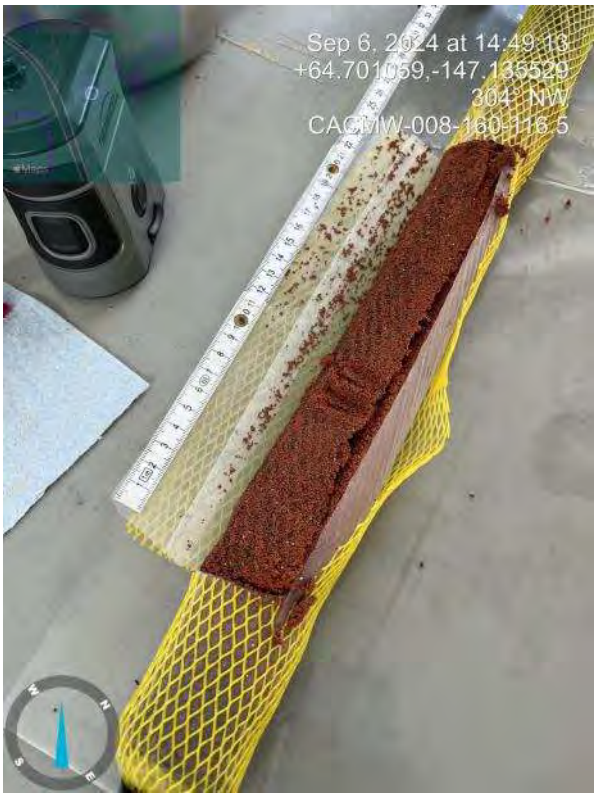

Photo 5: Black staining observed on resin in PFM deployed in CACMW-008-160

Photo 6: Collecting resin sample from PFM retrieved from CACMW-008-160.

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Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Construction for PFAS, Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-01	06/10/24-06/15/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat, safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

06/10/24:

- A-A 8(a) JV and Northern Sonic field team reviewed and discussed the site health and safety plan.
- The field team performed mobilization and site preparation activities:
  - Mobilization of personnel, equipment, and materials.
  - Brush clearing to accommodate drill rig, support vehicles, and equipment at drilling locations.
  - Prepared laydown area; soil logging shelter, 20 CY soil cuttings container, and IDW containment.
  - A portable toilet was delivered to the project location.
- Northern Sonic drill rig set up at CACMW-001 well cluster.

06/11/24:

- Reviewed site health and safety plan and conducted tailgate safety meeting.
- The field team continued site preparation activities.
- Northern Sonic advanced CACMW-001-160 soil boring.
- A-A 8(a) JV logged soil lithology and collected analytical and geotechnical soil samples from CACMW-001-160 boring.

06/12/24

- Northern Sonic attempted to install monitoring well CACMW-001-160, however bentonite bridging occurred at the uppermost centralizer, approx. 40 feet below ground surface, and the well was inadvertently lifted seven feet when attempting to release the bridged bentonite. The well was decommissioned, in accordance with DEC Monitoring Well Guidance; the screen was filled with sand and the riser and remaining borehole were sealed with bentonite up to ground surface.
- The Air Force approved a deviation from the Performance Work Statement regarding monitoring well centralizer frequency and spacing. The number of centralizers installed on monitoring wells will be reduced to two centralizers per well, to mitigate the installation challenges that were encountered at CACMW-001-160 on subsequent well locations. One centralizer will be installed at the base of the screen and one centralizer will be installed 10 to 15 feet down from the top of the screen.
- Northern Sonic stepped out 5 feet, parallel to the injection well transect, to advance a boring for a second attempt at installing CACMW-001-160.

06/13/24

- Northern Sonic installed monitoring wells CACMW-001-160 and CACMW-001-110.
- After installing several wells, “pre-development surging” was deemed unnecessary for settling the sand filter pack, as vibration from the sonic drill rig appeared to adequately settle the sand pack.

06/14/24

- Northern Sonic installed monitoring well CACMW-001-060 and advanced a soil boring at CACMW-002-160.
- A-A 8(a) JV logged soil lithology and collected analytical and geotechnical soil samples from CACMW-002-160.

06/15/24

- Northern Sonic installed monitoring well CACMW-002-160, CACMW-002-110, CACMW-002-060, and set up at CACMW-003-160.
- A-A 8(a) JV collected analytical and geotechnical samples from CACMW-002-110.

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Nathan Hager	A-A 8(a) JV	06/10/24-06/15/24	Environmental Engineer/ FTL
Caleb Renner	A-A 8(a) JV	06/10/24-06/15/24	Geologist
Nicholas Icks	A-A 8(a) JV	06/10/24-06/15/24	Site Geologist/ Field Technical Lead
Liam Furguson	Northern Sonic	06/10/24-06/15/24	Northen Sonic Team Lead
Denzil Roberts	Northen Sonic	06/14/24-06/15/24	Lead Driller
Dillon Stock	Northern Sonic	06/10/24-06/15/24	Assistant Driller
Kevin Hansen	Northern Sonic	06/11/24-06/15/24	Assistant Driller
Adam McComb	A-A 8(a) JV	06/10/24	Geologist
Joe Domine	A-A 8(a) JV	06/10/24	Environmental Engineer

IDW TRACKING

WATER

Date	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
6/15/24	Not Assigned - EMPTY	250-gallon IBC	0	0	Onsite Secondary Containment

SOIL/SOLIDS

Date	Container ID	Container Type	Quantity (CY)	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
TOTAL 06/15/24	6234	Total In Containment	3 CY	Onsite Secondary Containment

Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-02	06/17/24-06/22/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat, safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

06/17/24:

- Northern Sonic drilled and installed monitoring wells: CACMW-003-160 and CACMW-003-110. Northern Sonic drilled CACMW-003-060 boring.
- A-A 8(a) JV logged soil lithology of soil recovered from CACMW-003-160.
- A-A 8(a) JV collected analytical and geotechnical samples from soil recovered from CACMW-003-160.

06/18/24:

- Northern Sonic drilled and installed monitoring wells: CACMW-003-060, CACMW-005-160, CACMW-005-110, and CACMW-005-060.
- A-A 8(a) JV logged soil lithology of soil recovered from CACMW-005-160.
- A-A 8(a) JV collected analytical and geotechnical samples from soil recovered from CACMW-005-160.

06/19/24

- Northern Sonic drilled and installed monitoring wells: CACMW-006-160 and CACMW-006-110.
- A-A 8(a) JV shipped analytical and geotechnical soil samples collected from CACMW-001, CACMW-002, and CACMW-003 well clusters to the Pace laboratories.
- A-A 8(a) JV logged soil lithology of soil recovered from CACMW-006-160.
- A-A 8(a) JV collected analytical and geotechnical samples from soil recovered from CACMW-006-160.

06/20/24

- Northern Sonic drilled and installed monitoring wells: CACMW-006-060, CACMW-007-160 and started drilling CACMW-007-110.
- A-A 8(a) JV logged soil lithology of soil recovered from CACMW-007-160.
- A-A 8(a) JV collected analytical and geotechnical samples from soil recovered from CACMW-007-160.

06/21/24

- Northern Sonic installed CACMW-007-110 monitoring well. Northern Sonic drilled and installed monitoring well CACMW-007-060. Northern Sonic drilled CACMW-008-160 boring.
- A-A 8(a) JV logged soil lithology of soil recovered from CACMW-008-160.
- A-A 8(a) JV collected analytical and geotechnical samples from soil recovered from CACMW-008-160.

06/22/24

- Northern Sonic installed CACMW-008-160. Northern Sonic drilled and installed monitoring wells CACMW-008-110 and CACMW-008-060.
- A-A 8(a) JV began CACMW-001-060 well development. Development at CACMW-001-060 was paused due to equipment challenges, the inertial pump check valve detached from the tubing and is lodged at 61.28 feet bgs (inside the 2-foot sump). Efforts to recover the inertial pump check valve are in progress.

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Nathan Hager	A-A 8(a) JV	06/17/24-06/22/24	Environmental Engineer/ FTL
Caleb Renner	A-A 8(a) JV	06/17/24-06/22/24	Geologist

Nicholas Icks	A-A 8(a) JV	06/17/24-06/22/24	Site Geologist/ Field Technical Lead
Liam Furguson	Northern Sonic	06/17/24-06/20/24	Northen Sonic Team Lead
Denzil Roberts	Northen Sonic	06/17/24-06/22/24	Lead Driller
Dillon Stock	Northern Sonic	06/17/24-06/22/24	Assistant Driller
Kevin Hansen	Northern Sonic	06/17/24-06/22/24	Assistant Driller

IDW TRACKING

WATER

Date	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
6/17/24	6259	250-gallon IBC	100	100	Onsite Secondary Containment

SOIL/SOLIDS

Date	Container ID	Container Type	Quantity (CY)	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/17/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/18/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/19/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/20/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/21/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/22/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
TOTAL 06/22/24	6234	Total In Containment	13 CY	Onsite Secondary Containment

Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-03	06/24/24-06/29/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat, safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

06/24/24:

- Northern Sonic drilled CACMW-004-160 and CACMW-004-110. Northern Sonic installed monitoring well CACMW-004-160.
- A-A 8(a) JV logged soil lithology of soil recovered from CACMW-004-160.
- A-A 8(a) JV collected analytical and geotechnical samples from soil recovered from CACMW-004-160.

06/25/24:

- Northern Sonic drilled CACMW-004-060, and installed monitoring wells CACMW-004-110 and CACMW-004-060.
- A-A 8(a) JV continued efforts to recover the inertia pump check valve lodged in the sump below the well screen of CACMW-001-060 during initial development efforts.

06/26/24:

- A-A 8(a) JV collected a PFAS equipment blank analytical sample from the drill rig tooling.
- A-A 8(a) JV continued efforts to recover the inertia pump check valve lodged in CACMW-001-060, recovery attempts were unsuccessful; the inertia pump check valve remains abandoned in the CACMW-001-060 sump below the screen.
- A-A 8(a) JV developed monitoring well CACMW-002-060.

06/27/24:

- A-A 8(a) JV and Northen Sonic transferred 1-CY bulk bags of soil IDW generated during drilling operations from the onsite secondary containment to the 20-ton open top container. US Ecology transported the 20-ton container to EAFB IDW accumulation area at LF003, Holding Cell #1.
- Northern Sonic began installation of protective bollards around monitoring well clusters.
- A-A 8(a) JV shipped analytical PFAS soil samples collected from clusters CACMW-004, CACMW-005, CACMW-006, CACMW-007, and CACMW-008 to the Pace laboratory.
- The US Air Force Project Team, US Army Corps of Engineers, Alaska Department of Environmental Conservation, and US Environmental Protection Agency visited the site for a tour.

06/28/24:

- A-A 8(a) JV developed monitoring wells CACMW-001-060, CACMW-001-110, and CACMW-001-160.
- Northern Sonic continued installation of protective bollards around monitoring well clusters.
- A-A 8(a) JV generated and transported 100-gallons of IDW water to the EAFB Wastewater Treatment System.

06/29/24:

- A-A 8(a) JV developed monitoring wells CACMW-002-160, CACMW-002-110, CACMW-003-060, CACMW-003-160, CACMW-003-110, and CACMW-004-060.
- Northern Sonic continued installation of protective bollards around monitoring well clusters.
- A-A 8(a) JV generated and transported 220-gallons of IDW water to the EAFB Wastewater Treatment System.

Eielson DGI Field Status Report

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Nathan Hager	A-A 8(a) JV	06/24/24-06/29/24	Environmental Engineer/ FTL
Caleb Renner	A-A 8(a) JV	06/24/24-06/29/24	Geologist
Nicholas Icks	A-A 8(a) JV	06/24/24-06/29/24	Site Geologist/ Field Technical Lead
Denzil Roberts	Northen Sonic	06/24/24-06/26/24	Lead Driller
Dillon Stock	Northern Sonic	06/24/24-06/29/24	Assistant Driller
Kevin Hansen	Northern Sonic	06/24/24-06/29/24	Assistant Driller
Blake Ostrem	Northern Sonic	06/27/24-06/29/24	Assistant Driller
Will Rhodes	A-A 8(a) JV	06/26/24-06/29/24	Project Manager
Andrew Weller	A-A 8(a) JV	06/27/24	Fairbanks Program Manager
Kim Heinze	A-A 8(a) JV	06/25/24 & 06/27/24	Project Technical Lead
Joe Domine	A-A 8(a) JV	06/28/24	Environmental Engineer
USAF, USACE, ADEC, and EPA project team visitors	USAF, USACE, ADEC, and EPA project team visitors	06/27/24	RPMs, Regulators, Site Visitors

IDW TRACKING

WATER: ONSITE STORAGE

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume (gal)	Location
06/17/24	6259	250-gallon IBC	100	100	Onsite Secondary Containment
06/26/24	6259	250-gallon IBC	75	175	Onsite Secondary Containment
Total 06/29/24	6259	250-gallon IBC	Total	175	Onsite Secondary Containment

WATER: TRANSFERRED TO EAFB WASTEWATER TREATMENT SYSTEM (WWTS)

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
06/28/24	6259	250-gallon IBC	100	100	WWTS Tank 2
06/29/24	6259	250-gallon IBC	220	320	WWTS Tank 2
Total 06/29/24	WWTS Tank 2	10000-gallon Tank	Total Delivered	320	WWTS Tank 2

Note: EAFB Hazardous Waste assigned one Container ID for the IBC intended to stay onsite in secondary containment accumulating liquid and for any additional IBCs used to transfer water from the site to the WWTS.

SOIL/SOLIDS

Date	Container ID	Container Type	Quantity (CY)	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/17/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/18/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/19/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/20/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/21/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/22/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/25/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/27/24	6234	All Bulk Bags Loaded Into 20 CY Connex, Total 14 CY		
06/28/24	6234	20 CY Connex	Soil IDW 20 CY Container Transported to LF003	
TOTAL 06/29/24	6234	Total In 20-ton Connex	~11 CY	LF003

Note: EAFB Hazardous Waste assigned one Container ID for the 20-ton container and all individual Bulk Bags as the Bags were eventually consolidated into one container.

Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-04	07/01/24-07/06/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat, safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

07/01/24:

- Northern Sonic completed protective bollard installation around CACMW well clusters.
- A-A 8(a) JV developed monitoring wells CACMW-004-160, CACMW-004-110, CACMW-006-060, CACMW-006-110, CACMW-006-160, and CACMW-007-060.
- A-A 8(a) JV transferred 450-gallons of IDW water to the EAFB wastewater treatment system Tank #2.

07/02/24:

- A-A 8(a) JV developed monitoring wells CACMW-007-160, CACMW-007-110, CACMW-008-160, CACMW-008-110, CACMW-008-060, and CACMW-005-060.
- A-A 8(a) JV transferred 230-gallons of IDW water to the EAFB wastewater treatment system Tank #2.

07/03/24:

- A-A 8(a) JV developed monitoring wells CACMW-005-160 and CACMW-005-110 to complete the monitoring well development task.
- A-A 8(a) JV transferred 150-gallons of IDW water to the EAFB wastewater treatment system Tank #2.
- Combination locks were installed on monitoring well covers for security. Combination locks were coded to 3578, which is the preferred EAFB monitoring well lock combination code.
- General site housekeeping was performed – accumulated garbage and disposable well development materials were removed and equipment and materials no longer required on site were removed.

07/04/24:

- No A-A 8(a) JV or subcontractor personnel onsite.

07/05/24:

- No A-A 8(a) JV or subcontractor personnel onsite.

07/06/24:

- No A-A 8(a) JV or subcontractor personnel onsite.

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Nathan Hager	A-A 8(a) JV	07/01/24-07/03/24	Environmental Engineer/ FTL
Caleb Renner	A-A 8(a) JV	07/01/24-07/03/24	Geologist
Nicholas Icks	A-A 8(a) JV	07/01/24-07/03/24	Site Geologist/ Field Technical Lead
Dillon Stock	Northern Sonic	07/01/24	Assistant Driller
Kevin Hansen	Northern Sonic	07/01/24	Assistant Driller
Will Rhodes	A-A 8(a) JV	07/01/24-07/03/24	Project Manager
Joe Domine	A-A 8(a) JV	07/01/24	Environmental Engineer

IDW Tracking

Water: Onsite Storage

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume (gal)	Location
06/17/24	6259	250-gallon IBC	100	100	Onsite Secondary Containment
06/26/24	6259	250-gallon IBC	75	175	Onsite Secondary Containment
07/01/24	6259	250-gallon IBC	175-gallons transferred to WWTS Tank #2		
Total 07/06/24	6259	250-gallon IBC	Total	0	Onsite Secondary Containment

Water: Transferred To EAFB Wastewater Treatment System (WWTS)

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
06/28/24	6259	250-gallon IBC	100	100	WWTS Tank 2
06/29/24	6259	250-gallon IBC	220	320	WWTS Tank 2
07/01/24	6259	250-gallon IBC	450	770	WWTS Tank 2
07/02/24	6259	250-gallon IBC	230	1000	WWTS Tank 2
07/03/24	6259	250-gallon IBC	150	1150	WWTS Tank 2
Total 07/06/24	WWTS Tank 2	10000-gallon Tank	Total Delivered	1150	WWTS Tank 2

Note: EAFB Hazardous Waste assigned one Container ID for the IBC intended to stay onsite in secondary containment accumulating liquid and for any additional IBCs used to transfer water from the site to the WWTS.

Soil/Solids

Date	Container ID	Container Type	Quantity (CY)	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/17/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/18/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/19/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/20/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/21/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/22/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/25/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/27/24	6234	All Bulk Bags Loaded Into 20 CY Connex, Total 14 CY		
06/28/24	6234	20 CY Connex	Soil IDW 20 CY Container Transported to LF003	
TOTAL 06/29/24	6234	Total In 20-ton Connex	~11 CY	LF003

Note: EAFB Hazardous Waste assigned one Container ID for the 20-ton container and all individual Bulk Bags as the Bags were eventually consolidated into one container.

Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-05	07/08/24-07/13/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat, safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

07/08/24:

- No A-A 8(a) JV or subcontractor personnel onsite – final preparation for baseline groundwater sample collection.

07/09/24:

- A-A 8(a) JV gauged all site monitoring wells for total depth and depth to water within a three-hour period.
- A-A 8(a) JV collected one primary groundwater sample from CACMW-001-060 and one primary groundwater sample from CACMW-001-110.

07/10/24:

- A-A 8(a) JV collected primary groundwater sample sets at CACMW-001-160, CACMW-002-060, and CACMW-003-060.

07/11/24:

- A-A 8(a) JV collected primary groundwater sample sets at CACMW-002-160, CACMW-002-110, CACMW-003-160, CACMW-003-110, CACMW-004-060, and CACMW-005-060. A MS/MSD was collected from CACMW-003-160.

07/12/24:

- A-A 8(a) JV collected primary groundwater sample sets at CACMW-005-160, CACMW-005-110, CACMW-004-160, CACMW-004-110. A duplicate sample was collected at CACMW-004-160.
- A-A 8(a) JV shipped groundwater samples collected 07-09-24 through 07-11-24 to the laboratory.

07/13/24:

- No A-A 8(a) JV or subcontractor personnel onsite.

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Nathan Hager	A-A 8(a) JV	07/09/24-07/11/24	Environmental Engineer/ FTL
Caleb Renner	A-A 8(a) JV	07/09/24-07/12/24	Geologist
Chris Metz	A-A 8(a) JV	07/11/24-07/12/24	Geologist

IDW TRACKING

WATER: ONSITE STORAGE

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume (gal)	Location
06/17/24	6259	250-gallon IBC	100	100	Onsite Secondary Containment
06/26/24	6259	250-gallon IBC	75	175	Onsite Secondary Containment
07/01/24	6259	250-gallon IBC	175-gallons transferred to WWTS Tank #2; onsite container empty		
Total 07/13/24	6259	250-gallon IBC	Total	200	Onsite Secondary Containment

WATER: TRANSFERRED TO EAFB WASTEWATER TREATMENT SYSTEM (WWTS)

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
06/28/24	6259	250-gallon IBC	100	100	WWTS Tank 2
06/29/24	6259	250-gallon IBC	220	320	WWTS Tank 2
07/01/24	6259	250-gallon IBC	450	770	WWTS Tank 2
07/02/24	6259	250-gallon IBC	230	1000	WWTS Tank 2
07/03/24	6259	250-gallon IBC	150	1150	WWTS Tank 2

Note: EAFB Hazardous Waste assigned one Container ID for the IBC intended to stay onsite in secondary containment accumulating liquid and for any additional IBCs used to transfer water from the site to the WWTS.

SOIL/SOLIDS

Date	Container ID	Container Type	Quantity (CY)	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/17/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/18/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/19/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/20/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/21/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/22/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/25/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/27/24	6234	All Bulk Bags Loaded Into 20-ton Container, ~11 CY		
06/28/24	6234	20-ton container	Soil IDW 20-ton Container Transported from Project Location to LF003	

Note: EAFB Hazardous Waste assigned one Container ID for the 20-ton container and all individual Bulk Bags as the Bags were eventually consolidated into one container. 1 CY Bulk Bags were used, however not all bags were filled completely, therefore the approximate total quantity of 11 CY reflects several partially filled bags.

Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-06	07/15/24-07/20/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat, safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

07/15/24:

- A-A 8(a) JV collected primary groundwater samples at CACMW-006-060, CACMW-006-110, CACMW-006-160, CACMW-007-060, CACMW-007-110, and CACMW-007-160. A duplicate was collected at CACMW-007-060 and an MS/MSD was collected at CACMW-006-060.

07/16/24:

- A-A 8(a) JV collected groundwater samples at CACMW-008-060, CACMW-008-110, and CACWM-008-160. A duplicate was collected at CACMW-008-110.
- The field team collected field blank, equipment blank, and source blank quality control samples. DGI baseline groundwater sampling is complete.
- A-A 8(a) JV transferred 240 gallons of groundwater sampling purge water IDW to the EAFB WWTS.

07/17/24:

- A-A 8(a) JV shipped groundwater analytical samples to the Pace laboratories.

07/18/24:

- A-A 8(a) JV shipped groundwater analytical samples to the Pace laboratories.

07/19/24:

- No A-A 8(a) JV or subcontractor personnel onsite.

07/20/24:

- No A-A 8(a) JV or subcontractor personnel onsite.

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Caleb Renner	A-A 8(a) JV	07/15/24-07/16/24	Geologist
Chris Metz	A-A 8(a) JV	07/15/24-07/16/24	Geologist

IDW TRACKING

WATER: ONSITE STORAGE

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume (gal)	Location
06/17/24	6259	250-gallon IBC	100	100	Onsite Secondary Containment
06/26/24	6259	250-gallon IBC	75	175	Onsite Secondary Containment
07/01/24	6259	250-gallon IBC	175-gallons transferred to WWTS Tank #2; onsite container empty		
07/09/24 – 07/16/24	6259	250-gallon IBC	240	240	Onsite Secondary Containment
07/16/24	6259	250-gallon IBC	240-gallons transferred to WWTS Tank #2; onsite container empty		

WATER: TRANSFERRED TO EAFB WASTEWATER TREATMENT SYSTEM (WWTS)

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
06/28/24	6259	250-gallon IBC	100	100	WWTS Tank 2
06/29/24	6259	250-gallon IBC	220	320	WWTS Tank 2
07/01/24	6259	250-gallon IBC	450	770	WWTS Tank 2
07/02/24	6259	250-gallon IBC	230	1000	WWTS Tank 2
07/03/24	6259	250-gallon IBC	150	1150	WWTS Tank 2
07/16/24	6259	250-gallon IBC	240	1390	WWTS Tank 2

Note: EAFB Hazardous Waste assigned one Container ID for the IBC intended to stay onsite in secondary containment accumulating liquid and for any additional IBCs used to transfer water from the site to the WWTS.

SOIL/SOLIDS

Date	Container ID	Container Type	Quantity (CY)	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/17/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/18/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/19/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/20/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/21/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/22/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/25/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/27/24	6234	All Bulk Bags Loaded Into 20-ton Container, ~11 CY		
06/28/24	6234	20-ton container	Soil IDW 20-ton Container Transported from Project Location to LF003	

Note: EAFB Hazardous Waste assigned one Container ID for the 20-ton container and all individual Bulk Bags as the Bags were eventually consolidated into one container. 1 CY Bulk Bags were used, however not all bags were filled completely, therefore the approximate total quantity of 11 CY reflects several partially filled bags.

Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-07	07/22/24-07/26/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat, safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

07/22/24:

- A-A 8(a) JV field team acquired materials and prepared pneumatic slug test apparatus.

07/23/24:

- A-A 8(a) JV performed pneumatic slug tests at CACMW-001-060, CACMW-001-110, and CACMW-001-160.

07/24/24:

- A-A 8(a) JV performed pneumatic slug tests at CACMW-002-060, CACMW-002-110, CACMW-002-160, CACMW-003-060, CACMW-003-110, CACMW-003-160, and CACMW-004-060.

07/25/24:

- A-A 8(a) JV performed pneumatic slug tests at CACMW-004-110, CACMW-004-160, CACMW-005-060, CACMW-005-110, CACMW-005-160, CACMW-006-060, and CACMW-006-160.
- Design Alaska performed monitoring well top of casing elevation survey.

07/26/24:

- A-A 8(a) JV performed pneumatic slug tests at CACMW-006-110, CACMW-007-060, CACMW-007-110, CACMW-007-160, CACMW-008-060, CACMW-008-110, and CACMW-008-160.

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Caleb Renner	A-A 8(a) JV	07/22/24-07/26/24	Geologist
Nathan Hager	A-A 8(a) JV	07/22/24-07/26/24	Field Team Lead/ SSHO
Nick Icks	A-A 8(a) JV	07/22/24-07/26/24	Site Geologist/ Field Technical Lead
Will Rhodes	A-A 8(a) JV	07/25/24	Project Manager

IDW TRACKING

WATER: ONSITE STORAGE

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume (gal)	Location
06/17/24	6259	250-gallon IBC	100	100	Onsite Secondary Containment
06/26/24	6259	250-gallon IBC	75	175	Onsite Secondary Containment
07/01/24	6259	250-gallon IBC	175-gallons transferred to WWTS Tank #2; onsite container empty		
07/09/24 – 07/16/24	6259	250-gallon IBC	240	240	Onsite Secondary Containment
07/16/24	6259	250-gallon IBC	240-gallons transferred to WWTS Tank #2; onsite container empty		
07/26/24	6259	250-gallon IBC	50	50	Onsite Secondary Containment

WATER: TRANSFERRED TO EAFB WASTEWATER TREATMENT SYSTEM (WWTS)

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
06/28/24	6259	250-gallon IBC	100	100	WWTS Tank 2
06/29/24	6259	250-gallon IBC	220	320	WWTS Tank 2
07/01/24	6259	250-gallon IBC	450	770	WWTS Tank 2
07/02/24	6259	250-gallon IBC	230	1000	WWTS Tank 2
07/03/24	6259	250-gallon IBC	150	1150	WWTS Tank 2
07/16/24	6259	250-gallon IBC	240	1390	WWTS Tank 2

Note: EAFB Hazardous Waste assigned one Container ID for the IBC intended to stay onsite in secondary containment accumulating liquid and for any additional IBCs used to transfer water from the site to the WWTS.

SOIL/SOLIDS

Date	Container ID	Container Type	Quantity (CY)	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/17/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/18/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/19/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/20/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/21/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/22/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/25/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/27/24	6234	All Bulk Bags Loaded Into 20-ton Container, ~11 CY		
06/28/24	6234	20-ton container	Soil IDW 20-ton Container Transported from Project Location to LF003	

Note: EAFB Hazardous Waste assigned one Container ID for the 20-ton container and all individual Bulk Bags as the Bags were eventually consolidated into one container. 1 CY Bulk Bags were used, however not all bags were filled completely, therefore the approximate total quantity of 11 CY reflects several partially filled bags.

Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-08	07/29/24-08/02/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat (when overhead hazard exists), safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

07/29/24:

- No A-A 8(a) JV personnel onsite.

07/30/24:

- A-A 8(a) JV received the first shipment of passive flux meters (PFM).
- No A-A 8(a) JV personnel onsite.

07/31/24:

- A-A 8(a) JV deployed five PFMs per monitoring well, in the lower half of each 50-foot screen at CACMW-001-060, CACMW-001-110, CACMW-001-160, CACMW-002-060, CACMW-002-110, CACMW-002-160, CACMW-003-060, and CACMW-003-110.

08/01/24:

- A-A 8(a) JV deployed five PFMs per monitoring well, in the lower half of each 50-foot screen at CACMW-003-160, CACMW-004-060, CACMW-004-110, CACMW-004-160, CACMW-005-060, CACMW-005-110, CACMW-005-160, and CACMW-006-060.

08/02/24:

- A-A 8(a) JV deployed five PFMs per monitoring well, in the lower half of each 50-foot screen at CACMW-006-110, CACMW-006-160, CACMW-007-060, CACMW-007-110, CACMW-007-160, CACMW-008-060, CACMW-008-110, and CACMW-008-160.

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Caleb Renner	A-A 8(a) JV	07/31/24-08/02/24	Geologist
Nathan Hager	A-A 8(a) JV	07/31/24-08/02/24	Field Team Lead/ SSHO
Nick Icks	A-A 8(a) JV	07/31/24-08/02/24	Site Geologist/ Field Technical Lead

IDW TRACKING

WATER: ONSITE STORAGE

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume (gal)	Location
06/17/24	6259	250-gallon IBC	100	100	Onsite Secondary Containment
06/26/24	6259	250-gallon IBC	75	175	Onsite Secondary Containment
07/01/24	6259	250-gallon IBC	175-gallons transferred to WWTS Tank #2; onsite container empty		
07/09/24 – 07/16/24	6259	250-gallon IBC	240	240	Onsite Secondary Containment
07/16/24	6259	250-gallon IBC	240-gallons transferred to WWTS Tank #2; onsite container empty		
07/26/24	6259	250-gallon IBC	50	50	Onsite Secondary Containment
08/02/24	6259	250-gallon IBC	25	75	Onsite Secondary Containment

WATER: TRANSFERRED TO EAFB WASTEWATER TREATMENT SYSTEM (WWTS)

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
06/28/24	6259	250-gallon IBC	100	100	WWTS Tank 2
06/29/24	6259	250-gallon IBC	220	320	WWTS Tank 2
07/01/24	6259	250-gallon IBC	450	770	WWTS Tank 2
07/02/24	6259	250-gallon IBC	230	1000	WWTS Tank 2
07/03/24	6259	250-gallon IBC	150	1150	WWTS Tank 2
07/16/24	6259	250-gallon IBC	240	1390	WWTS Tank 2

Note: EAFB Hazardous Waste assigned one Container ID for the IBC intended to stay onsite in secondary containment accumulating liquid and for any additional IBCs used to transfer water from the site to the WWTS.

SOIL/SOLIDS

Date	Container ID	Container Type	Quantity (CY)	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/17/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/18/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/19/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/20/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/21/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/22/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/25/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/27/24	6234	All Bulk Bags Loaded Into 20-ton Container, ~11 CY		
06/28/24	6234	20-ton container	Soil IDW 20-ton Container Transported from Project Location to LF003	

Note: EAFB Hazardous Waste assigned one Container ID for the 20-ton container and all individual Bulk Bags as the Bags were eventually consolidated into one container. 1 CY Bulk Bags were used, however not all bags were filled completely, therefore the approximate total quantity of 11 CY reflects several partially filled bags.

Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-09	08/12/24-08/17/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat (when overhead hazard exists), safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

08/12/24:

- No A-A 8(a) JV personnel onsite.

08/13/24:

- No A-A 8(a) JV personnel onsite.

08/14/24:

- A-A 8(a) JV retrieved and sampled three passive flux meters (PFM) from CACMW-001-060 and five PFMs from CACMW-001-110.
- PFMs in CACMW-001-060 became stuck in the well casing during retrieval, the field team was able to recover three PFMs on 08/14/24, and the two remaining PFMs on 08/15/24.

08/15/24:

- A-A 8(a) JV retrieved and sampled two PFMs from CACMW-001-060, five PFMs from CACMW-001-160, five PFMs from CACMW-002-060, five PFMs from CACMW-002-160, five PFMs from CACMW-002-110, and five PFMs from CACMW-003-160.
- The top PFM retrieved from CACMW-002-160 was damaged, likely during deployment, and most of the resin in the upper resin compartment was lost. The entire resin sample (method 1633) was collected from the lower resin compartment.

08/16/24:

- A-A 8(a) JV retrieved and sampled five PFMs from CACMW-003-110, five PFMs from CACMW-003-060, five PFMs from CACMW-004-060, five PFMs from CACMW-004-160, five PFMs from CACMW-004-110, five PFMs from CACMW-005-060, five PFMs from CACMW-005-160, and five PFMs from CACMW-005-110.

08/17/24:

- A-A 8(a) JV retrieved and sampled five PFMs from CACMW-006-060, five PFMs from CACMW-006-160, five PFMs from CACMW-006-110, five PFMs from CACMW-007-060, five PFMs from CACMW-007-160, five PFMs from CACMW-007-110, five PFMs from CACMW-008-060, five PFMs from CACMW-008-160, and five PFMs from CACMW-008-110.
- One 55-gallon open top steel drum containing excess PFM resin and granular activated carbon was generated during the PFM retrieval/sampling event.

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Nathan Hager	Ahtna	08/14/24-08/17/24	Field Team Lead/ SSHO
Nick Icks	Arcadis	08/14/24-08/17/24	Site Geologist/ Field Technical Lead
Joe Domine	Ahtna	08/14/24	Environmental Engineer
Will Rhodes	Ahtna	08/15/24-08/17/24	Project Manager

IDW TRACKING

WATER: ONSITE STORAGE

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume (gal)	Location
06/17/24	6259	250-gallon IBC	100	100	Onsite Secondary Containment
06/26/24	6259	250-gallon IBC	75	175	Onsite Secondary Containment
07/01/24	6259	250-gallon IBC	175-gallons transferred to WWTS Tank #2; onsite container empty		
07/09/24 – 07/16/24	6259	250-gallon IBC	240	240	Onsite Secondary Containment
07/16/24	6259	250-gallon IBC	240-gallons transferred to WWTS Tank #2; onsite container empty		
07/26/24	6259	250-gallon IBC	50	50	Onsite Secondary Containment
08/02/24	6259	250-gallon IBC	25	75	Onsite Secondary Containment

WATER: TRANSFERRED TO EAFB WASTEWATER TREATMENT SYSTEM (WWTS)

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
06/28/24	6259	250-gallon IBC	100	100	WWTS Tank 2
06/29/24	6259	250-gallon IBC	220	320	WWTS Tank 2
07/01/24	6259	250-gallon IBC	450	770	WWTS Tank 2
07/02/24	6259	250-gallon IBC	230	1000	WWTS Tank 2
07/03/24	6259	250-gallon IBC	150	1150	WWTS Tank 2
07/16/24	6259	250-gallon IBC	240	1390	WWTS Tank 2

Note: EAFB Hazardous Waste assigned one Container ID for the IBC intended to stay onsite in secondary containment accumulating liquid and for any additional IBCs used to transfer water from the site to the WWTS.

SOIL/SOLIDS

Date	Container ID	Container Type	Quantity	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/17/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/18/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/19/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/20/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/21/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/22/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/25/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/27/24	6234	All Bulk Bags Loaded Into 20-ton Container, ~11 CY		
06/28/24	6234	20-ton container	Soil IDW 20-ton Container Transported from Project Location to LF003	
08/14/24	6516	55-gallon steel drum	1x55-gal	Onsite

Note: EAFB Hazardous Waste assigned one Container ID for the 20-ton container and all individual Bulk Bags as the Bags were eventually consolidated into one container. 1 CY Bulk Bags were used, however not all bags were filled completely, therefore the approximate total quantity of 11 CY reflects several partially filled bags.

Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-10	08/19/24-08/23/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat (when overhead hazard exists), safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

08/19/24:

- No A-A 8(a) JV personnel onsite.

08/20/24:

- No A-A 8(a) JV personnel onsite.

08/20/24:

- A-A 8(a) JV deployed four passive flux meters (PFM) in each of the following wells: CACMW-001-060, CACMW-001-110, CACMW-001-160, CACMW-002-060, CACMW-002-110, CACMW-002-160, CACMW-003-060, and CACMW-003-160.

08/22/24:

- A-A 8(a) JV deployed four (PFM) in each of the following wells: CACMW-003-110, CACMW-004-060, CACMW-004-110, CACMW-004-160, CACMW-005-060, CACMW-005-110, CACMW-005-160, and CACMW-006-060.

08/23/24:

- A-A 8(a) JV deployed four (PFM) in each of the following wells: CACMW-006-110, CACMW-006-160, CACMW-007-060, CACMW-007-110, CACMW-007-160, CACMW-008-060, CACMW-008-110, and CACMW-008-160.

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Nathan Hager	Ahtna	08/19/24-08/23/24	Field Team Lead/ SSHO
Nick Icks	Arcadis	08/19/24-08/23/24	Site Geologist/ Field Technical Lead
Caleb Renner	Ahtna	08/23/24	Geologist

IDW TRACKING

WATER: ONSITE STORAGE

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume (gal)	Location
06/17/24	6259	250-gallon IBC	100	100	Onsite Secondary Containment
06/26/24	6259	250-gallon IBC	75	175	Onsite Secondary Containment
07/01/24	6259	250-gallon IBC	175-gallons transferred to WWTS Tank #2; onsite container empty		
07/09/24 – 07/16/24	6259	250-gallon IBC	240	240	Onsite Secondary Containment
07/16/24	6259	250-gallon IBC	240-gallons transferred to WWTS Tank #2; onsite container empty		
07/26/24	6259	250-gallon IBC	50	50	Onsite Secondary Containment
08/02/24	6259	250-gallon IBC	25	75	Onsite Secondary Containment

WATER: TRANSFERRED TO EAFB WASTEWATER TREATMENT SYSTEM (WWTS)

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
06/28/24	6259	250-gallon IBC	100	100	WWTS Tank 2
06/29/24	6259	250-gallon IBC	220	320	WWTS Tank 2
07/01/24	6259	250-gallon IBC	450	770	WWTS Tank 2
07/02/24	6259	250-gallon IBC	230	1000	WWTS Tank 2
07/03/24	6259	250-gallon IBC	150	1150	WWTS Tank 2
07/16/24	6259	250-gallon IBC	240	1390	WWTS Tank 2

Note: EAFB Hazardous Waste assigned one Container ID for the IBC intended to stay onsite in secondary containment accumulating liquid and for any additional IBCs used to transfer water from the site to the WWTS.

SOIL/SOLIDS

Date	Container ID	Container Type	Quantity	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/17/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/18/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/19/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/20/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/21/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/22/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/25/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/27/24	6234	All Bulk Bags Loaded Into 20-ton Container, ~11 CY		
06/28/24	6234	20-ton container	Soil IDW 20-ton Container Transported from Project Location to LF003	
08/14/24	6516	55-gallon steel drum	1x55-gal	Onsite

Note: EAFB Hazardous Waste assigned one Container ID for the 20-ton container and all individual Bulk Bags as the Bags were eventually consolidated into one container. 1 CY Bulk Bags were used, however not all bags were filled completely, therefore the approximate total quantity of 11 CY reflects several partially filled bags.

Eielson DGI Field Status Report

AFCEC Contract Number	Project Title
FA8903-23-C-0037	Data Gap Investigation and Groundwater Pilot Study Eielson Air Force Base, Alaska
Report Number	**Dates**
EAFB-DGI-11	09/02/24-09/06/24

HEALTH AND SAFETY

Worker protection levels: Level A ☐ Level B ☐ Level C ☐ Modified Level D ☐ Level D ☒ NA ☐

Were approved decontamination procedures used on workers and equipment as required? N/A ☐ Yes ☒ No ☐

Did all on-site personnel attend daily safety meetings? Yes ☒ No ☐

Notes: Minimum site PPE requirements: Hard hat (when overhead hazard exists), safety toe boots, high visibility clothing, eye protection, ear protection, and gloves (work or nitrile). Emergency response materials onsite: First aid kit, fire extinguisher, spill kit, AED, and eye wash.

WORK ACTIVITIES PERFORMED THIS PERIOD

09/02/24:

- No A-A 8(a) JV personnel onsite. Labor Day!

09/03/24:

- No A-A 8(a) JV personnel onsite.

09/04/24:

- A-A 8(a) JV retrieved and sampled four PFMs from CACMW-001-060, four PFMs from CACMW-001-160, four PFMs from CACMW-001-110, four PFMs from CACMW-002-060, four PFMs from CACMW-002-160, four PFMs from CACMW-002-110, four PFMs from CACMW-003-060, and four PFMs from CACMW-003-160.

09/05/24:

- A-A 8(a) JV retrieved and sampled four PFMs from CACMW-003-110, four PFMs from CACMW-004-060, four PFMs from CACMW-004-160, four PFMs from CACMW-004-110, four PFMs from CACMW-005-060, four PFMs from CACMW-005-160, four PFMs from CACMW-005-110, and four PFMs from CACMW-006-060.

09/06/24:

- A-A 8(a) JV retrieved and sampled four PFMs from CACMW-006-160, four PFMs from CACMW-006-110, four PFMs from CACMW-007-060, four PFMs from CACMW-007-160, four PFMs from CACMW-004-110, four PFMs from CACMW-008-060, four PFMs from CACMW-008-160, and four PFMs from CACMW-008-110.

ON-SITE PERSONNEL THIS PERIOD

Name	Company	Dates	Role
Will Rhodes	Ahtna	09/04/24-09/06/24	Sampling Technician/ SSHO
Nick Icks	Arcadis	09/04/24-09/06/24	Site Geologist/ Field Technical Lead
Victoria Paul	Ahtna	09/04/24-09/05/24	Sampling Technician

IDW TRACKING

WATER: ONSITE STORAGE

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume (gal)	Location
06/17/24	6259	250-gallon IBC	100	100	Onsite Secondary Containment
06/26/24	6259	250-gallon IBC	75	175	Onsite Secondary Containment
07/01/24	6259	250-gallon IBC	175-gallons transferred to WWTS Tank #2; onsite container empty		
07/09/24 – 07/16/24	6259	250-gallon IBC	240	240	Onsite Secondary Containment
07/16/24	6259	250-gallon IBC	240-gallons transferred to WWTS Tank #2; onsite container empty		
07/26/24	6259	250-gallon IBC	50	50	Onsite Secondary Containment
08/02/24	6259	250-gallon IBC	25	75	Onsite Secondary Containment

WATER: TRANSFERRED TO EAFB WASTEWATER TREATMENT SYSTEM (WWTS)

Date Generated	Container ID	Container Type	Volume (gal)	Total Volume(gal)	Location
06/28/24	6259	250-gallon IBC	100	100	WWTS Tank 2
06/29/24	6259	250-gallon IBC	220	320	WWTS Tank 2
07/01/24	6259	250-gallon IBC	450	770	WWTS Tank 2
07/02/24	6259	250-gallon IBC	230	1000	WWTS Tank 2
07/03/24	6259	250-gallon IBC	150	1150	WWTS Tank 2
07/16/24	6259	250-gallon IBC	240	1390	WWTS Tank 2

Note: EAFB Hazardous Waste assigned one Container ID for the IBC intended to stay onsite in secondary containment accumulating liquid and for any additional IBCs used to transfer water from the site to the WWTS.

SOIL/SOLIDS

Date	Container ID	Container Type	Quantity	Location
06/15/24	6234	20 CY Connex	0	Onsite
06/14/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/15/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/17/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/18/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/19/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/20/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/21/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/22/24	6234	Bulk Bag	2 CY	Onsite Secondary Containment
06/25/24	6234	Bulk Bag	1 CY	Onsite Secondary Containment
06/27/24	6234	All Bulk Bags Loaded Into 20-ton Container, ~11 CY		
06/28/24	6234	20-ton container	Soil IDW 20-ton Container Transported from Project Location to LF003	
08/14/24	6516	55-gallon steel drum	1x55-gal	Onsite
09/04/24	6516	55-gallon steel drum	1x55-gal	Onsite

Note: EAFB Hazardous Waste assigned one Container ID for the 20-ton container and all individual Bulk Bags as the Bags were eventually consolidated into one container. 1 CY Bulk Bags were used, however not all bags were filled completely, therefore the approximate total quantity of 11 CY reflects several partially filled bags.

Soil Boring Log

Boring No.: CACMW-001-110

Sheet: 1 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-13-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–20				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-001-160 for lithology.		6" Borehole; Cement Grout w/5% bentonite; (0.0-60.0') 2" Sch. 40 PVC Casing; Bentonite Chips

Drilling Co.: Northern Sonic
Driller: Liam Ferguson
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 112.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

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Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-001-110

Project Site: AFCEC
Date Started: 06-13-2024
Logger: Nicholas Icks
Project Name: Eielson AFB DGI-PSC
Date Completed: 06-13-2024
Reviewer: Kim Heinze
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-001-160 for lithology.	
22					
23					
24					
25					
26					
27					
28					
29					
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31					
32					
33					
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36					
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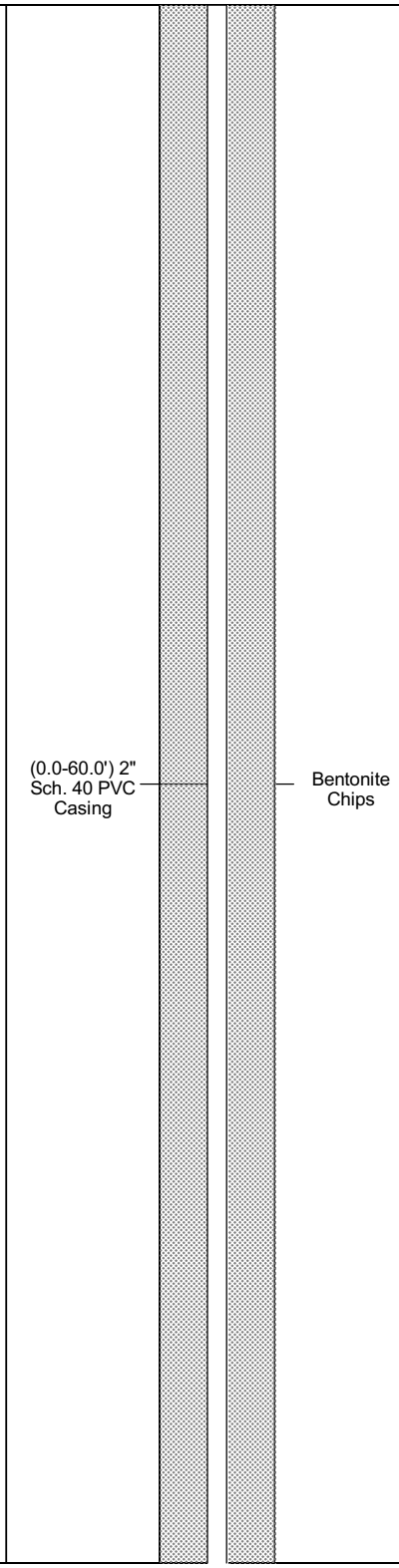

Remarks:

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Soil Boring Log

Boring No.: CACMW-001-110

Sheet: 3 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-13-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-001-160 for lithology.	
44					
45					
46					
47					
48					
49					
50					
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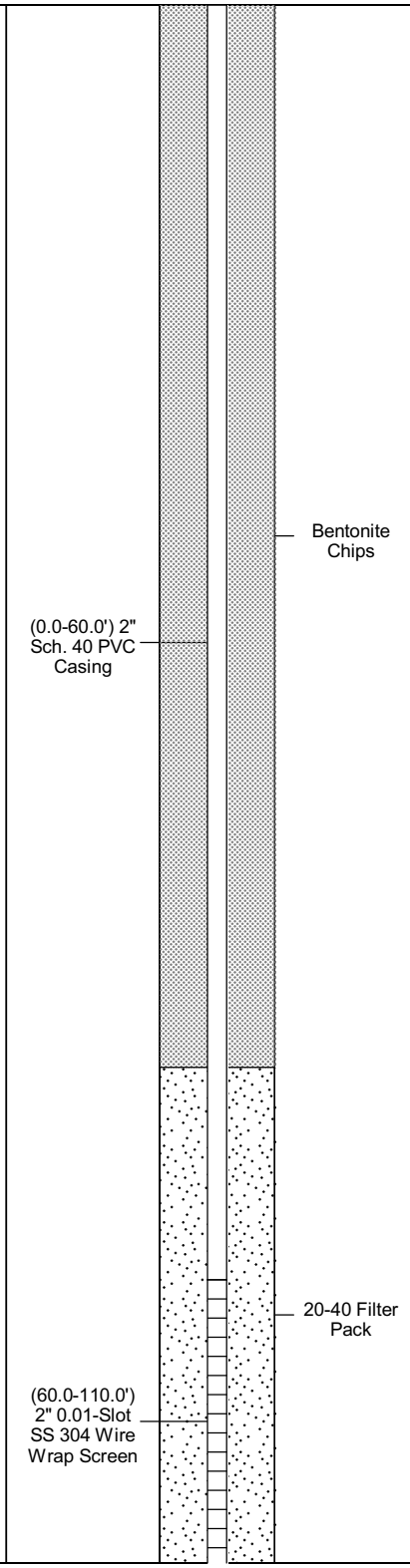

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Soil Boring Log

Boring No.: CACMW-001-110

Sheet: 4 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-13-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-001-160 for lithology.	
66					
67					
68					
69					
70					
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72					
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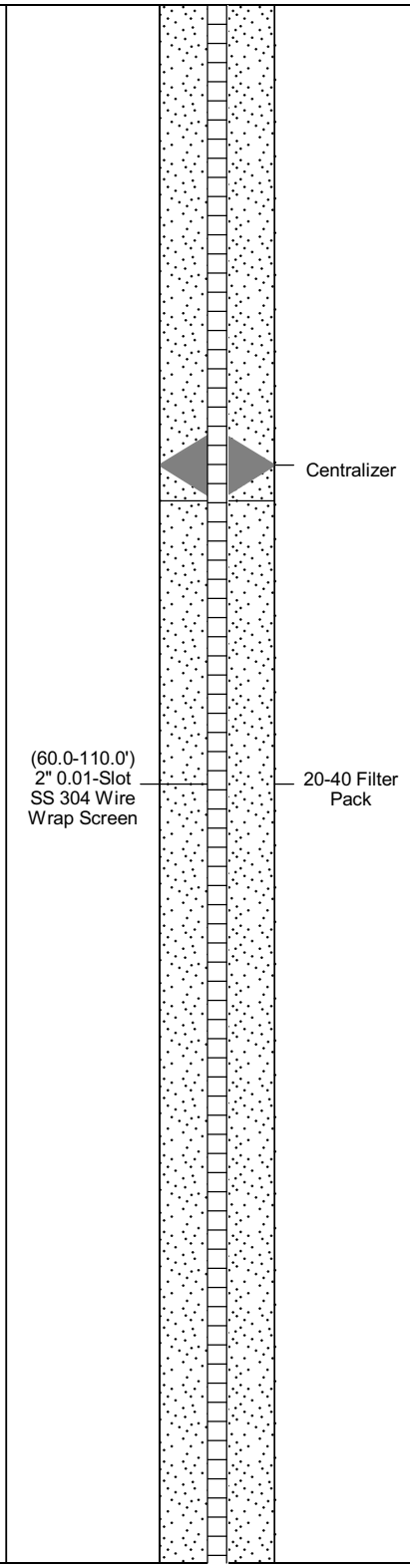
86					



Remarks:

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Soil Boring Log

Ahtna ARCADIS JV

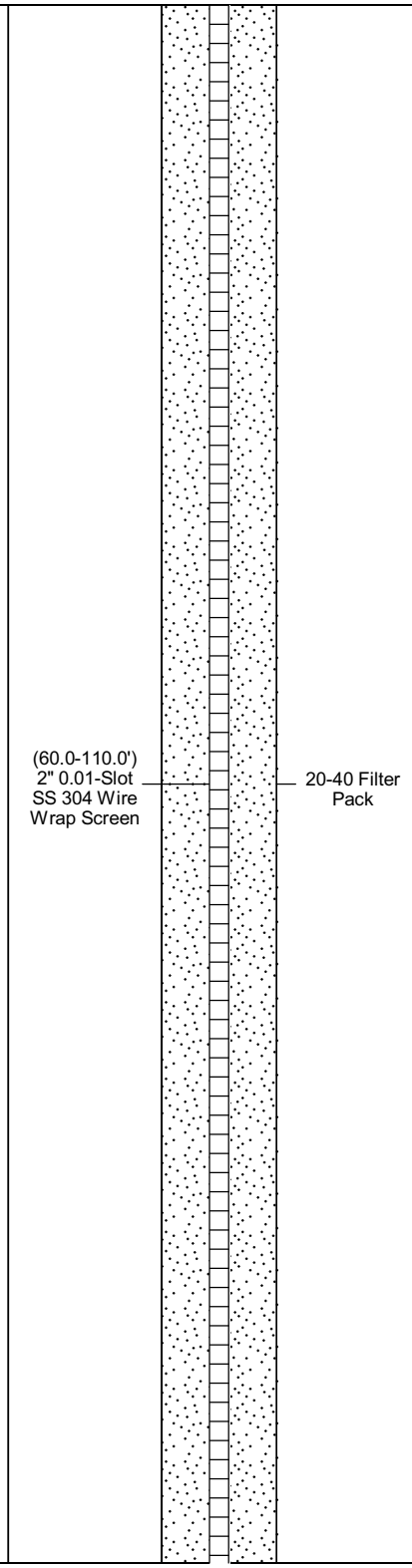
Boring No.: CACMW-001-110

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-13-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-001-160 for lithology.	
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-001-110

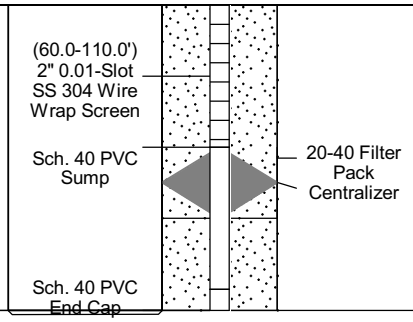
Sheet: 6 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-13-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-001-160 for lithology.	
110					
111					
112					
113				End of Boring at 112.3 ft bgs.	
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-001-160

Sheet: 1 of 8

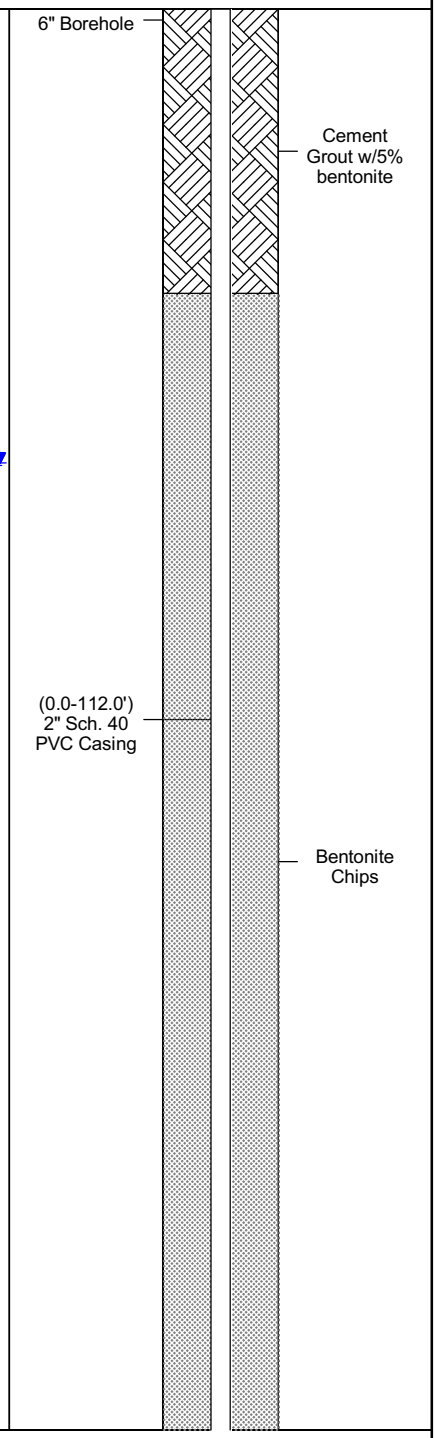
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-11-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
1–4	2.3			(0.0-4.0 ft) Poorly graded sand with silt and gravel (SP-SM): fine to medium-grained sand, subangular to subround and granules to large pebbles, subangular to subround; little silt; moist; 10YR 4/2 - dark grayish brown.	
5–8	1.8			(4.0-8.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; wet; 10YR 4/3 - brown.	
9–15	0			(8.0-15.0 ft) No Recovery.	
16–19	4.1			(15.0-19.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; wet; 10YR 4/3 - brown.	
20				(19.0-30.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 5/1 - gray.	

Construction Details



Drilling Co.: Northern Sonic
Driller: Liam Ferguson
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks: Initial well install attempt abandoned and redrilled

Sampling Method: Sonic
Sampling Dimensions: 10 - 20 ft
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 164.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-001-160

Sheet: 2 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-11-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(19.0-30.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 5/1 - gray.	
22					
23					
24					
25					
26					
27					
28	5.3				
29					
30					
31				(30.0-35.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; wet; 10YR 4/3 - brown.	
32					
33					
34					
35				(35.0-55.0 ft) Poorly graded sand with gravel (SP): fine to coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 5/1 - gray.	
36					
37					
38					
39	11.6				
40					
41					
42					

(0.0-112.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks: Initial well install attempt abandoned and redrilled

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-001-160

Sheet: 3 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-11-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(35.0-55.0 ft) Poorly graded sand with gravel (SP): fine to coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 5/1 - gray.	
44					
45					
46					
47					
48					
49	11.6				
50					
51					
52					
53					
54					
55					
56				(55.0-56.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; wet; 10YR 4/3 - brown.	
57				(56.0-62.0 ft) Well-graded sand with gravel (SW): fine to coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 5/1 - gray.	
58					
59					
60	10.8				
61					
62					
63				(62.0-76.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; little fine to very coarse-grained sand, subangular to subround; trace silt; wet; 5Y 3/2 - dark olive gray.	
64					

(0.0-112.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks: Initial well install attempt abandoned and redrilled

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-001-160

Sheet: 4 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-11-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65				(62.0-76.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; little fine to very coarse-grained sand, subangular to subround; trace silt; wet; 5Y 3/2 - dark olive gray.	
66					
67					
68					
69					
70	10.8				
71					
72					
73					
74					
75					
76				(76.0-80.0 ft) Poorly graded sand with gravel (SP): fine to coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 5/1 - gray.	
77					
78					
79					
80				(80.0-88.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; little fine to very coarse-grained sand, subangular to subround; trace silt; wet; 5Y 3/2 - dark olive gray.	
81	15				
82					
83					
84					
85					
86					

(0.0-112.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks: Initial well install attempt abandoned and redrilled

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-001-160

Sheet: 5 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-11-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(80.0-88.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; little fine to very coarse-grained sand, subangular to subround; trace silt; wet; 5Y 3/2 - dark olive gray.	
88					
89				(88.0-91.0 ft) Poorly graded sand with gravel (SP): fine to coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 5/1 - gray.	
90					
91	15			(91.0-135.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 4/1 - dark gray.	
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102	15.2				
103					
104					
105					
106					
107					
108					

(0.0-112.0') 2" Sch. 40 PVC Casing

Bentonite Chips

20-40 Filter Pack

Remarks: Initial well install attempt abandoned and redrilled

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-001-160

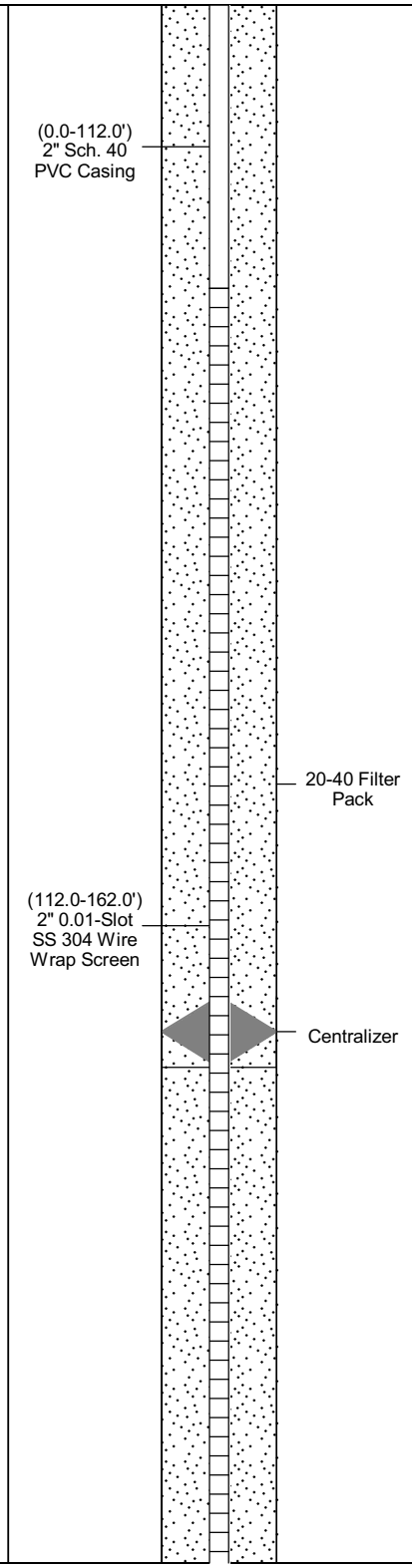
Sheet: 6 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-11-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(91.0-135.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 4/1 - dark gray.	
110					
111					
112	15.2				
113					
114					
115					
116					
117					
118					
119					
120					
121					
122					
123	17.7				
124					
125					
126					
127					
128					
129					
130					



Remarks: Initial well install attempt abandoned and redrilled

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-001-160

Sheet: 7 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-11-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
131				(91.0-135.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 4/1 - dark gray.	
132					
133	17.7				
134					
135					
136				(135.0-136.0 ft) Silty sand (SM): very fine to fine-grained sand, subangular to subround; some silt; moist; 7.5YR 3/1 - very dark gray.	
137				(136.0-164.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 4/1 - dark gray. NOTE: Up to 20% small to large, subangular to subround GRAVEL 150-152'.	
138					
139					
140					
141					
142					
143					
144	9.2				
145					
146					
147					
148					
149					
150					
151					
152					

(112.0-162.0')
2" 0.01-Slot
SS 304 Wire
Wrap Screen

20-40 Filter Pack

Remarks: Initial well install attempt abandoned and redrilled

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-001-160

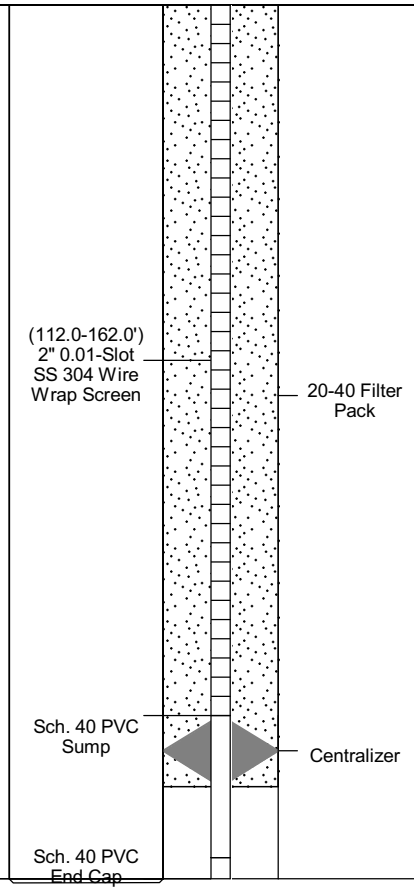
Sheet: 8 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-11-2024
Date Completed: 06-13-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
153				(136.0-164.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround; trace granules, subangular to subround; wet; 2.5Y 4/1 - dark gray. NOTE: Up to 20% small to large, subangular to subround GRAVEL 150-152'.	
154	9.2				
155					
156					
157					
158					
159					
160					
161	17.7				
162					
163					
164				End of Boring at 164.3 ft bgs.	
165					
166					
167					
168					
169					
170					
171					
172					
173					
174					



Remarks: Initial well install attempt abandoned and redrilled

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-002-060

Sheet: 1 of 3

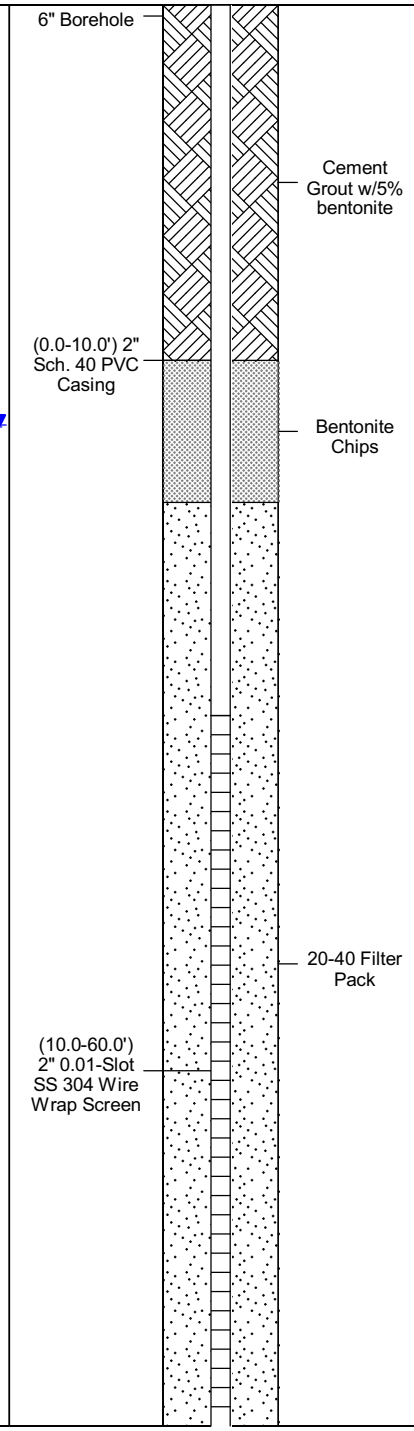
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-15-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
1–20				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-002-160 log for lithology.	

Construction Details



Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 62.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-002-060

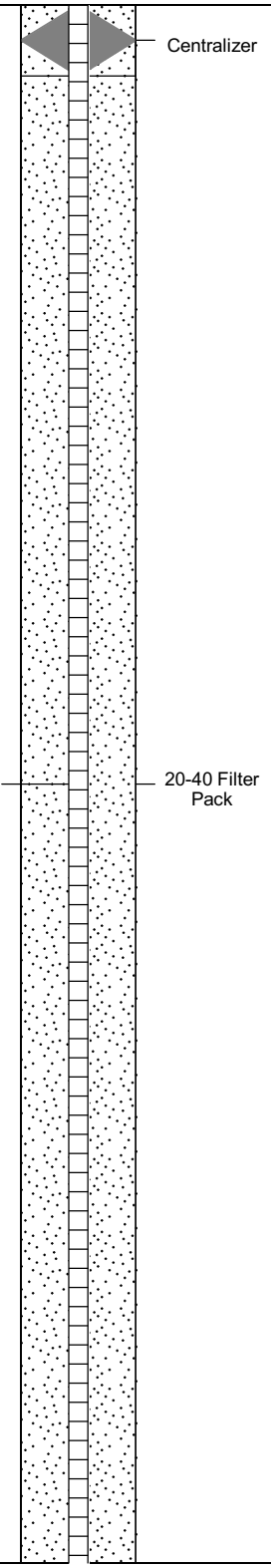
Sheet: 2 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-15-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-002-160 log for lithology.	



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-002-060

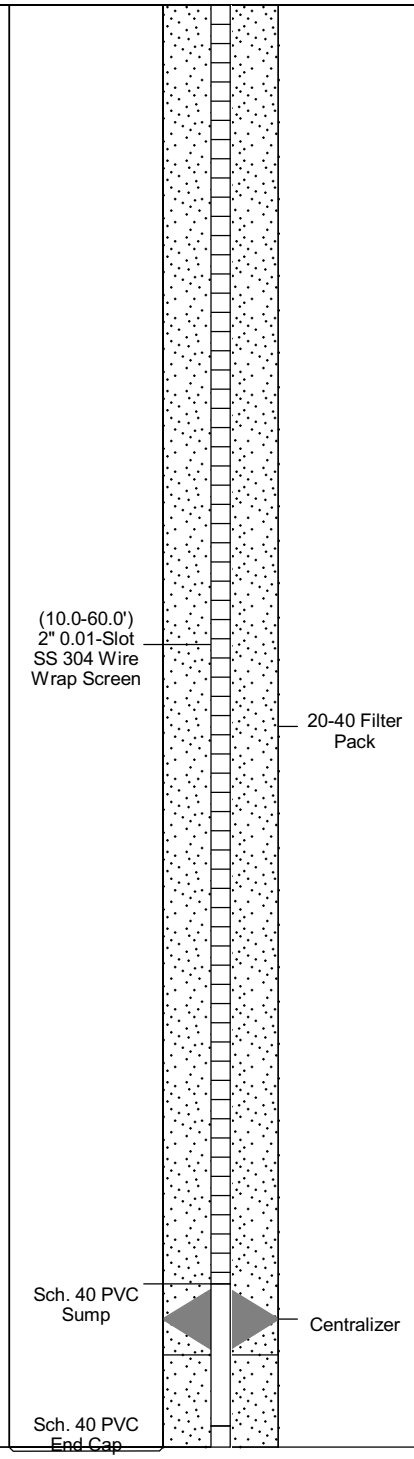
Sheet: 3 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-15-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-002-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63				End of Boring at 62.3 ft bgs.	
64					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-002-110

Sheet: 1 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-15-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–20				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-002-160 log for lithology.		6" Borehole; Cement Grout w/5% bentonite; (0.0-60.0') 2" Sch. 40 PVC Casing; Bentonite Chips

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 112.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-002-110

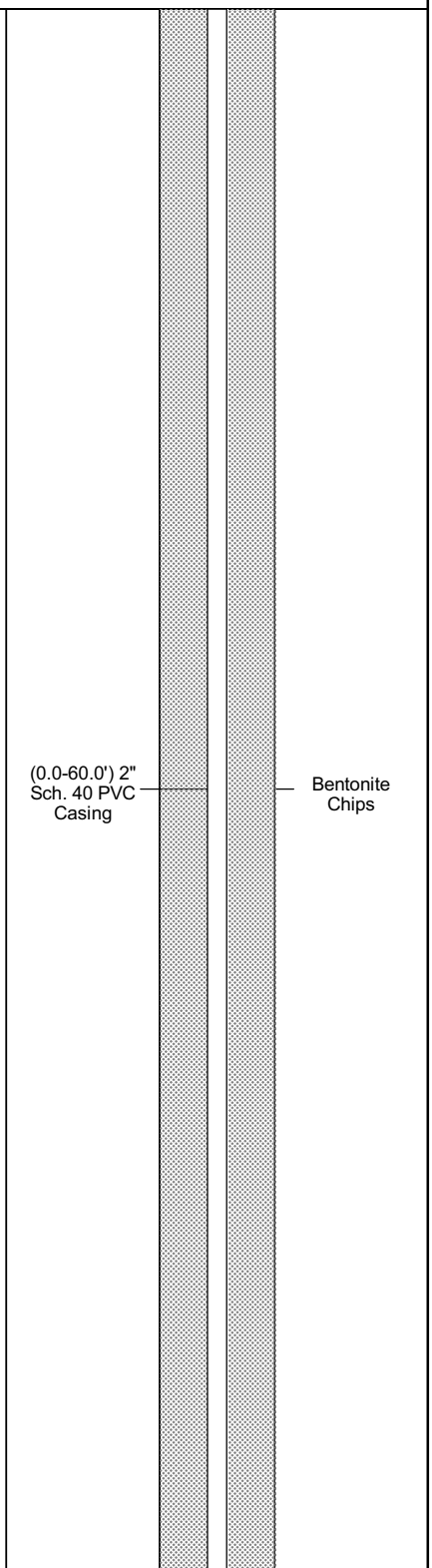
Sheet: 2 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-15-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-002-160 log for lithology.	
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-002-110

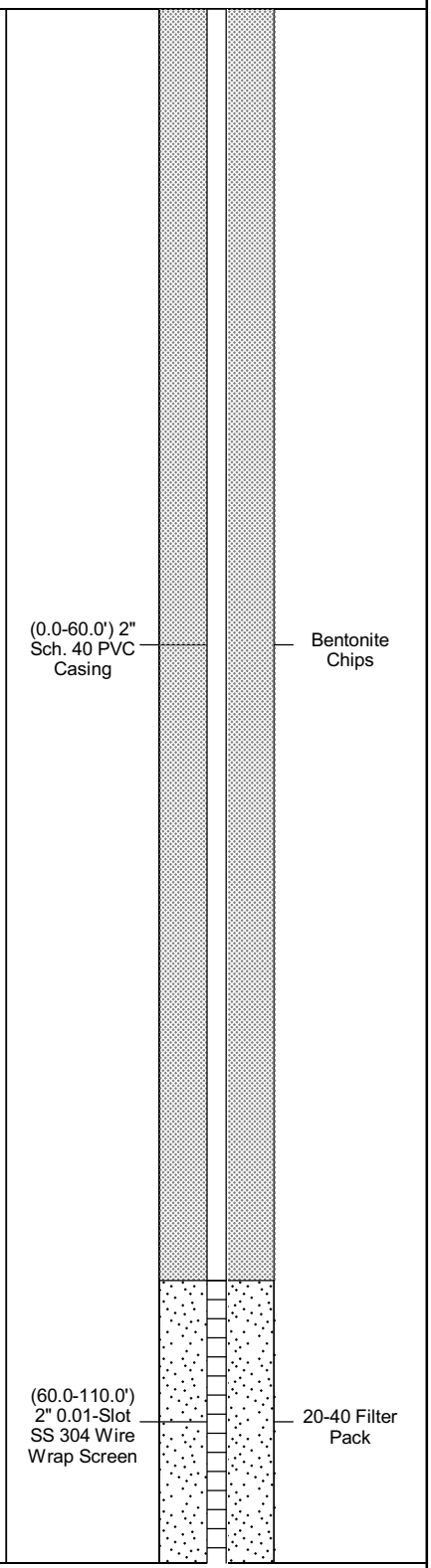
Sheet: 3 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-15-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-002-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					



Remarks:

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Soil Boring Log

Boring No.: CACMW-002-110

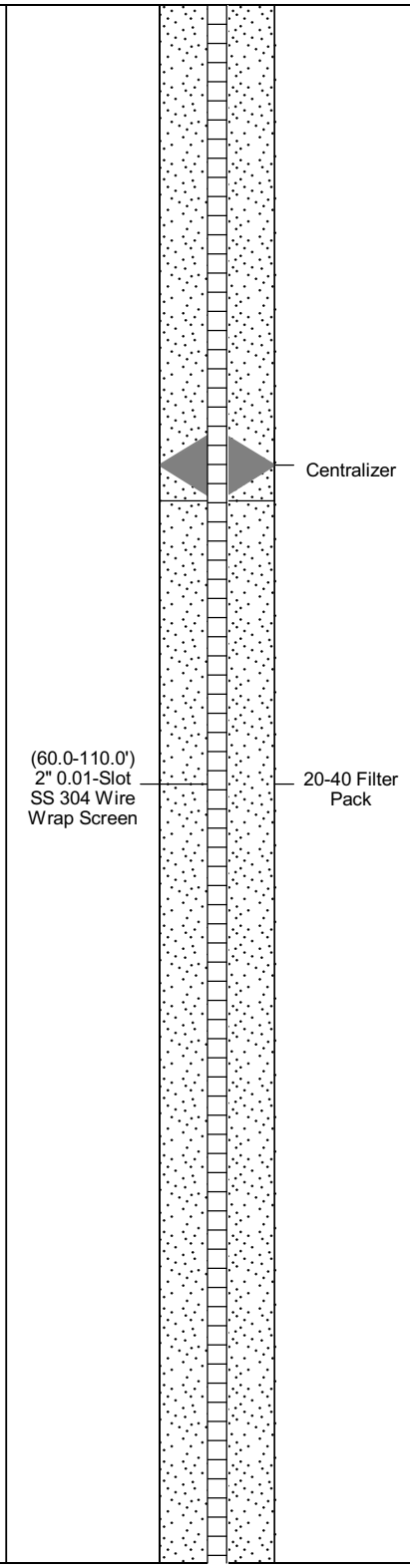
Sheet: 4 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-15-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-002-160 log for lithology.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					



Remarks:

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Soil Boring Log

Ahtna ARCADIS JV

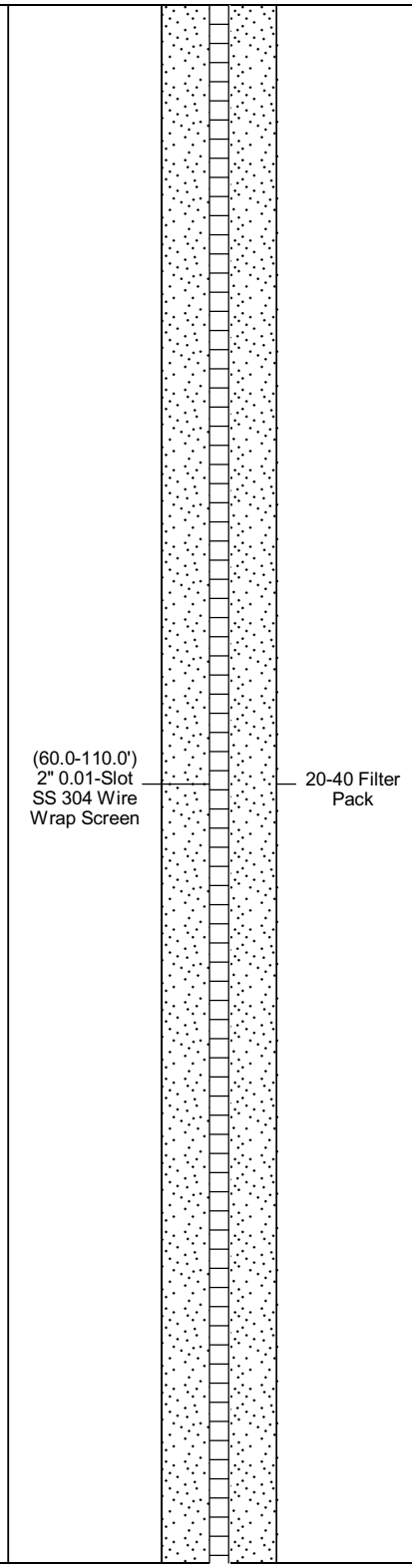
Boring No.: CACMW-002-110

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-15-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-002-160 log for lithology.	
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					



Remarks:

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Soil Boring Log

Boring No.: CACMW-002-110

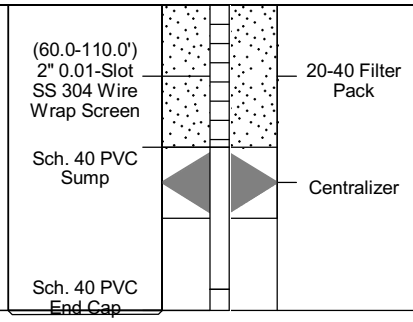
Sheet: 6 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-15-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-002-160 log for lithology.	
110					
111					
112					
113				End of Boring at 112.3 ft bgs.	
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					



Remarks:

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Soil Boring Log

Boring No.: CACMW-002-160

Sheet: 1 of 8

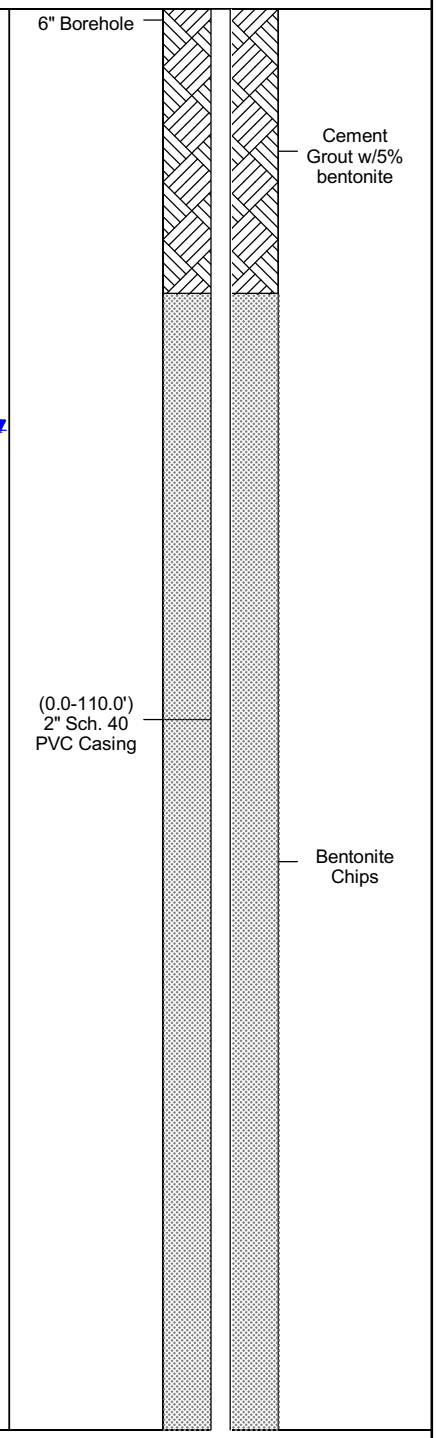
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-14-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
1				(0.0-2.0 ft) Well-graded sand with silt and gravel (SW-SM): fine to very coarse-grained sand, subangular to subround and granules to large pebbles, subangular to subround; little silt; dry; 10YR 3/3 - dark brown.	
2					
3	3.2			(2.0-4.0 ft) Poorly graded sand (SP): fine to medium-grained sand, subangular to subround; trace silt; dry to moist; 10YR 3/3 - dark brown.	
4					
5				(4.0-7.0 ft) Well-graded sand with silt and gravel (SW-SM): fine to very coarse-grained sand, subangular to subround and granules to large pebbles, subangular to subround; little silt; dry; 10YR 3/3 - dark brown.	
6					
7				(7.0-14.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; wet; 10YR 4/2 - dark grayish brown.	
8					
9					
10	4.8				
11					
12					
13					
14					
15				(14.0-22.0 ft) Well-graded sand (SW): fine to coarse-grained sand, subangular to subround; trace silt; wet; 10YR 3/2 - very dark grayish brown.	
16					
17	4.4				
18					
19					
20					

Construction Details



Drilling Co.: Northern Sonic
Driller: Liam Ferguson
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions: 10 - 20 ft
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 162.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-002-160

Sheet: 2 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-14-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(14.0-22.0 ft) Well-graded sand (SW): fine to coarse-grained sand, subangular to subround; trace silt; wet; 10YR 3/2 - very dark grayish brown.	
22					
23	4.4			(22.0-25.0 ft) Well-graded sand with gravel (SW): granules to small pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray.	
24					
25					
26				(25.0-29.0 ft) Well-graded sand (SW): fine to coarse-grained sand, subangular to subround; trace silt; wet; 10YR 3/2 - very dark grayish brown.	
27					
28					
29					
30	2.7			(29.0-66.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray. NOTE: Some artificial sorting in core due to rig vibing.	
31					
32					
33					
34					
35					
36					
37					
38					
39	5.2				
40					
41					
42					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-002-160

Sheet: 3 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-14-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(29.0-66.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray. NOTE: Some artificial sorting in core due to rig vibing.	
44	5.2				
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55	8.3				
56					
57					
58					
59					
60					
61					
62					
63					
64					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-002-160

Sheet: 4 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-14-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65	8.3			(29.0-66.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray. NOTE: Some artificial sorting in core due to rig vibing.	
66					
67	6.5			(66.0-83.0 ft) Well-graded gravel with sand (GW): granules to medium pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray. NOTE: Some artificial sorting in core due to rig vibing.	
68					
69					
70					
71					
72					
73					
74					
75					
76	8.4				
77					
78					
79					
80					
81					
82					
83					
84				(83.0-86.0 ft) Well-graded sand (SW): fine to coarse-grained sand, subangular to subround; trace silt; wet; 10YR 3/2 - very dark grayish brown.	
85					
86					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-002-160

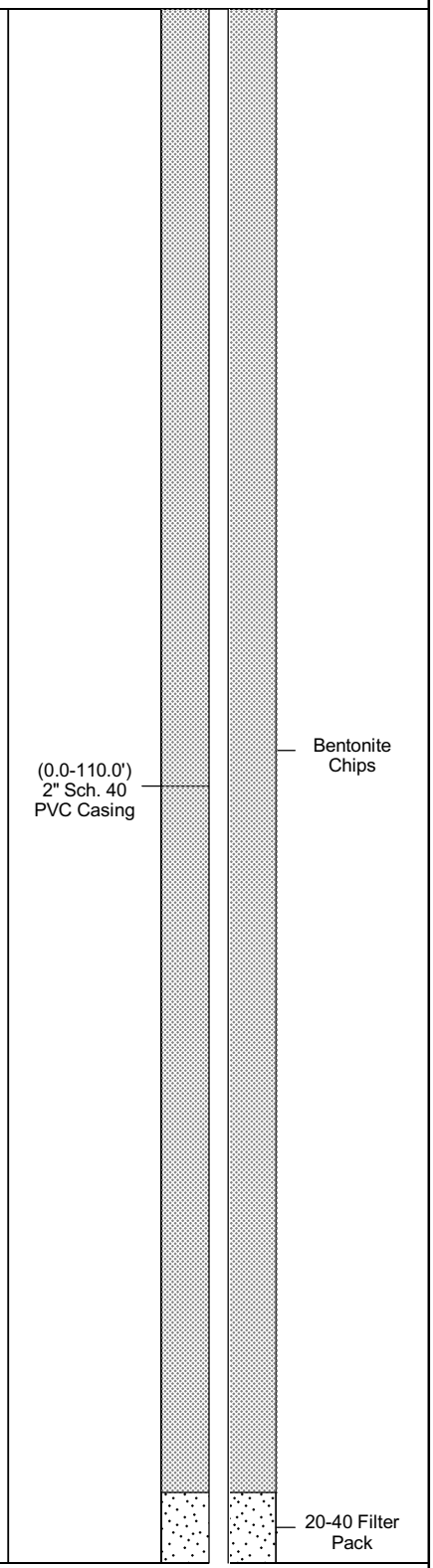
Sheet: 5 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-14-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(86.0-122.0 ft) Well-graded gravel with sand (GW): granules to medium pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray. NOTE: Some artificial sorting in core due to rig vibing.	
88					
89					
90					
91					
92					
93					
94					
95					
96	16.4				
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107	14				
108					



Remarks:

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Soil Boring Log

Boring No.: CACMW-002-160

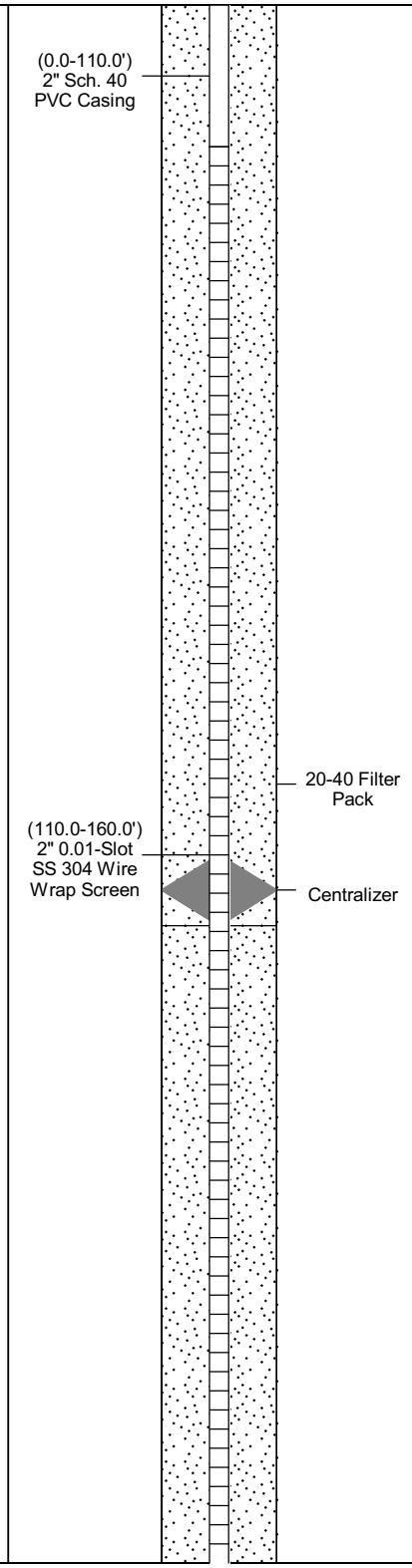
Sheet: 6 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-14-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(86.0-122.0 ft) Well-graded gravel with sand (GW): granules to medium pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray. NOTE: Some artificial sorting in core due to rig vibing.	
110					
111					
112					
113					
114					
115					
116					
117	14				
118					
119					
120					
121					
122				(122.0-143.0 ft) Well-graded sand (SW): fine to coarse-grained sand, subangular to subround; trace granules to small pebbles, subangular to subround; wet; 10YR 3/1 - very dark gray.	
123					
124					
125					
126					
127					
128	17.7				
129					
130					



Remarks:

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Soil Boring Log

Boring No.: CACMW-002-160

Sheet: 7 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-14-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
131				(122.0-143.0 ft) Well-graded sand (SW): fine to coarse-grained sand, subangular to subround; trace granules to small pebbles, subangular to subround; wet; 10YR 3/1 - very dark gray.	
132					
133					
134					
135					
136					
137					
138	17.7				
139					
140					
141					
142					
143				(143.0-162.0 ft) Well-graded gravel with sand (GW): granules to medium pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray. NOTE: Some artificial sorting in core due to rig vibing.	
144					
145					
146					
147					
148					
149	11.8				
150					
151					
152					

(110.0-160.0') 2" 0.01-Slot SS 304 Wire Wrap Screen

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-002-160

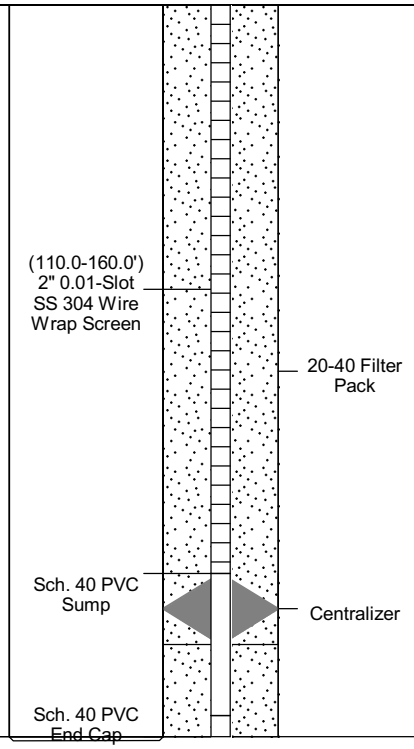
Sheet: 8 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-14-2024
Date Completed: 06-15-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
153				(143.0-162.0 ft) Well-graded gravel with sand (GW): granules to medium pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray. NOTE: Some artificial sorting in core due to rig vibing.	
154					
155					
156					
157	11.8				
158					
159					
160					
161					
162					
163				End of Boring at 162.3 ft bgs.	
164					
165					
166					
167					
168					
169					
170					
171					
172					
173					
174					



Remarks:

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Soil Boring Log

Boring No.: CACMW-003-060

Sheet: 1 of 3

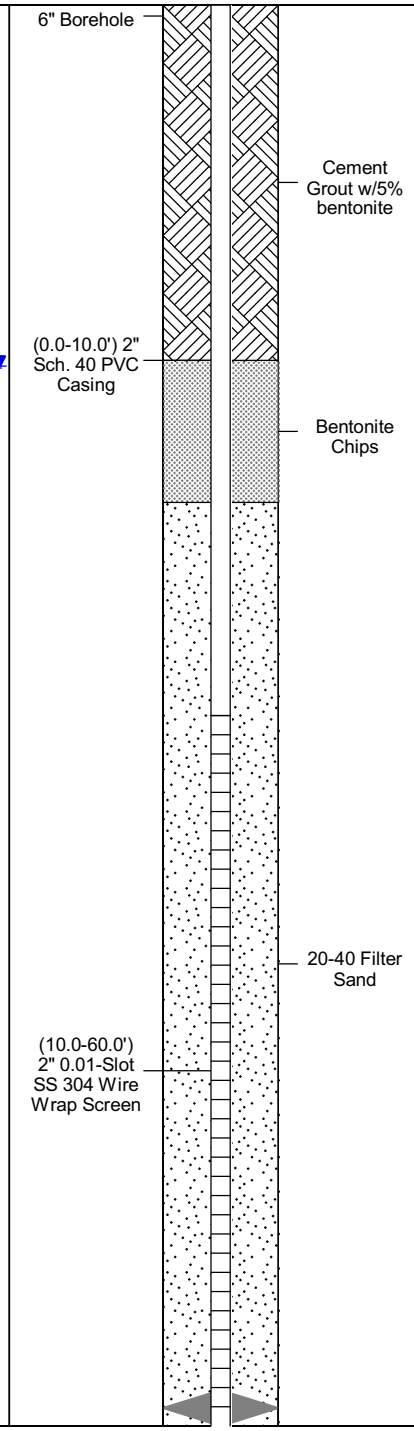
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-003-160 log for lithology.	

Construction Details



Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 62.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-003-060

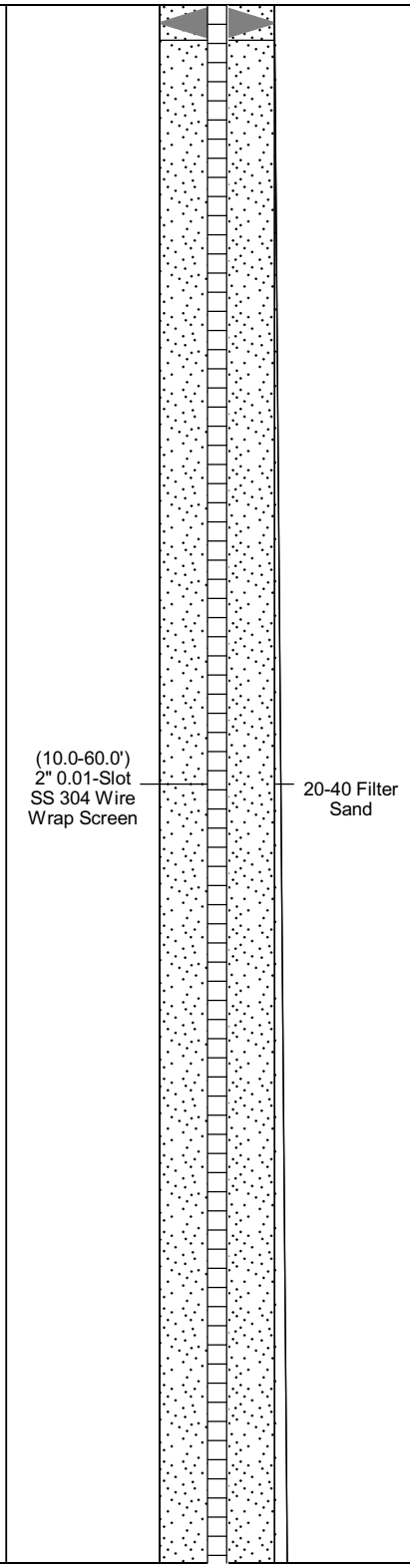
Sheet: 2 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-003-160 log for lithology.	



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-003-060

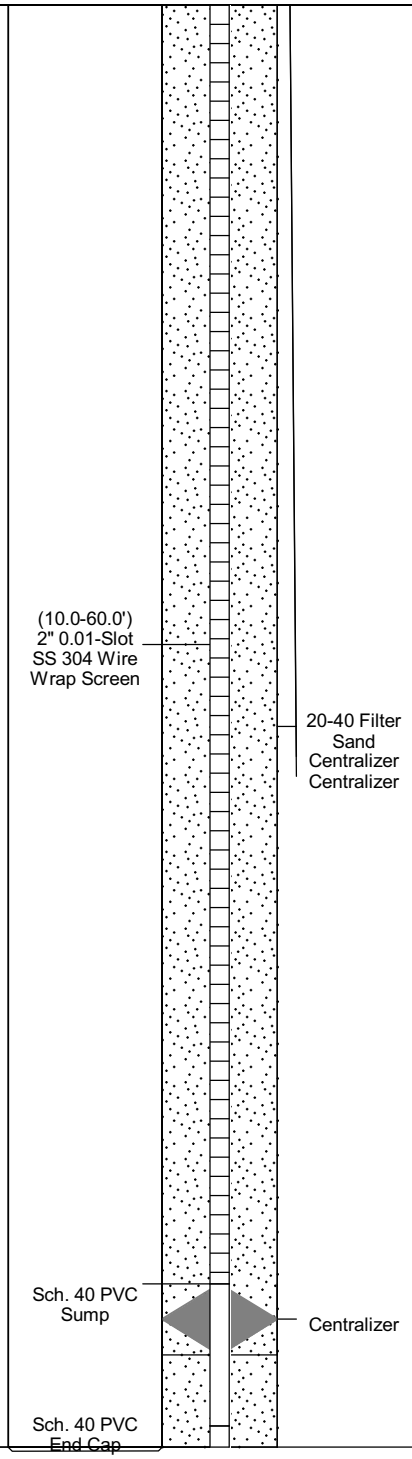
Sheet: 3 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-003-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
				End of Boring at 62.3 ft bgs.	
63					
64					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-003-110

Sheet: 1 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–20				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-003-160 log for lithology.		6" Borehole; Cement Grout w/5% bentonite; (0.0-60.0') 2" Sch. 40 PVC Casing; Bentonite Chips

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 112.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-003-110

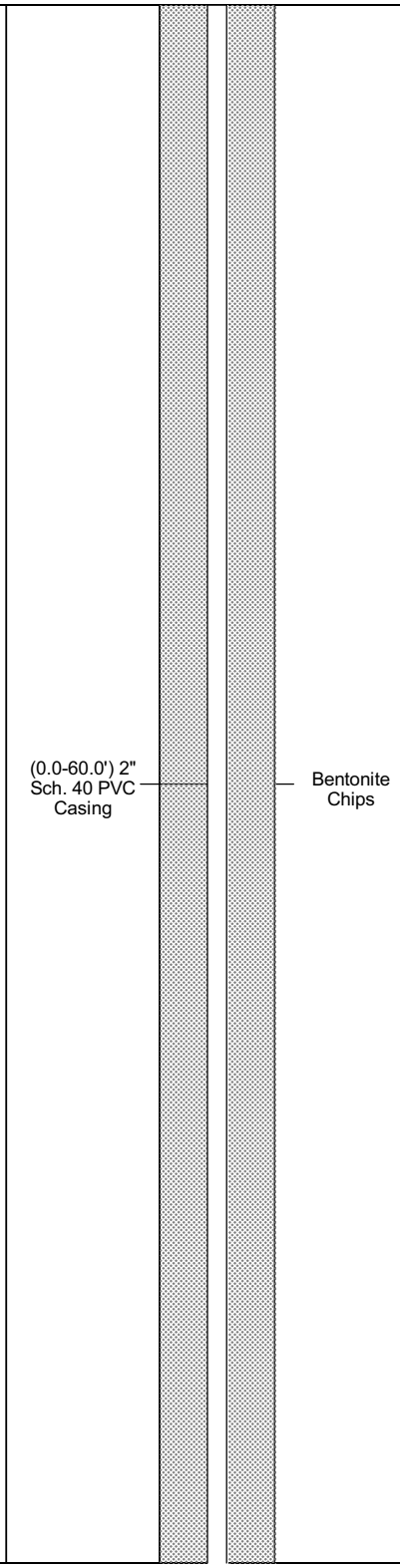
Sheet: 2 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-003-160 log for lithology.	
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-003-110

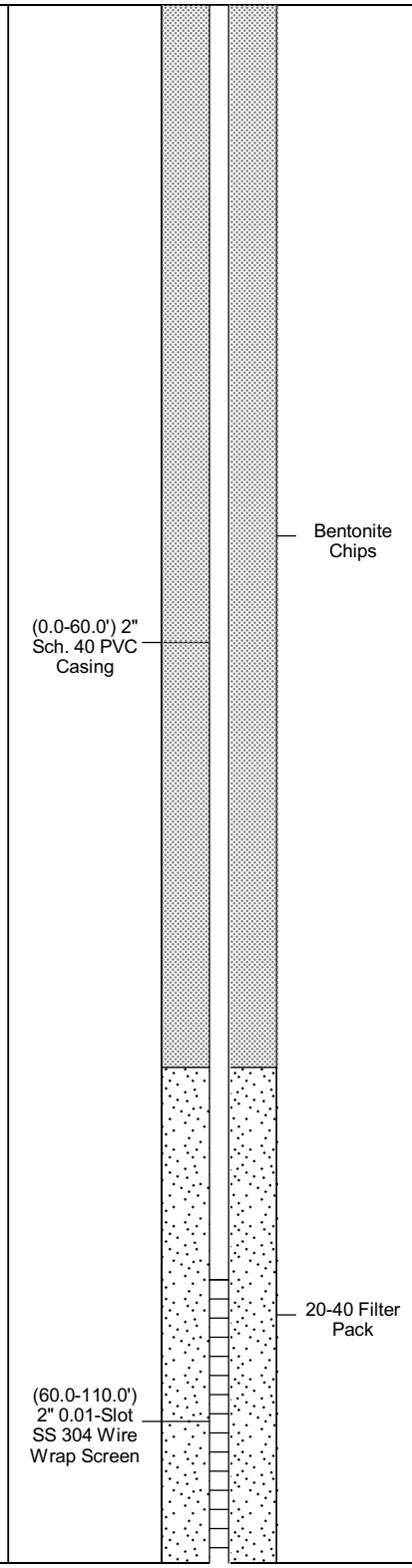
Sheet: 3 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-003-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					



Remarks:

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Soil Boring Log

Boring No.: CACMW-003-110

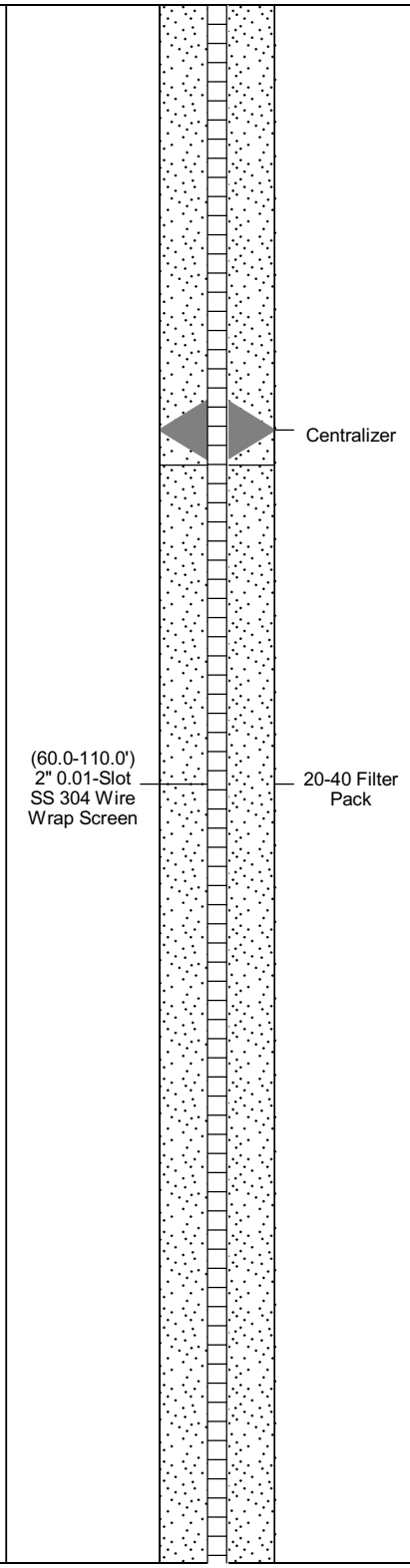
Sheet: 4 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-003-160 log for lithology.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					



Remarks:

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Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-003-110

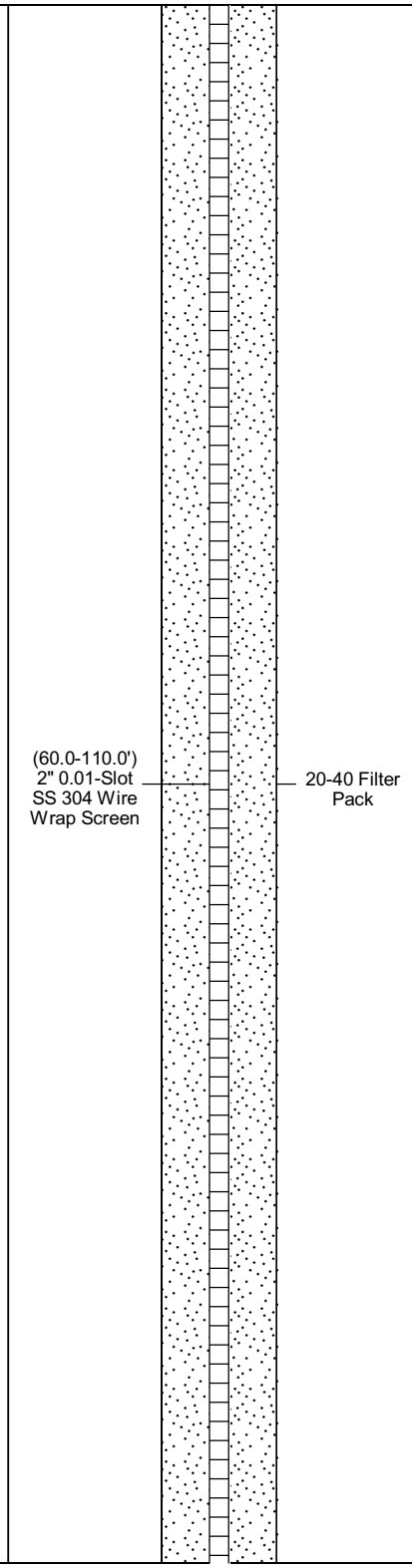
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-003-160 log for lithology.	

87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108



Remarks:

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Soil Boring Log

Boring No.: CACMW-003-110

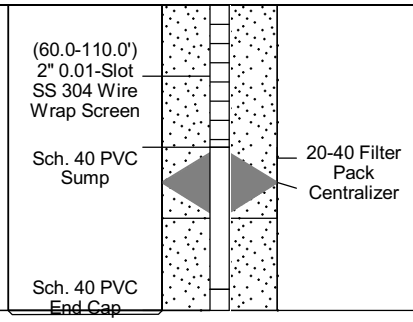
Sheet: 6 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-003-160 log for lithology.	
110					
111					
112					
113				End of Boring at 112.3 ft bgs.	
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					



Remarks:

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Soil Boring Log

Boring No.: CACMW-003-160

Sheet: 1 of 8

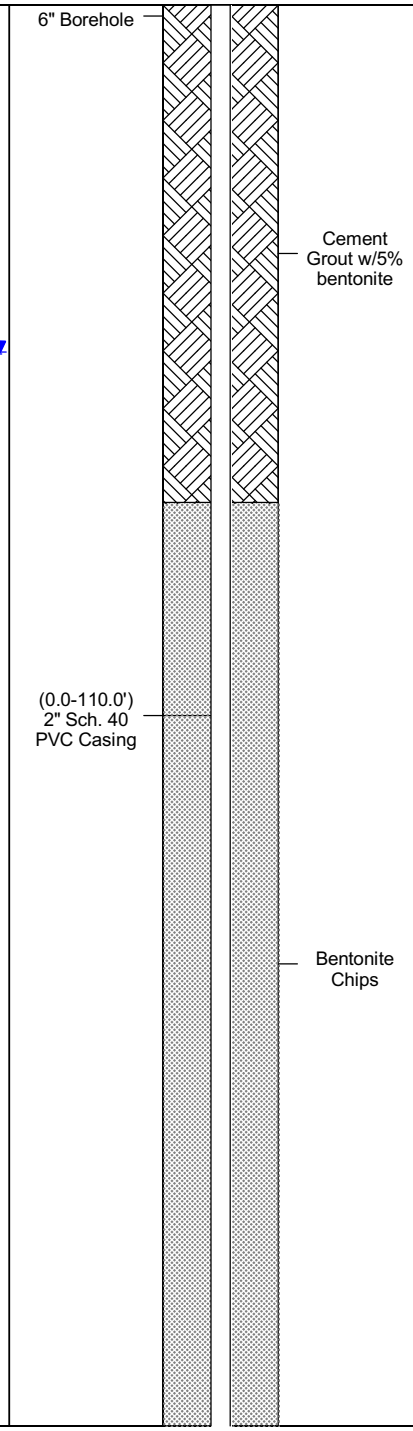
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
1–10	3.7			(0.0-13.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; moist; 10YR 4/3 - brown.	
10–13	5.8			(13.0-16.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 4/3 - brown.	
16–18	11			(16.0-19.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; moist; 10YR 4/3 - brown.	
19–20				(19.0-36.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 4/1 - dark gray.	

Construction Details



Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions: 10 - 20 ft
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 162.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-003-160

Sheet: 2 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(19.0-36.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 4/1 - dark gray.	
22					
23					
24					
25					
26					
27					
28	11				
29					
30					
31					
32					
33					
34					
35					
36					
37				(36.0-43.0 ft) Well-graded sand (SW): fine to coarse-grained sand, subangular to subround; trace silt; wet; 10YR 4/1 - dark gray.	
38					
39	14.2				
40					
41					
42					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-003-160

Sheet: 3 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(36.0-43.0 ft) Well-graded sand (SW): fine to coarse-grained sand, subangular to subround; trace silt; wet; 10YR 4/1 - dark gray.	
44				(43.0-81.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 4/1 - dark gray.	
45					
46					
47					
48					
49	14.2				
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60	13				
61					
62					
63					
64					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-003-160

Sheet: 4 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65				(43.0-81.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 4/1 - dark gray.	
66					
67					
68					
69					
70	13				
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81	18.5			(81.0-119.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, subangular to subround and granules to large pebbles, subangular to subround; wet; 10YR 4/1 - dark gray.	
82					
83					
84					
85					
86					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-003-160

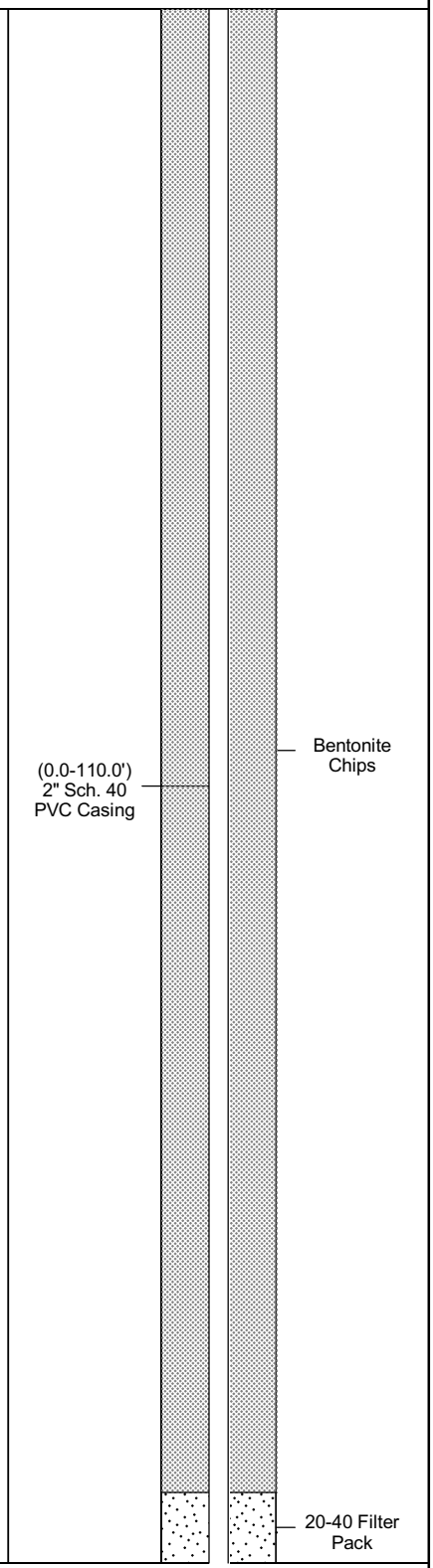
Sheet: 5 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(81.0-119.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, subangular to subround and granules to large pebbles, subangular to subround; wet; 10YR 4/1 - dark gray.	
88					
89					
90					
91	18.5				
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102	19				
103					
104					
105					
106					
107					
108					



Remarks:

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Soil Boring Log

Boring No.: CACMW-003-160

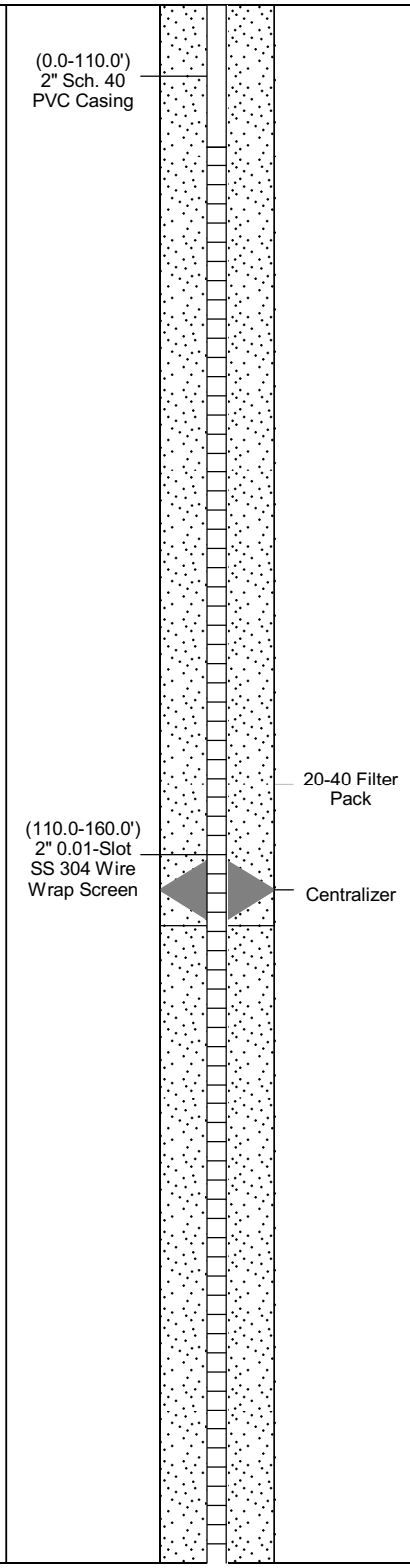
Sheet: 6 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(81.0-119.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, subangular to subround and granules to large pebbles, subangular to subround; wet; 10YR 4/1 - dark gray.	
110					
111					
112	19				
113					
114					
115					
116					
117					
118					
119				(119.0-129.0 ft) Well-graded sand (SW): fine to coarse-grained sand, subangular to subround; little granules to small pebbles, subangular to subround; moist; 10YR 4/1 - dark gray.	
120					
121					
122					
123	18				
124					
125					
126					
127					
128					
129				(129.0-131.0 ft) Silty sand (SM): very fine to fine-grained sand, subangular to subround; some silt; wet; 10YR 3/2 - very dark grayish brown.	
130					



Remarks:

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Soil Boring Log

Boring No.: CACMW-003-160

Sheet: 7 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
131				(129.0-131.0 ft) Silty sand (SM): very fine to fine-grained sand, subangular to subround; some silt; wet; 10YR 3/2 - very dark grayish brown.	
132				(131.0-140.0 ft) Well-graded sand (SW): fine to coarse-grained sand, subangular to subround; little granules to small pebbles, subangular to subround; moist; 10YR 4/1 - dark gray.	
133	18				
134					
135					
136					
137					
138					
139					
140					
141				(140.0-162.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, subangular to subround; some granules to large pebbles, subangular to subround; wet; 10YR 4/1 - dark gray.	
142					
143					
144	22				
145					
146					
147					
148					
149					
150					
151					
152					

(110.0-160.0') 2" 0.01-Slot SS 304 Wire Wrap Screen

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-003-160

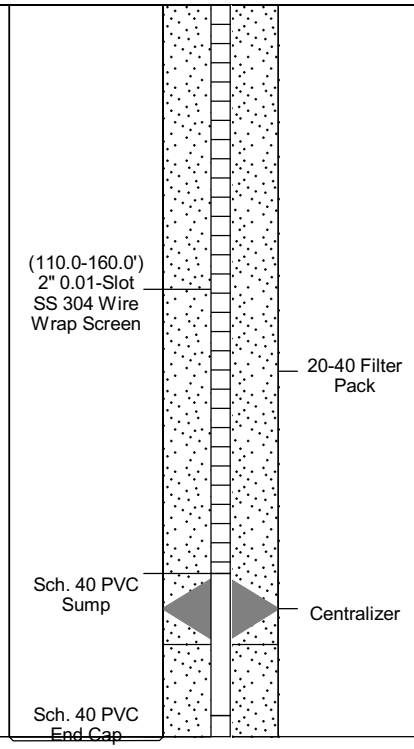
Sheet: 8 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-17-2024
Date Completed: 06-17-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
153				(140.0-162.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, subangular to subround; some granules to large pebbles, subangular to subround; wet; 10YR 4/1 - dark gray.	
154					
155					
156					
157	22				
158					
159					
160					
161					
162					
				End of Boring at 162.3 ft bgs.	
163					
164					
165					
166					
167					
168					
169					
170					
171					
172					
173					
174					



Remarks:

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Soil Boring Log

Boring No.: CACMW-004-060

Sheet: 1 of 3

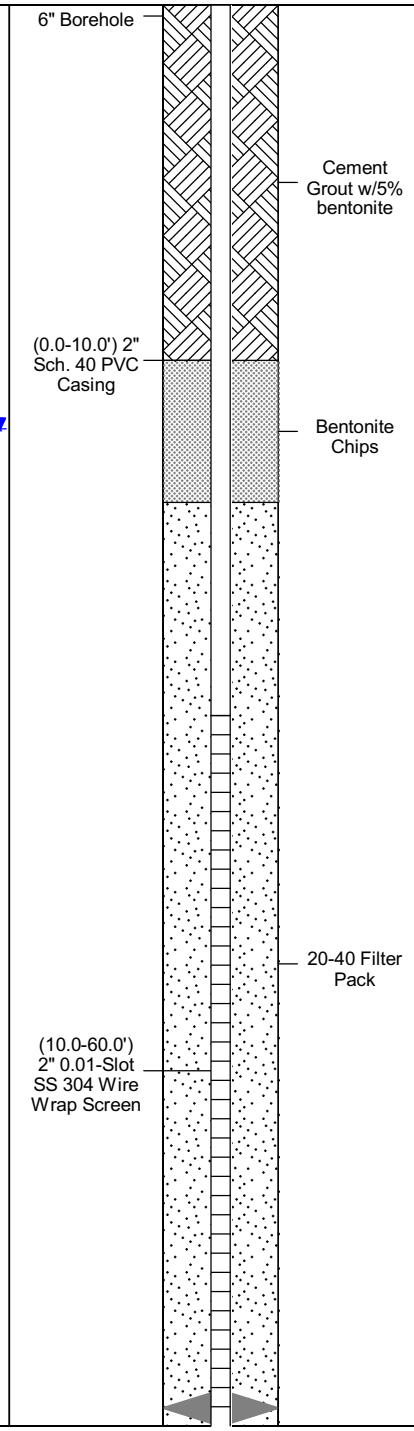
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-25-2024
Date Completed: 06-25-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
1–20				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-004-160 log for lithology.	

Construction Details



Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 62.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-060

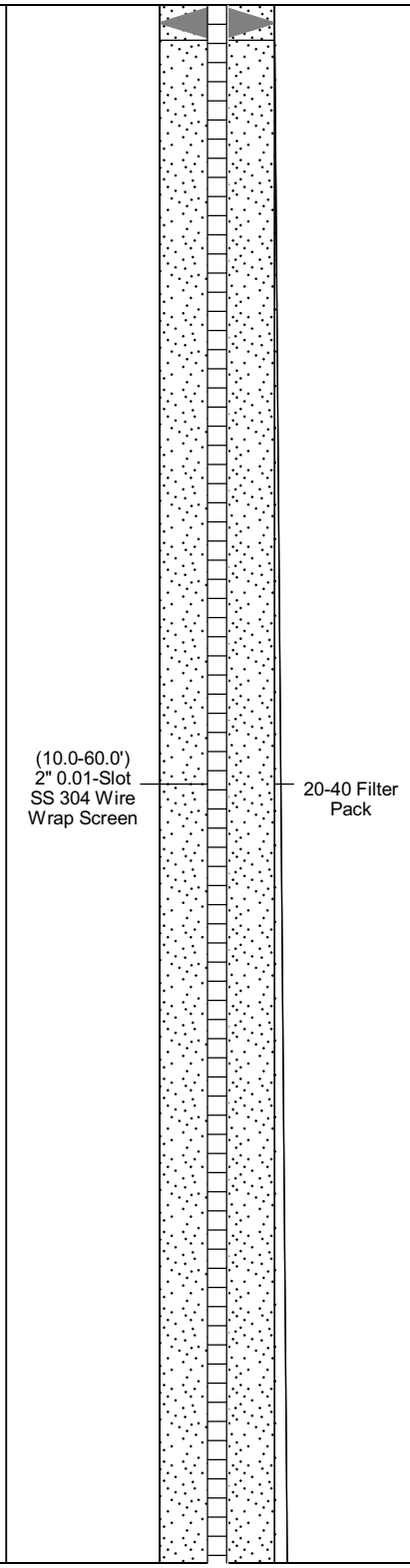
Sheet: 2 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-25-2024
Date Completed: 06-25-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-004-160 log for lithology.	
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-060

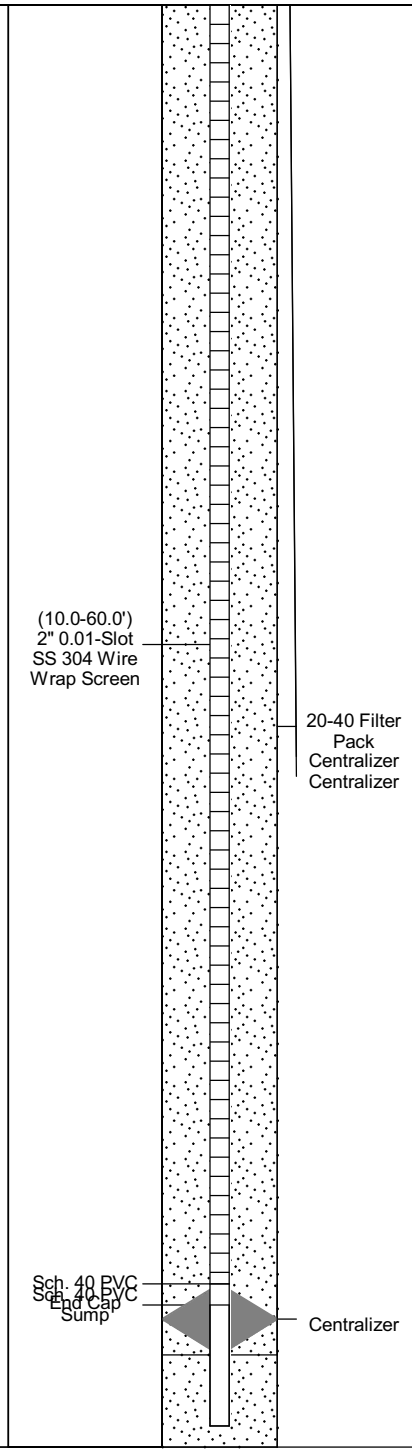
Sheet: 3 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-25-2024
Date Completed: 06-25-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-004-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63				End of Boring at 62.3 ft bgs.	
64					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-110

Sheet: 1 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-25-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–20				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-004-160 for lithology.		6" Borehole; (0.0-60.0') 2" Sch. 40 PVC Casing; Cement Grout w/5% bentonite; Bentonite Chips

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 112.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-110

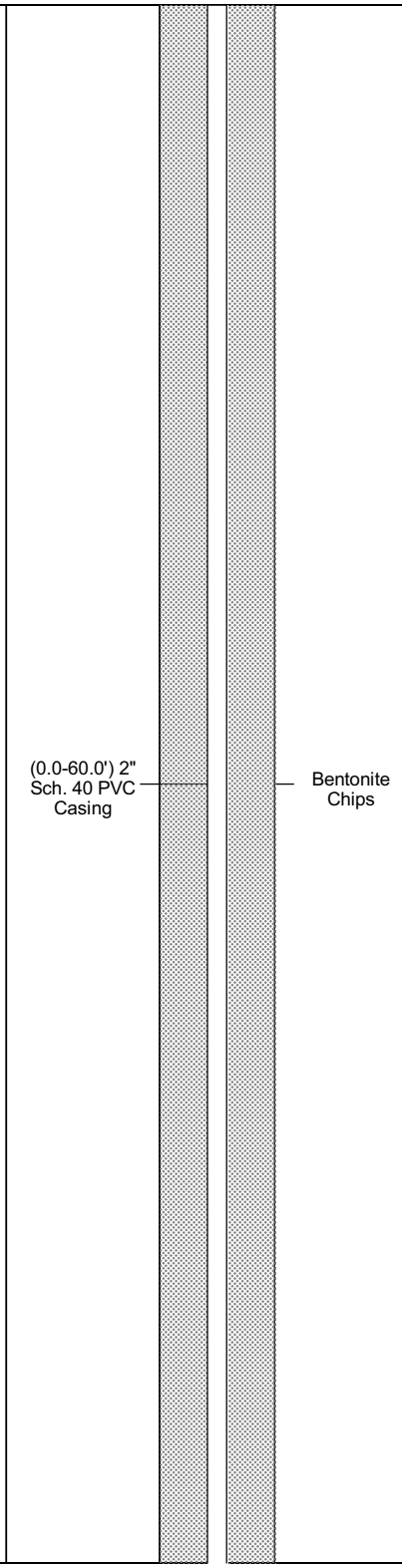
Sheet: 2 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-25-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-004-160 for lithology.	



Remarks:

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Soil Boring Log

Boring No.: CACMW-004-110

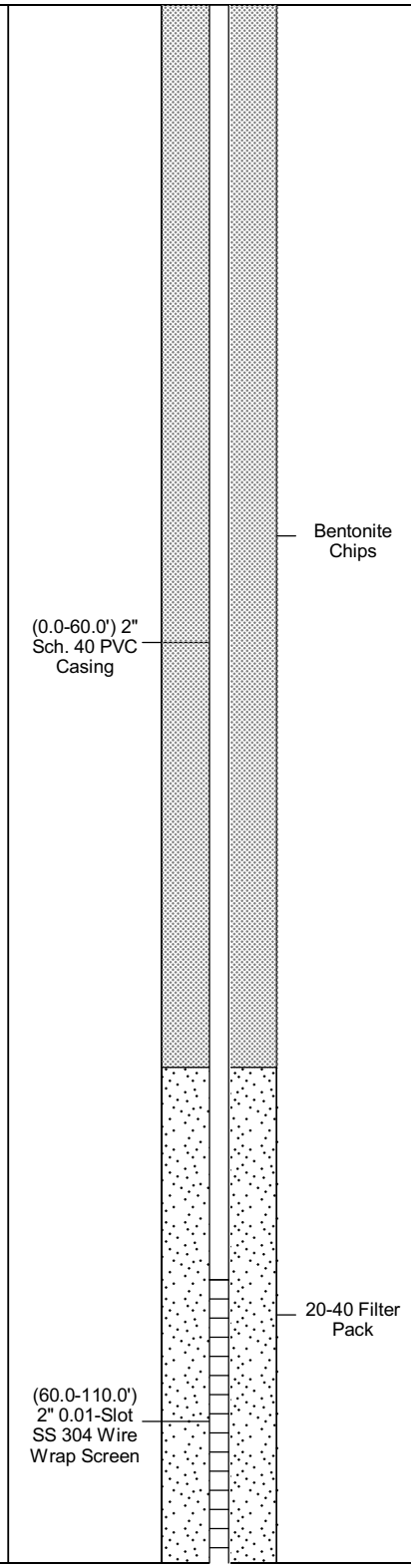
Sheet: 3 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-25-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-004-160 for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					



Remarks:

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Soil Boring Log

Boring No.: CACMW-004-110

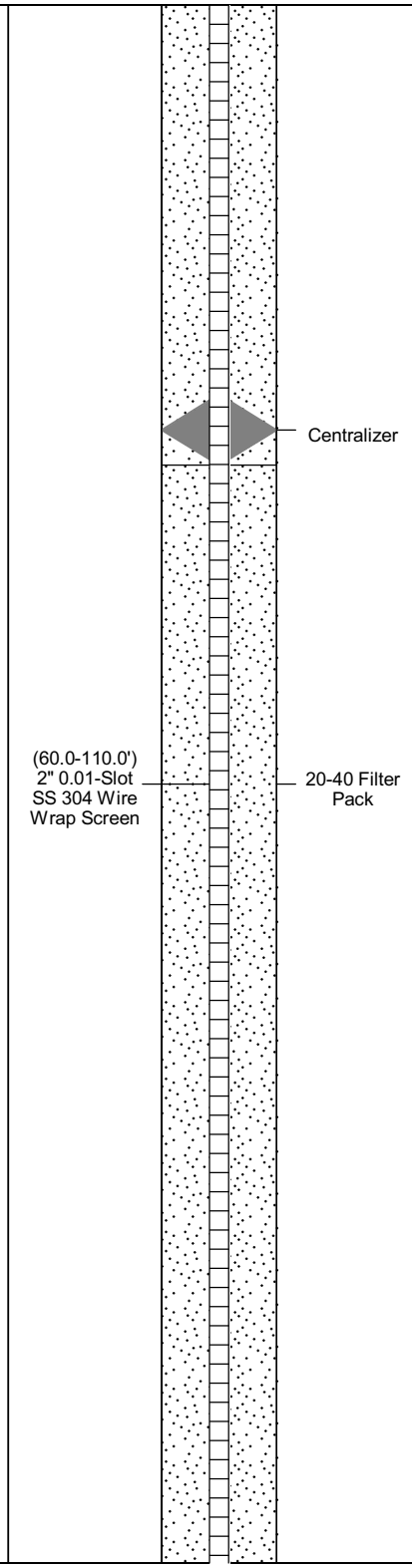
Sheet: 4 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-25-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-004-160 for lithology.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					



Remarks:

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Soil Boring Log

Boring No.: CACMW-004-110

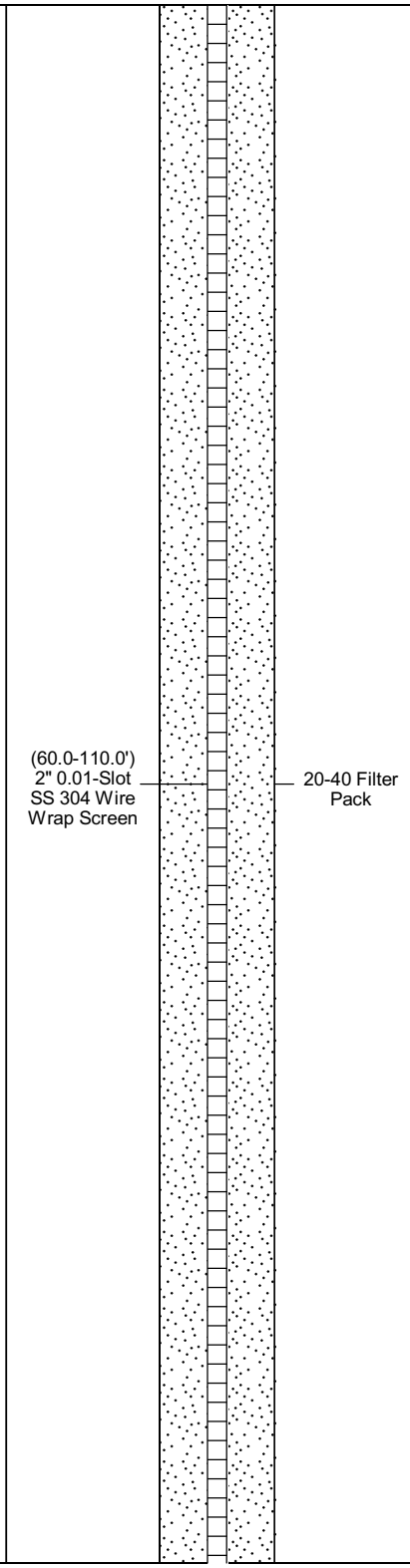
Sheet: 5 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-25-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-004-160 for lithology.	
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-110

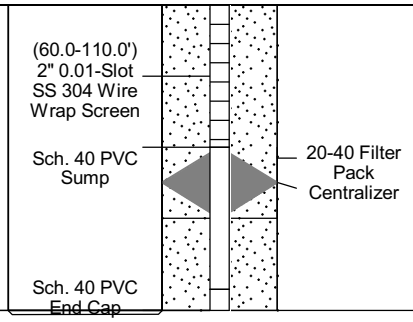
Sheet: 6 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-25-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-004-160 for lithology.	
110					
111					
112					
113				End of Boring at 112.3 ft bgs.	
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-160

Sheet: 1 of 8

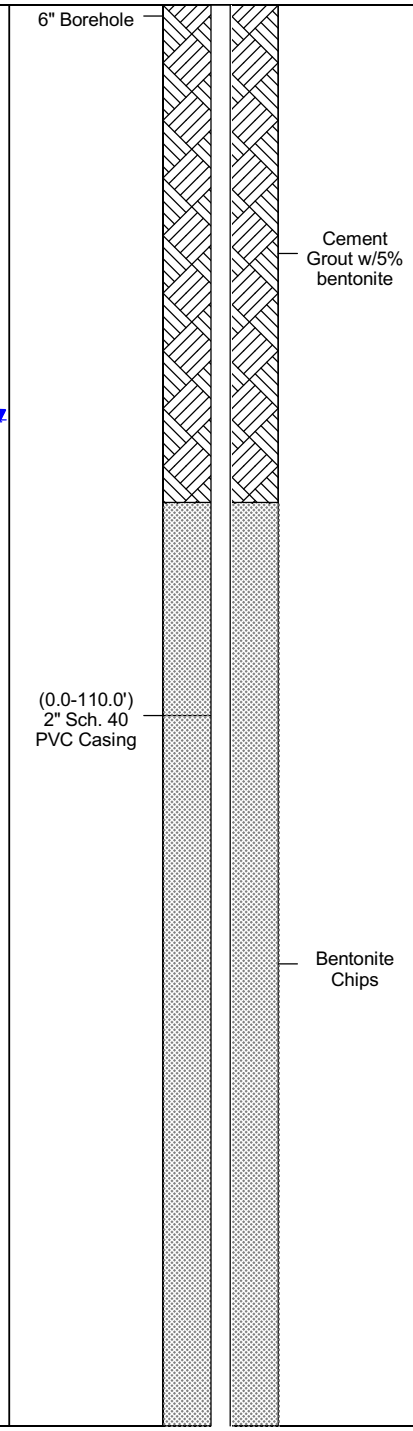
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-24-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
1–6				(0.0-6.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some very fine to very coarse-grained sand, subangular to subround; dry to moist; 10YR 4/3 - brown.	
6–13	11			(6.0-13.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand; moist to wet; 10YR 3/2 - very dark grayish brown.	
13–17				(13.0-17.0 ft) Poorly graded sand (SP): fine to medium-grained sand, subangular to subround; trace silt; wet; 2.5Y 4/1 - dark gray.	
17–19	9.8			(17.0-19.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand; moist to wet; 10YR 3/2 - very dark grayish brown.	
19–20				(19.0-21.0 ft) Poorly graded sand (SP): fine to medium-grained sand, subangular to subround; trace silt; wet; 2.5Y 4/1 - dark gray.	

Construction Details



Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions: 10 - 20 ft
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 162.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-004-160

Project Site: AFCEC
Date Started: 06-24-2024
Logger: Nicholas Icks
Project Name: Eielson AFB DGI-PSC
Date Completed: 06-24-2024
Reviewer: Kim Heinze
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(19.0-21.0 ft) Poorly graded sand (SP): fine to medium-grained sand, subangular to subround; trace silt; wet; 2.5Y 4/1 - dark gray.	
22				(21.0-93.5 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray.	
23	9.8				
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34	8				
35					
36					
37					
38					
39					
40					
41					
42					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-160

Sheet: 3 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-24-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(21.0-93.5 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray.	
44	8				
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55	16				
56					
57					
58					
59					
60					
61					
62					
63					
64					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-160

Sheet: 4 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-24-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65	16			(21.0-93.5 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76	18.5				
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-160

Sheet: 5 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-24-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(21.0-93.5 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray.	
88					
89					
90					
91					
92					
93					
94				(93.5-101.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, subangular to subround and granules to large pebbles, subangular to subround; wet; 10YR 3/1 - very dark gray.	
95					
96	18.5				
97					
98					
99					
100					
101				(101.0-121.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray.	
102					
103					
104					
105					
106					
107	17.5				
108					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-160

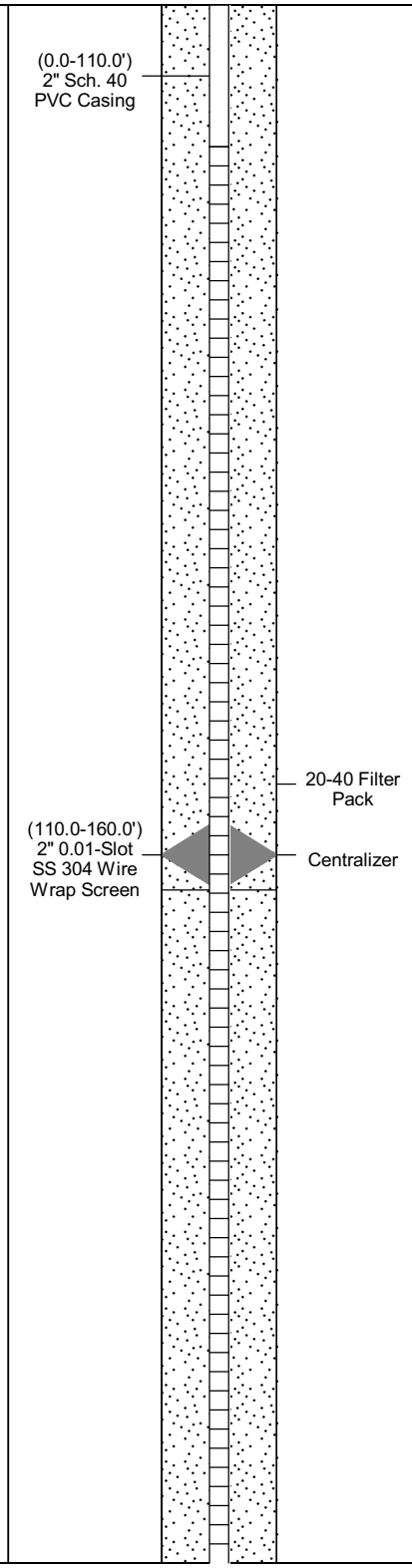
Sheet: 6 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-24-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(101.0-121.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/1 - very dark gray.	
110					
111					
112					
113					
114					
115					
116					
117	17.5				
118					
119					
120					
121				(121.0-122.0 ft) Poorly graded sand (SP): very fine to fine-grained sand, subangular to subround; trace silt; moist to wet; 10YR 4/1 - dark gray.	
122				(122.0-126.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, subangular to subround and granules to large pebbles, subangular to subround; wet; 10YR 3/1 - very dark gray.	
123					
124					
125					
126				(126.0-162.0 ft) Well-graded sand with gravel (SW): fine to coarse-grained sand, subangular to subround; little granules to large pebbles, subangular to subround; moist to wet; 10YR 3/1 - very dark gray.	
127					
128	17.5				
129					
130					



Remarks:

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Soil Boring Log

Boring No.: CACMW-004-160

Sheet: 7 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-24-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
131				(126.0-162.0 ft) Well-graded sand with gravel (SW): fine to coarse-grained sand, subangular to subround; little granules to large pebbles, subangular to subround; moist to wet; 10YR 3/1 - very dark gray.	
132					
133					
134					
135					
136					
137					
138	17.5				
139					
140					
141					
142					
143					
144					
145					
146					
147					
148					
149	5.2				
150					
151					
152					

(110.0-160.0') 2" 0.01-Slot SS 304 Wire Wrap Screen

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-004-160

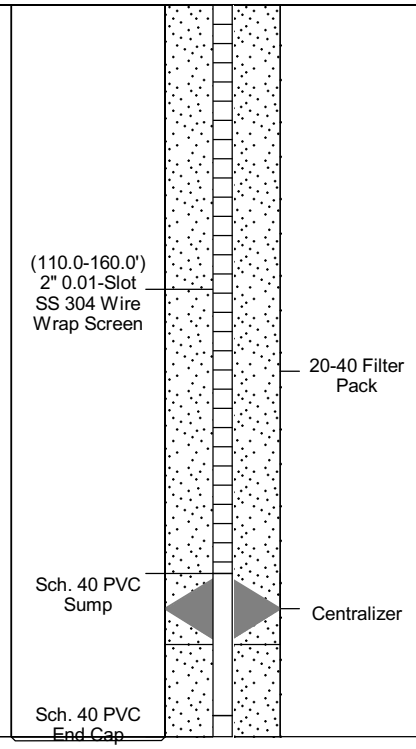
Sheet: 8 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-24-2024
Date Completed: 06-24-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
153				(126.0-162.0 ft) Well-graded sand with gravel (SW): fine to coarse-grained sand, subangular to subround; little granules to large pebbles, subangular to subround; moist to wet; 10YR 3/1 - very dark gray.	
154					
155					
156					
157	5.2				
158					
159					
160					
161					
162					
				End of Boring at 162.3 ft bgs.	
163					
164					
165					
166					
167					
168					
169					
170					
171					
172					
173					
174					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-005-060

Sheet: 1 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Ickes
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–20				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-005-160 log for lithology.		6" Borehole Cement Grout w/5% bentonite (0.0-10.0') 2" Sch. 40 PVC Casing Bentonite Chips 20-40 Filter Pack (10.0-60.0') 2" 0.01-Slot SS 304 Wire Wrap Screen

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 62.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-005-060

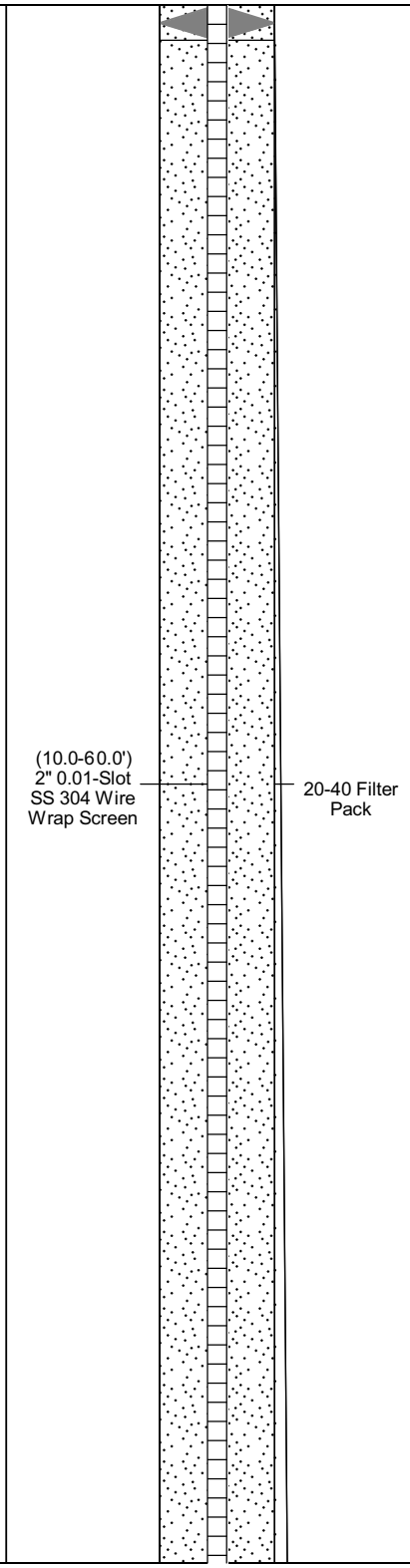
Sheet: 2 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nichdas Ickes
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-005-160 log for lithology.	



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-005-060

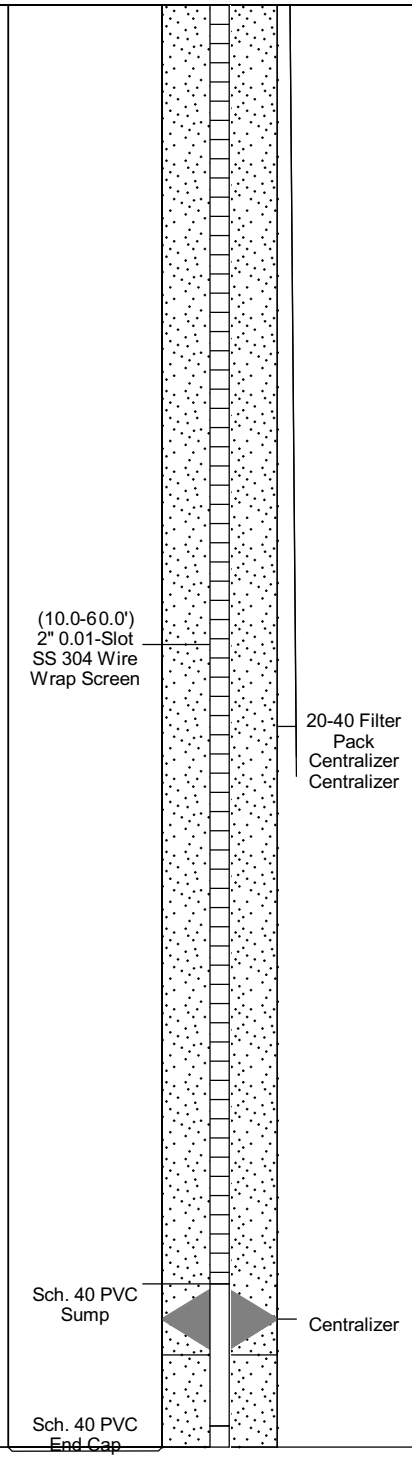
Sheet: 3 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nichdas Ickes
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-005-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
				End of Boring at 62.3 ft bgs.	
63					
64					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-005-110

Sheet: 1 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–20				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-005-160 log for lithology.		6" Borehole; Cement Grout w/5% bentonite; (0.0-60.0') 2" Sch. 40 PVC Casing; Bentonite Chips

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 112.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-005-110

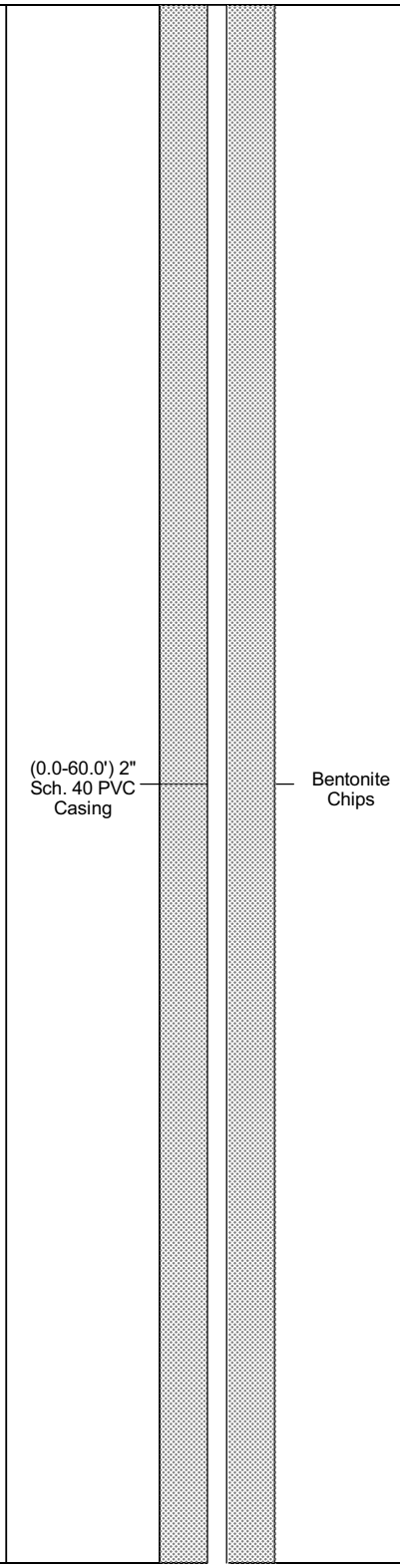
Sheet: 2 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-005-160 log for lithology.	
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					



Remarks:

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Soil Boring Log

Boring No.: CACMW-005-110

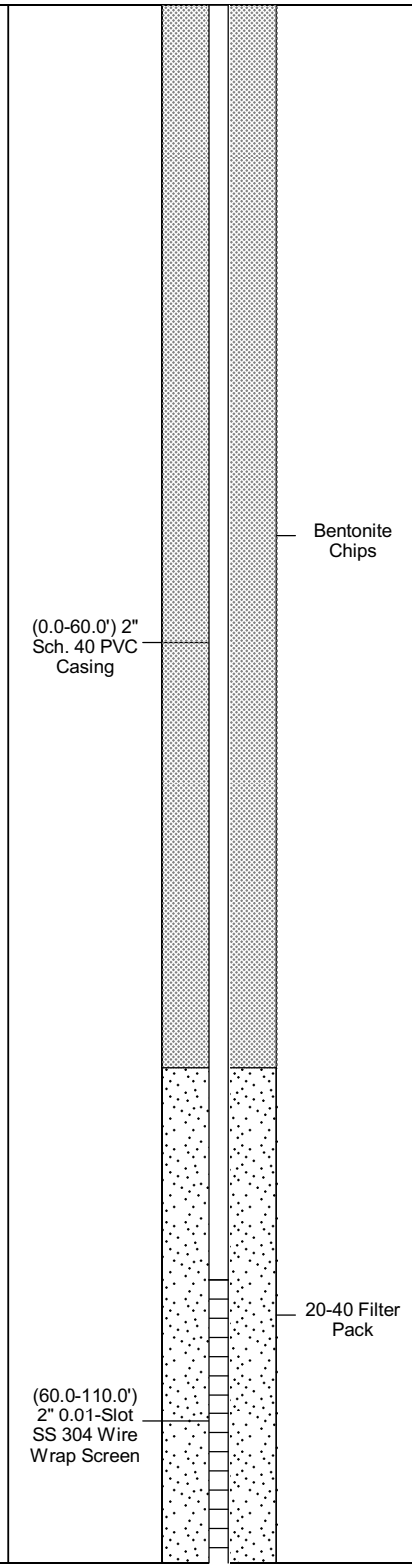
Sheet: 3 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-005-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					



Remarks:

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Soil Boring Log

Boring No.: CACMW-005-110

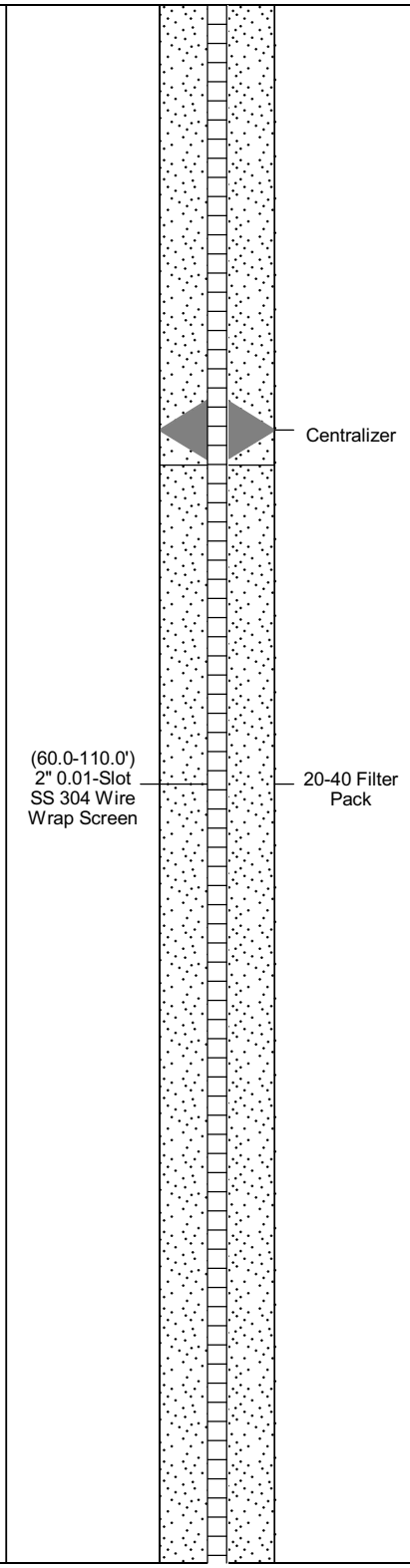
Sheet: 4 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-005-160 log for lithology.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					



Remarks:

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Soil Boring Log

Boring No.: CACMW-005-110

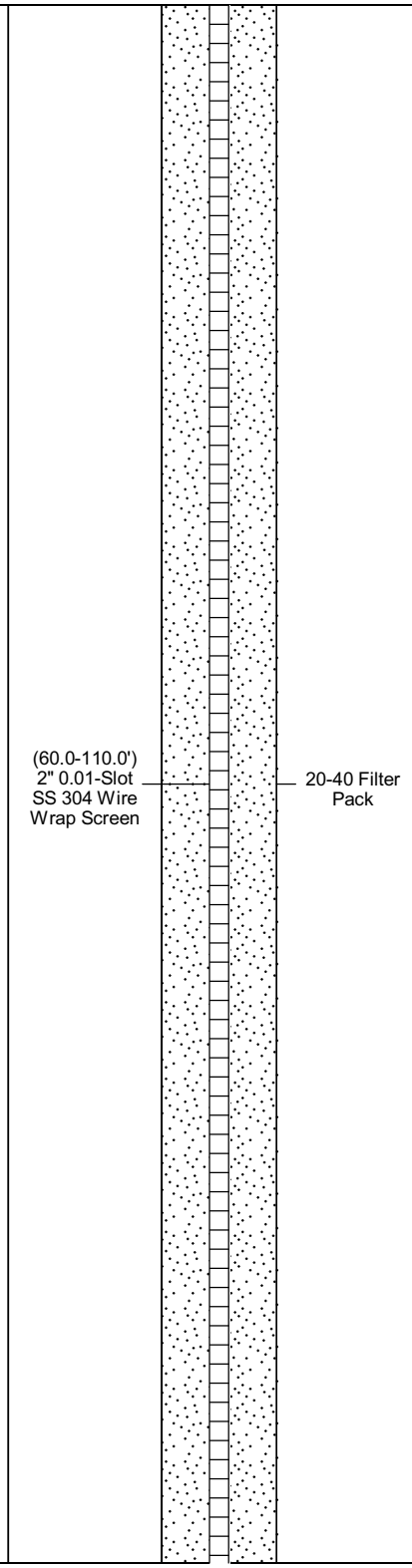
Sheet: 5 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-005-160 log for lithology.	
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					



Remarks:

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Soil Boring Log

Boring No.: CACMW-005-110

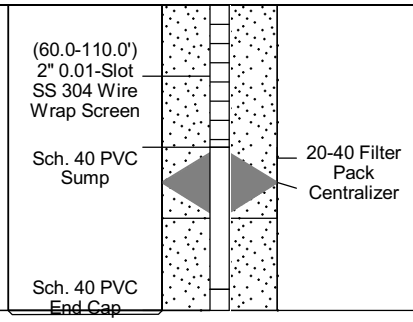
Sheet: 6 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-005-160 log for lithology.	
110					
111					
112					
113				End of Boring at 112.3 ft bgs.	
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					



Remarks:

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Soil Boring Log

Boring No.: CACMW-005-160

Sheet: 1 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–6	4.7			(0.0-6.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; dry to moist; 10YR 4/3 - brown.		6" Borehole; Cement Grout w/5% bentonite
6–16	6.6			(6.0-29.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; wet; 10YR 3/2 - very dark grayish brown.	▼	(0.0-110.0') 2" Sch. 40 PVC Casing; Bentonite Chips
16–20	8					

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 162.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-005-160

Sheet: 2 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(6.0-29.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; wet; 10YR 3/2 - very dark grayish brown.	
22					
23	8				
24					
25					
26					
27					
28					
29				(29.0-30.0 ft) Well-graded sand (SW): fine to coarse-grained sand; little small pebbles, subangular to subround; wet; 10YR 4/1 - dark gray.	
30				(30.0-94.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; little silt; wet; 10YR 4/1 - dark gray. NOTE: Artificial sorting in 66-72' and 86-89' cores due to vibing.	
31					
32					
33					
34	16.8				
35					
36					
37					
38					
39					
40					
41					
42					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-005-160

Sheet: 3 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(30.0-94.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; little silt; wet; 10YR 4/1 - dark gray. NOTE: Artificial sorting in 66-72' and 86-89' cores due to vibing.	
44	16.8				
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55	17.5				
56					
57					
58					
59					
60					
61					
62					
63					
64					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-005-160

Sheet: 4 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65	17.5			(30.0-94.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; little silt; wet; 10YR 4/1 - dark gray. NOTE: Artificial sorting in 66-72' and 86-89' cores due to vibing.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76	16.6				
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-005-160

Sheet: 5 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(30.0-94.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; little silt; wet; 10YR 4/1 - dark gray. NOTE: Artificial sorting in 66-72' and 86-89' cores due to vibing.	
88					
89					
90					
91					
92					
93					
94				(94.0-103.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 4/1 - dark gray.	
95					
96	17.5				
97					
98					
99					
100					
101					
102					
103				(103.0-106.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; little silt; wet; 10YR 4/1 - dark gray. NOTE: Artificial sorting in 66-72' and 86-89' cores due to vibing.	
104					
105					
106				(106.0-116.0 ft) Well-graded sand with gravel (SW): fine to coarse-grained sand, angular to subround; some granules to large pebbles, subangular to subround; wet; 10YR 4/1 - dark gray.	
107	17.5				
108					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-005-160

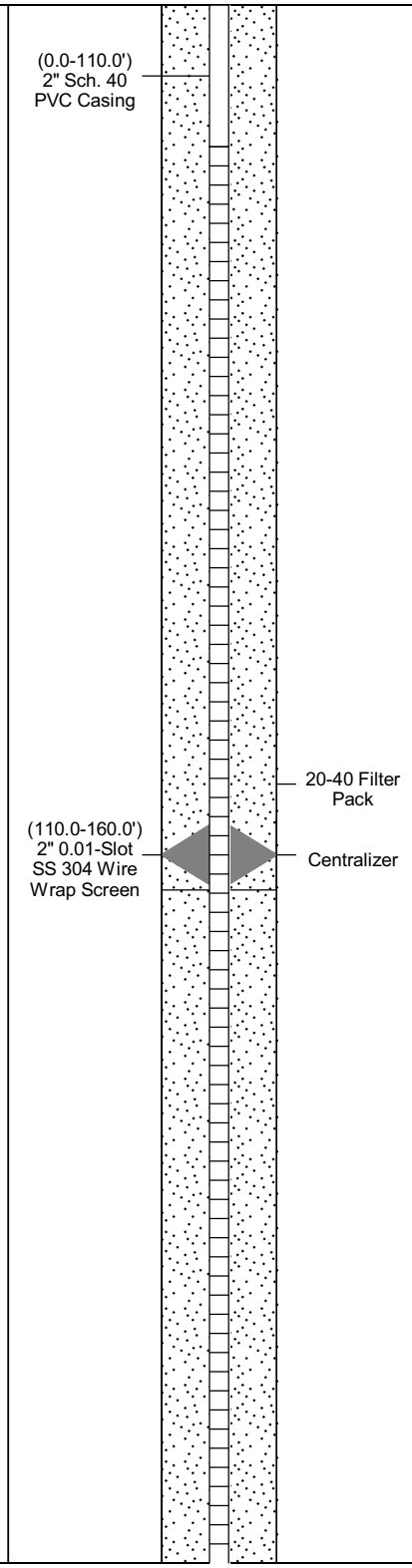
Sheet: 6 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(106.0-116.0 ft) Well-graded sand with gravel (SW): fine to coarse-grained sand, angular to subround; some granules to large pebbles, subangular to subround; wet; 10YR 4/1 - dark gray.	
110					
111					
112					
113					
114					
115					
116					
117	17.5			(116.0-122.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, subangular to subround; little silt; wet; 10YR 4/1 - dark gray.	
118					
119					
120					
121					
122					
123				(122.0-126.0 ft) Well-graded sand with gravel (SW): fine to coarse-grained sand, angular to subround; some granules to large pebbles, subangular to subround; wet; 10YR 4/1 - dark gray.	
124					
125					
126					
127				(126.0-146.0 ft) Well-graded sand with gravel (SW): fine to coarse-grained sand, angular to subround; some granules to large pebbles, subangular to subround; moist to wet; 10YR 4/1 - dark gray.	
128	18.3				
129					
130					



Remarks:

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Soil Boring Log

Boring No.: CACMW-005-160

Sheet: 7 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
131				(126.0-146.0 ft) Well-graded sand with gravel (SW): fine to coarse-grained sand, angular to subround; some granules to large pebbles, subangular to subround; moist to wet; 10YR 4/1 - dark gray.	
132					
133					
134					
135					
136					
137					
138	18.3				
139					
140					
141					
142					
143					
144					
145					
146				(146.0-166.0 ft) No Recovery.	
147					
148					
149	0				
150					
151					
152					

(110.0-160.0') 2" 0.01-Slot SS 304 Wire Wrap Screen

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-005-160

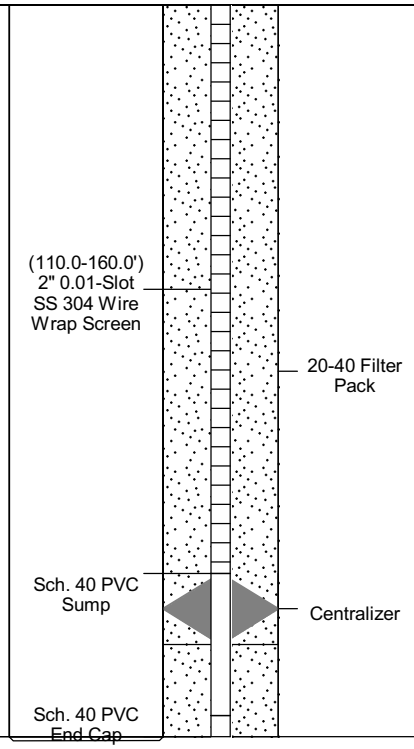
Sheet: 8 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-18-2024
Date Completed: 06-18-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
153				(146.0-166.0 ft) No Recovery.	
154					
155					
156					
157					
158					
159	0				
160					
161					
162					
163					
164					
165					
166				End of Boring at 162.3 ft bgs.	
167					
168					
169					
170					
171					
172					
173					
174					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-006-060

Sheet: 1 of 3

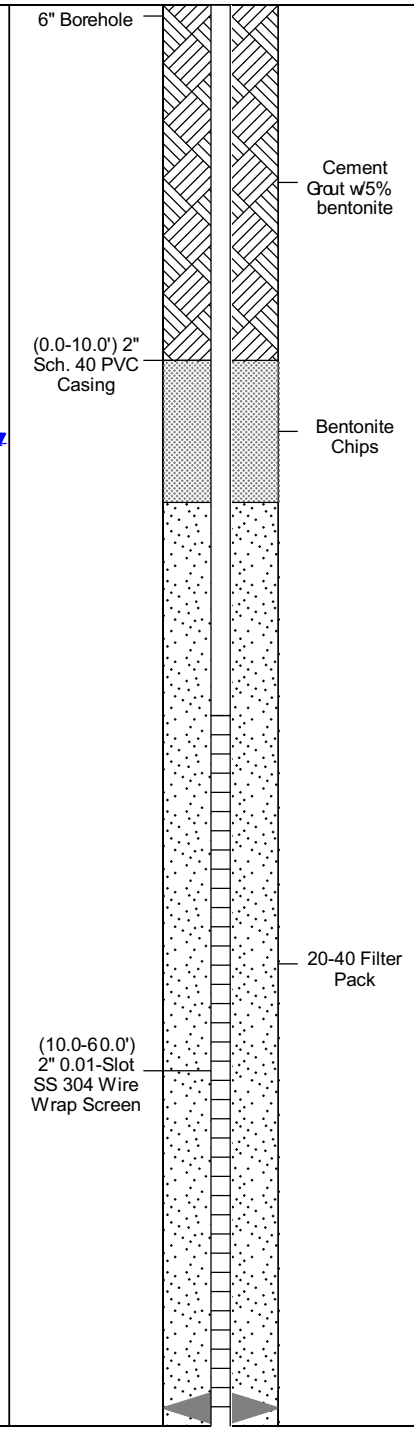
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-20-2024
Date Completed: 06-20-2024

Logger: Nichdas Ickes
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
1–20				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-006-160 log for lithology.	

Construction Details



Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Rotosonic
Drill Rig: Rotosonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 62.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-006-060

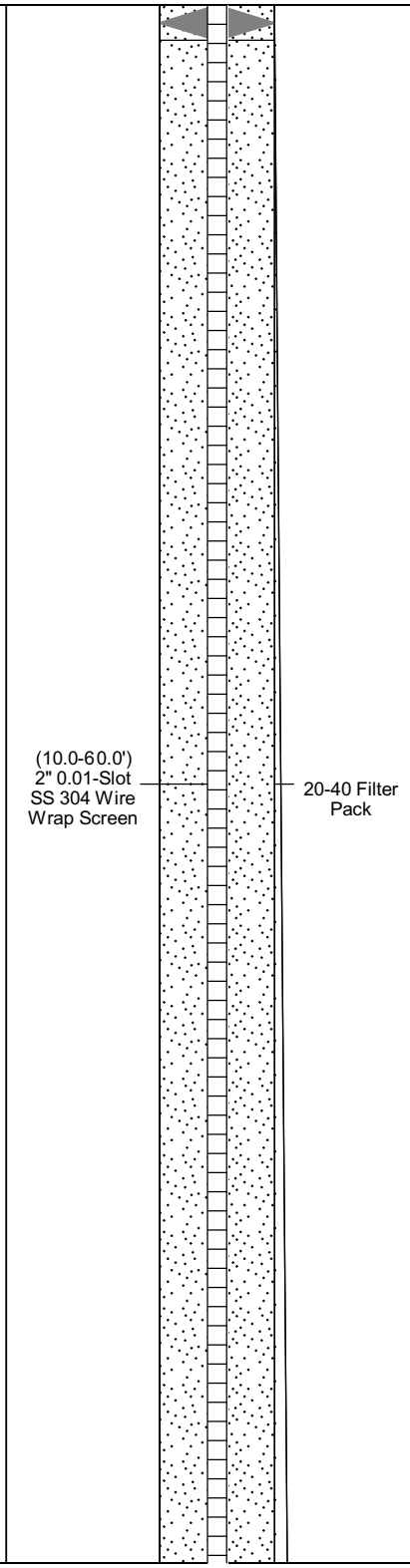
Sheet: 2 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-20-2024
Date Completed: 06-20-2024

Logger: Nichdas Ickes
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-006-160 log for lithology.	



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-006-060

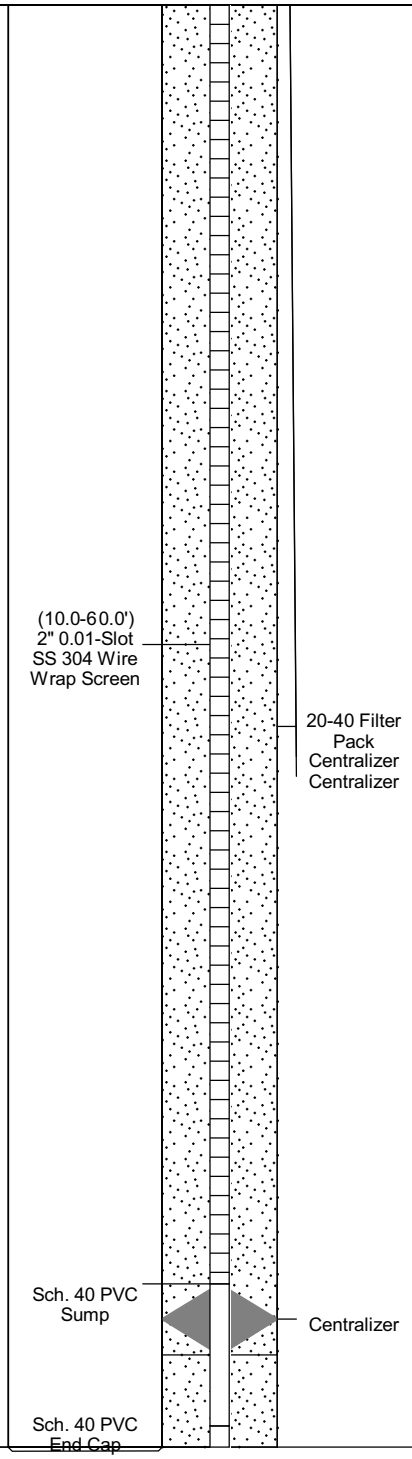
Sheet: 3 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-20-2024
Date Completed: 06-20-2024

Logger: Nichdas Ickes
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-006-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
				End of Boring at 62.3 ft bgs.	
63					
64					



Remarks:

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Soil Boring Log

Boring No.: CACMW-006-110

Sheet: 1 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–20				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-006-160 log for lithology.		6" Borehole; (0.0-60.0') 2" Sch. 40 PVC Casing; Cement Grout w/5% bentonite; Bentonite Chips

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 112.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-006-110

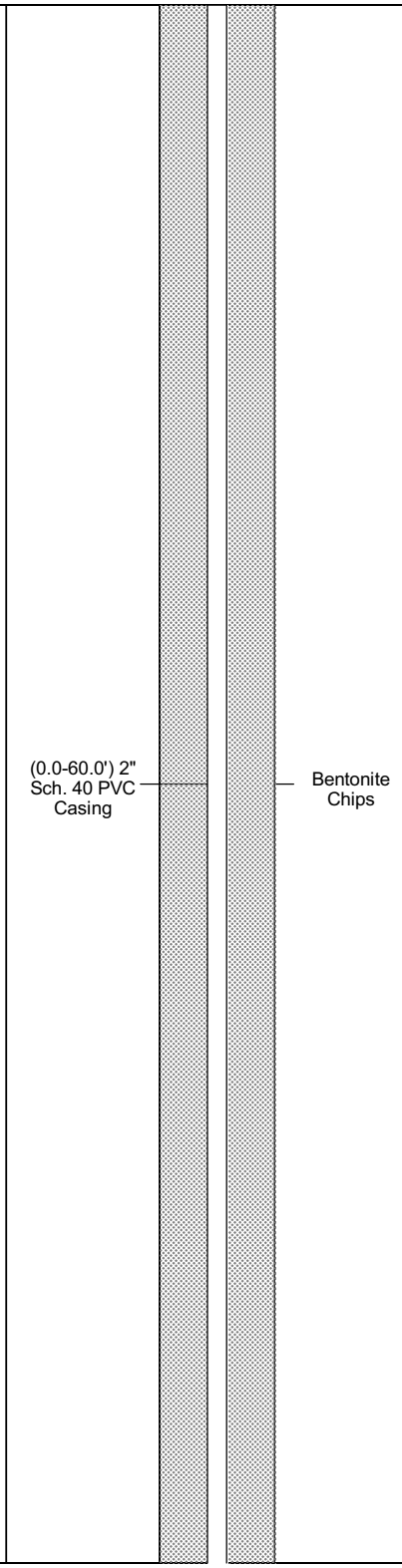
Sheet: 2 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-006-160 log for lithology.	
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					



Remarks:

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Soil Boring Log

Boring No.: CACMW-006-110

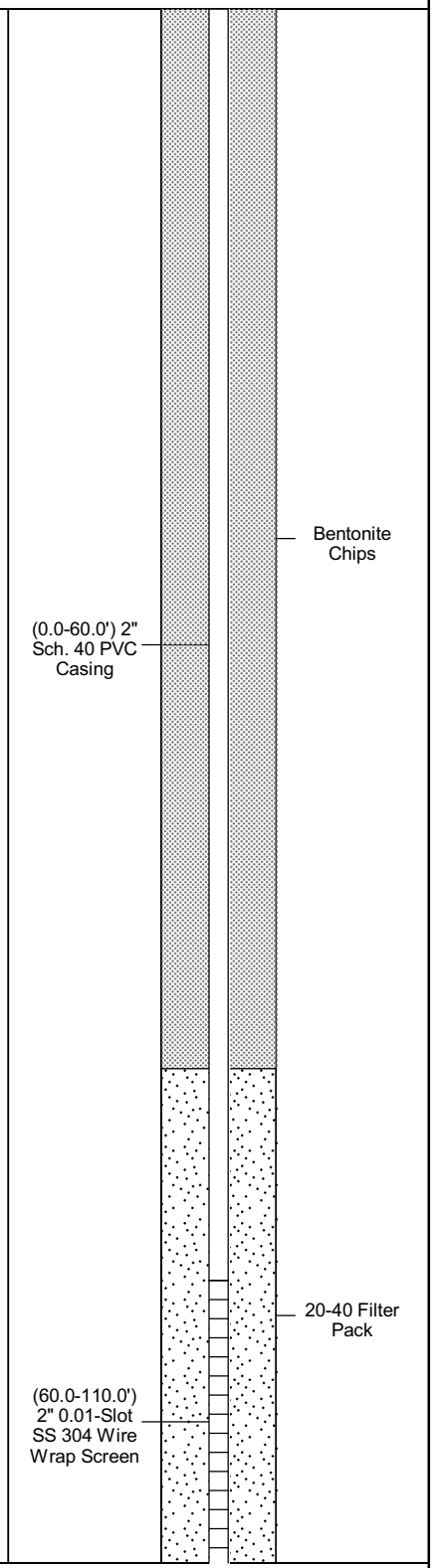
Sheet: 3 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-006-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					



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Soil Boring Log

Boring No.: CACMW-006-110

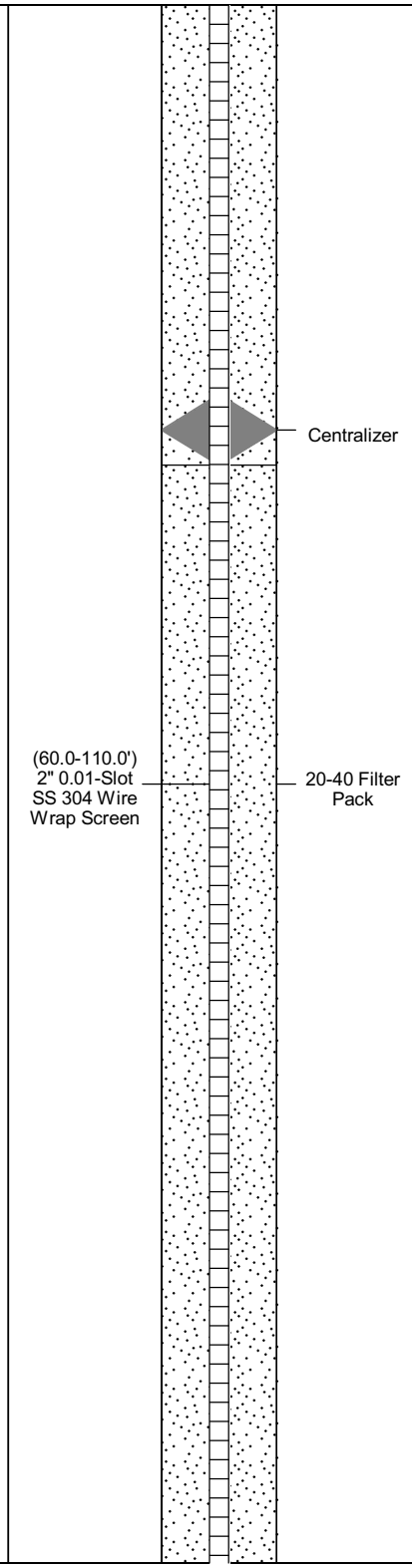
Sheet: 4 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-006-160 log for lithology.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					



Remarks:

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Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-006-110

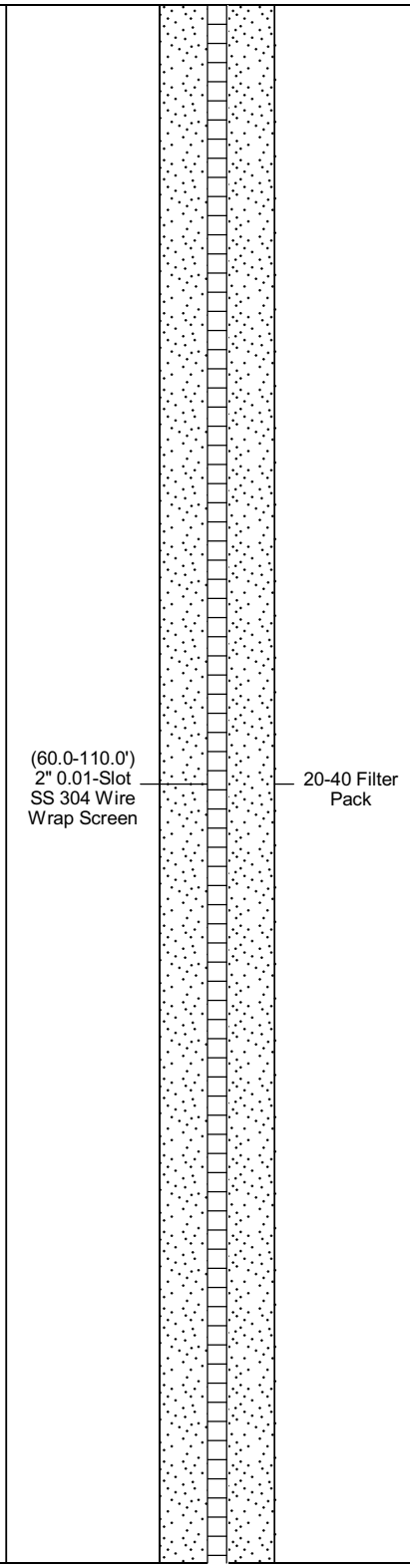
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-006-160 log for lithology.	

87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108



Remarks:

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Soil Boring Log

Boring No.: CACMW-006-110

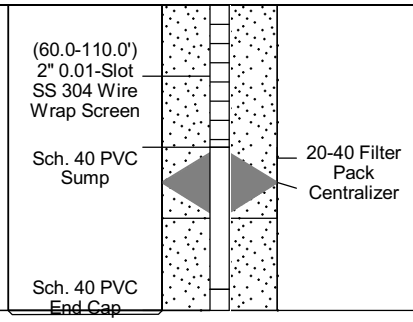
Sheet: 6 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-006-160 log for lithology.	
110					
111					
112					
113				End of Boring at 112.3 ft bgs.	
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-006-160

Sheet: 1 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–8	5			(0.0-8.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; dry to moist; 10YR 4/3 - brown.		6" Borehole; Cement Grout w/5% bentonite
8–20	9.6			(8.0-23.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/2 - very dark grayish brown.		(0.0-110.0') 2" Sch. 40 PVC Casing; Bentonite Chips

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions: 10 - 20 ft
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 162.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-006-160

Sheet: 2 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(8.0-23.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; wet; 10YR 3/2 - very dark grayish brown.	
22					
23	9.6				
24				(23.0-27.0 ft) Well-graded sand with gravel (SW): very fine to coarse-grained sand, subangular to subround; some granules to very large pebbles, subangular to subround; wet; 10YR 3/1 - very dark gray. NOTE: Trace pieces of wood ~23.5' bgs.	
25					
26					
27				(27.0-40.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; wet; 10YR 4/1 - dark gray.	
28					
29					
30					
31					
32					
33					
34	14.4				
35					
36					
37					
38					
39					
40					
41				(40.0-47.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; little fine to very coarse-grained sand, subangular to subround; trace silt; wet; 10YR 4/1 - dark gray.	
42					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-006-160

Sheet: 3 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(40.0-47.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; little fine to very coarse-grained sand, subangular to subround; trace silt; wet; 10YR 4/1 - dark gray.	
44	14.4				
45					
46					
47				(47.0-115.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 3/1 - very dark gray.	
48					
49					
50					
51					
52					
53					
54					
55	18.3				
56					
57					
58					
59					
60					
61					
62					
63					
64					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-006-160

Sheet: 4 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65	18.3			(47.0-115.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 3/1 - very dark gray.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76	17.5				
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-006-160

Sheet: 5 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(47.0-115.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 3/1 - very dark gray.	
88					
89					
90					
91					
92					
93					
94					
95					
96	18				
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107	19				
108					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-006-160

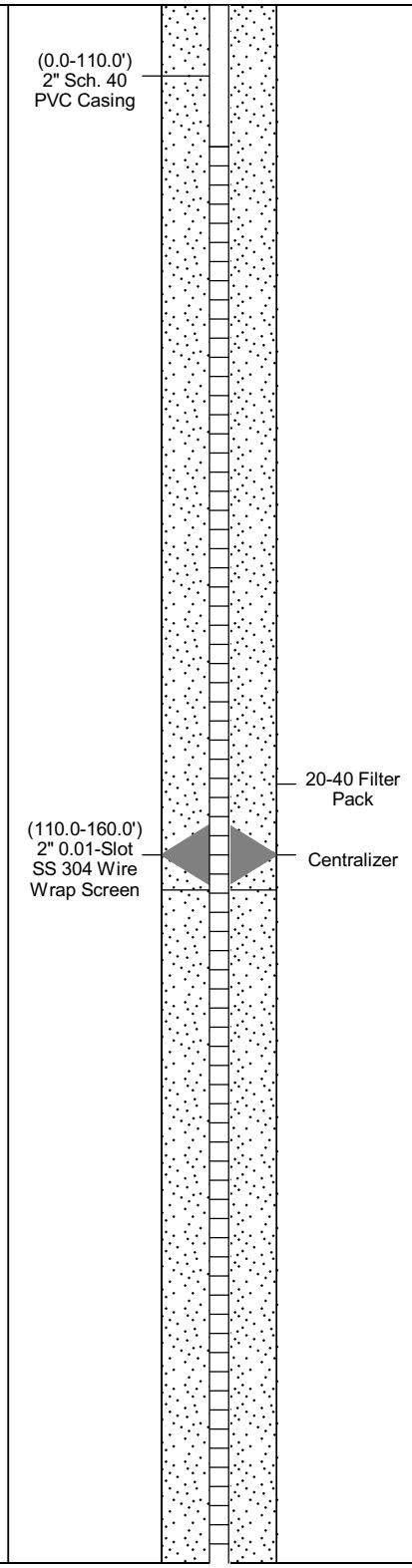
Sheet: 6 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(47.0-115.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 3/1 - very dark gray.	
110					
111					
112					
113					
114					
115					
116				(115.0-143.0 ft) Well-graded sand (SW): fine to very coarse-grained sand, subangular to subround; trace small pebbles, subangular to subround; wet; 10YR 3/1 - very dark gray.	
117	19				
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128	17				
129					
130					



Remarks:

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Soil Boring Log

Boring No.: CACMW-006-160

Sheet: 7 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
131				(115.0-143.0 ft) Well-graded sand (SW): fine to very coarse-grained sand, subangular to subround; trace small pebbles, subangular to subround; wet; 10YR 3/1 - very dark gray.	
132					
133					
134					
135					
136					
137					
138	17				
139					
140					
141					
142					
143				(143.0-145.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 3/1 - very dark gray.	
144					
145				(145.0-151.0 ft) Well-graded sand (SW): fine to very coarse-grained sand, subangular to subround; trace small pebbles, subangular to subround; wet; 10YR 3/1 - very dark gray.	
146					
147					
148					
149	13				
150					
151					
152				(151.0-162.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 3/1 - very dark gray.	

(110.0-160.0') 2" 0.01-Slot SS 304 Wire Wrap Screen

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-006-160

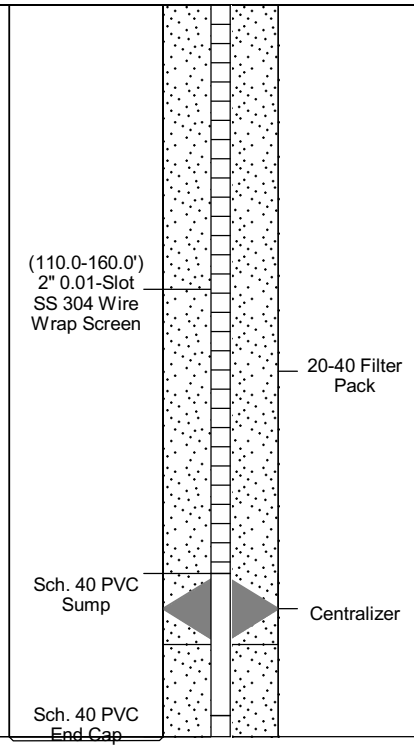
Sheet: 8 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-19-2024
Date Completed: 06-19-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
153				(151.0-162.0 ft) Well-graded gravel with sand (GW): granules to large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; trace silt; wet; 10YR 3/1 - very dark gray.	
154					
155					
156					
157	13				
158					
159					
160					
161					
162					
				End of Boring at 162.3 ft bgs.	
163					
164					
165					
166					
167					
168					
169					
170					
171					
172					
173					
174					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-007-060

Sheet: 1 of 3

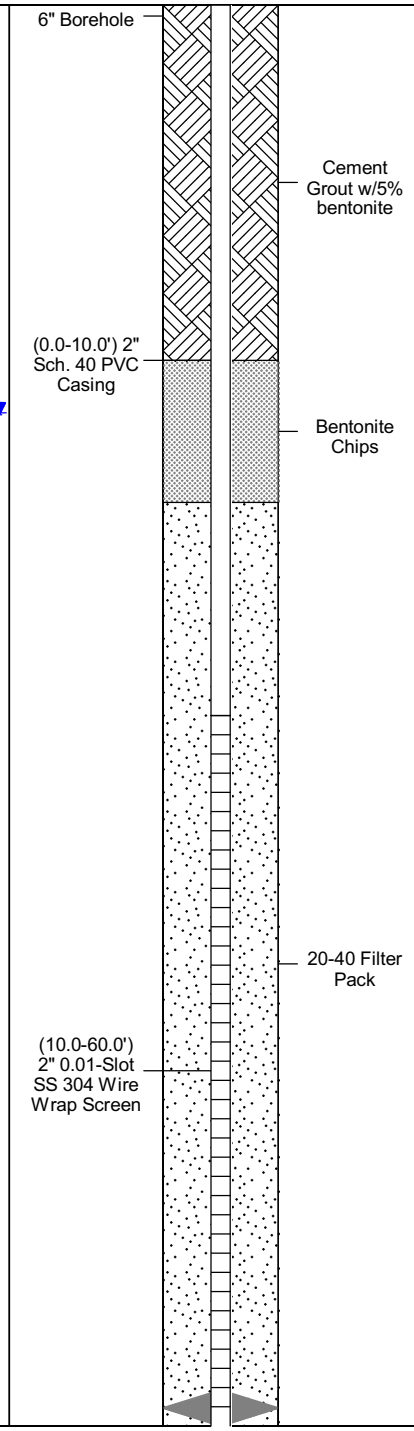
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-21-2024
Date Completed: 06-21-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
1–20				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-007-160 log for lithology.	

Construction Details



Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 62.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-007-060

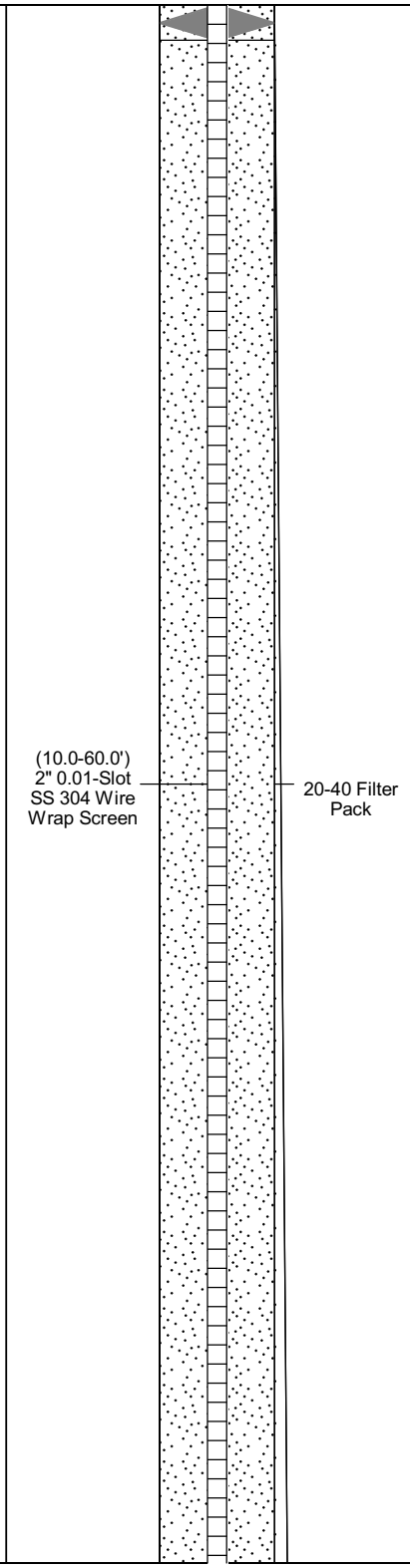
Sheet: 2 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-21-2024
Date Completed: 06-21-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-007-160 log for lithology.	
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					



Remarks:

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Soil Boring Log

Boring No.: CACMW-007-060

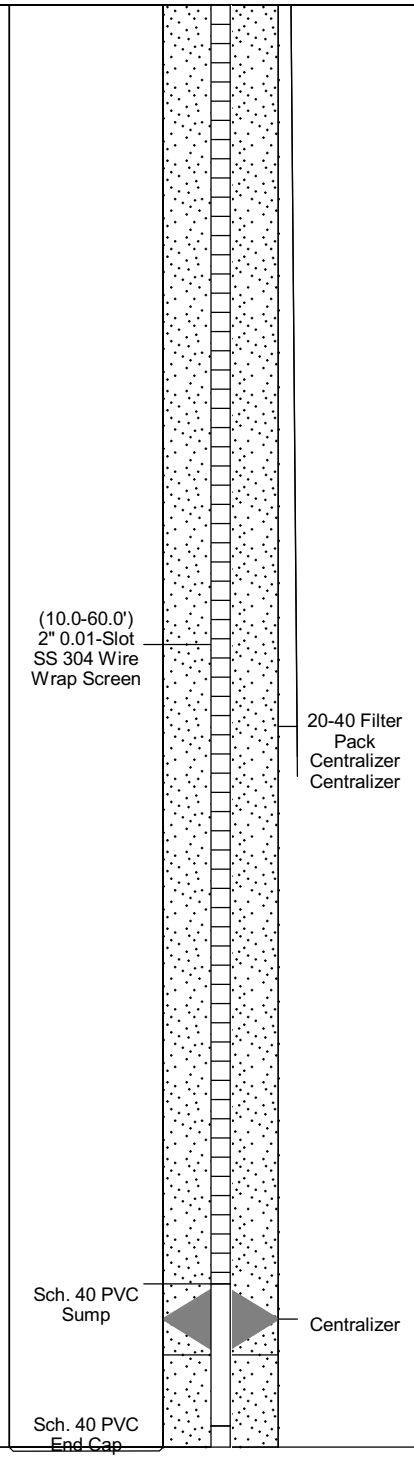
Sheet: 3 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-21-2024
Date Completed: 06-21-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-007-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
				End of Boring at 62.3 ft bgs.	
63					
64					



Remarks:

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Soil Boring Log

Boring No.: CACMW-007-110

Sheet: 1 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-20-2024
Date Completed: 06-21-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–20				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-007-160 log for lithology.		6" Borehole; (0.0-60.0') 2" Sch. 40 PVC Casing; Cement Grout w/5% bentonite; Bentonite Chips

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 112.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-007-110

Sheet: 2 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-20-2024
Date Completed: 06-21-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-007-160 log for lithology.	
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					

(0.0-60.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-007-110

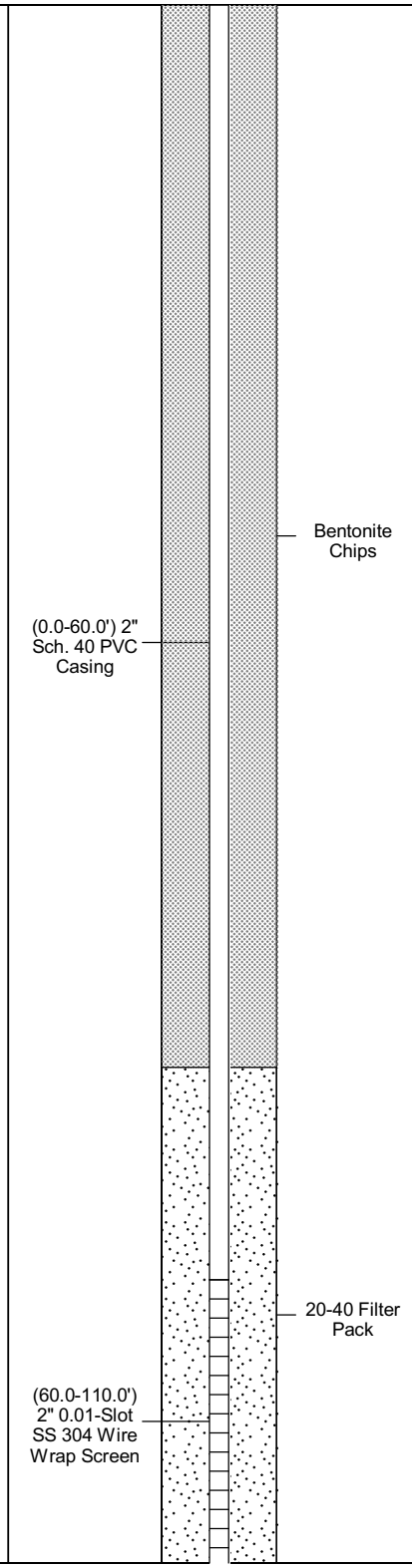
Sheet: 3 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-20-2024
Date Completed: 06-21-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-007-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					



Remarks:

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Soil Boring Log

Ahtna ARCADIS JV

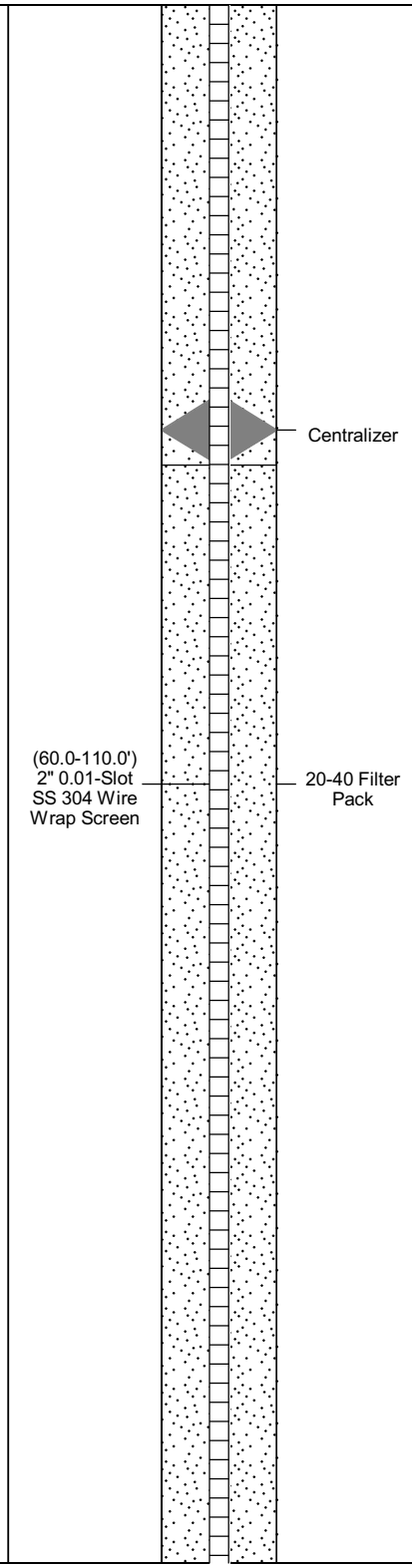
Boring No.: CACMW-007-110

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-20-2024
Date Completed: 06-21-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-007-160 log for lithology.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					



Remarks:

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Soil Boring Log

Boring No.: CACMW-007-110

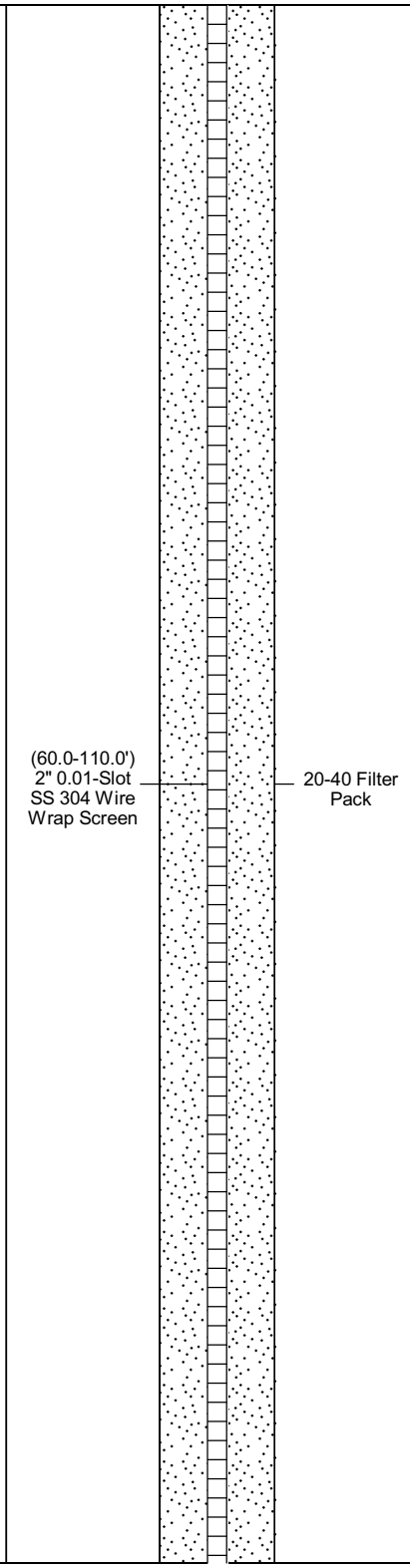
Sheet: 5 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-20-2024
Date Completed: 06-21-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-007-160 log for lithology.	
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-007-110

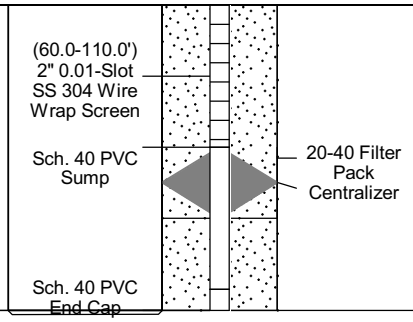
Sheet: 6 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-20-2024
Date Completed: 06-21-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-007-160 log for lithology.	
110					
111					
112					
113				End of Boring at 112.3 ft bgs.	
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-007-160

Sheet: 1 of 8

Project Site: AFCEC | Date Started: 06-20-2024 | Logger: Nchdas Icks

Project Name: Eielson AFB DGI-PSC | Date Completed: 06-20-2024 | Reviewer: Kim Heinze

Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–20	4.3			(0.0-13.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; somefine to very coarse-grained sand, subangular to subround; trace silt; dry to moist; 10YR 4/3 - brown.		6" Borehole; Cement Grout w/5% bentonite
11	5.6					(0.0-110.0') 2" Sch. 40 PVC Casing
13				(13.0-21.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; somefine to very coarse-grained sand, angular to subround; wet; 10YR 3/2 - very dark grayish brown.		Bentonite Chips
18	7.5					

Drilling Co: Northern Sonic

Driller: Denzil Roberts

Drilling Method: Rotosonic

Drill Rig: Rotosonic

Remarks:

Sampling Method: Sonic

Sampling Dimensions: 10 - 20 ft

First Encountered Water (ft bgs): ▽ NA

Total Depth (ft bgs): 162.3 ft bgs

Surface Elev: NA

North Coor: NA

East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-007-160

Sheet: 2 of 8

Project Site: AFCEC | Date Started: 06-20-2024 | Logger: Nchdas Icks

Project Name: Eielson AFB DGI-PSC | Date Completed: 06-20-2024 | Reviewer: Kim Heinze

Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(13.0-21.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; somefine to very coarse-grained sand, angular to subround; wet; 10YR 3/2 - very dark grayish brown.	
22				(21.0-60.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 10YR 3/1 - very dark gray.	
23					
24					
25					
26					
27					
28	7.5				
29					
30					
31					
32					
33					
34	16.2				
35					
36					
37					
38					
39					
40					
41					
42					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-007-160

Project Site: AFCEC Date Started: 06-20-2024 Logger: Nchdas Icks

Project Name: Eielson AFB DGI-PSC Date Completed: 06-20-2024 Reviewer: Kim Heinze

Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(21.0-60.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 10YR 3/1 - very dark gray.	
44	16.2				
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55	17.4				
56					
57					
58					
59					
60				(60.0-66.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround and granules to very large pebbles, subangular to subround; wet ; 10YR 3/1 - very dark gray.	
61					
62					
63					
64					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-007-160

Sheet: 4 of 8

Project Site: AFCEC | Date Started: 06-20-2024 | Logger: Nchdas Icks

Project Name: Eielson AFB DGI-PSC | Date Completed: 06-20-2024 | Reviewer: Kim Heinze

Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65	17.4			(60.0-66.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround and granules to very large pebbles, subangular to subround; wet ; 10YR 3/1 - very dark gray.	
66				(66.0-88.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 10YR 3/1 - very dark gray.	
67					
68					
69					
70					
71					
72					
73					
74					
75					
76	17.5				
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-007-160

Sheet: 5 of 8

Project Site: AFCEC Date Started: 06-20-2024 Logger: Nchdas Icks

Project Name: Eielson AFB DGI-PSC Date Completed: 06-20-2024 Reviewer: Kim Heinze

Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(66.0-88.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 10YR 3/1 - very dark gray.	
88				(88.0-97.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround; some granules to small pebbles, subangular to subround; wet; 10YR 3/1 - very dark gray.	
89					
90					
91					
92					
93					
94					
95					
96	17				
97				(97.0-123.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 10YR 3/1 - very dark gray.	
98					
99					
100					
101					
102					
103					
104					
105					
106					
107	17.2				
108					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-007-160

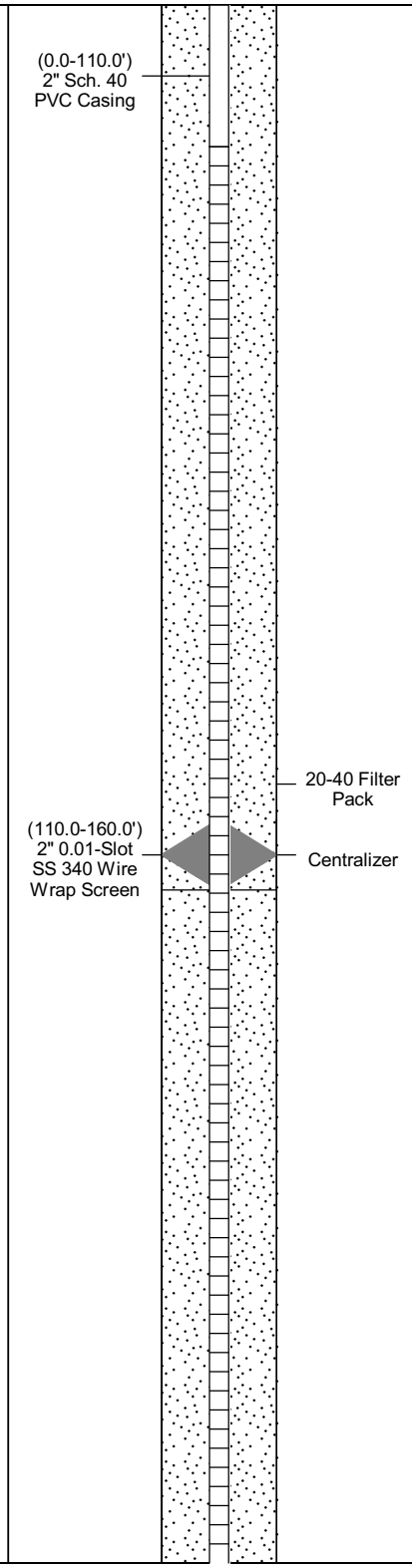
Sheet: 6 of 8

Project Site: AFCEC | Date Started: 06-20-2024 | Logger: Nchdas Icks

Project Name: Eielson AFB DGI-PSC | Date Completed: 06-20-2024 | Reviewer: Kim Heinze

Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(97.0-123.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 10YR 3/1 - very dark gray.	
110					
111					
112					
113					
114					
115					
116					
117	17.2				
118					
119					
120					
121					
122					
123				(123.0-126.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand, angular to subround; some granules to small pebbles, subangular to subround; moist to wet ; 10YR 3/1 - very dark gray.	
124					
125					
126				(126.0-142.0 ft) Well-graded sand (SW): fine to coarse-grained sand; trace granules, subangular to subround; moist to wet; 10YR 3/ 1 - very dark gray.	
127					
128	17				
129					
130					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-007-160

Sheet: 7 of 8

Project Site: AFCEC Date Started: 06-20-2024 Logger: Nchdas Icks

Project Name: Eielson AFB DGI-PSC Date Completed: 06-20-2024 Reviewer: Kim Heinze

Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
131				(126.0-142.0 ft) Well-graded sand (SW): fine to coarse-grained sand; trace granules, subangular to subround; moist to wet; 10YR 3/1 - very dark gray.	
132					
133					
134					
135					
136					
137					
138	17				
139					
140					
141					
142				(142.0-144.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 10YR 3/1 - very dark gray.	
143					
144				(144.0-150.0 ft) Well-graded sand (SW): fine to coarse-grained sand; trace granules, subangular to subround; moist to wet; 10YR 3/1 - very dark gray.	
145					
146					
147					
148					
149	17.4				
150				(150.0-162.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 10YR 3/1 - very dark gray.	
151					
152					

(110.0-160.0') 2" 0.01-Slot SS 340 Wire Wrap Screen

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-007-160

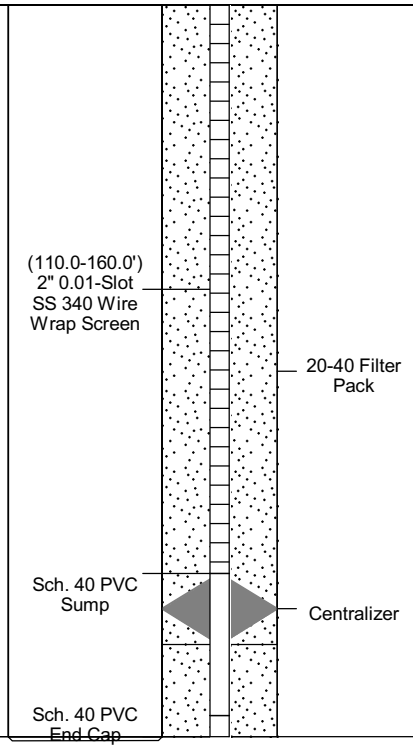
Sheet: 8 of 8

Project Site: AFCEC Date Started: 06-20-2024 Logger: Nchdas Icks

Project Name: Eielson AFB DGI-PSC Date Completed: 06-20-2024 Reviewer: Kim Heinze

Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
153				(150.0-162.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 10YR 3/1 - very dark gray.	
154					
155					
156					
157	17.4				
158					
159					
160					
161					
162					
163				End of Boring at 162.3 ft bgs.	
164					
165					
166					
167					
168					
169					
170					
171					
172					
173					
174					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-060

Sheet: 1 of 3

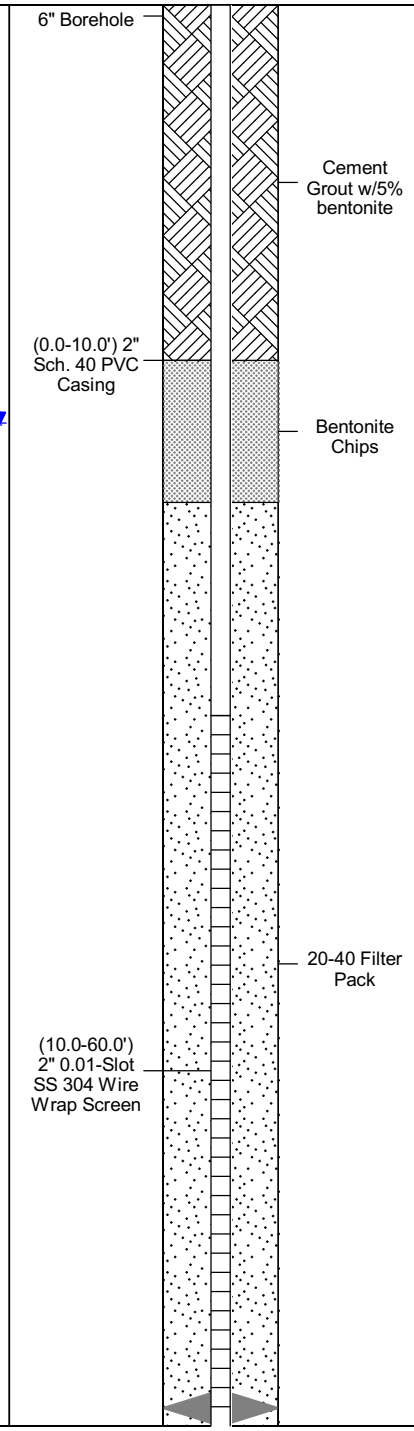
Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-22-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-008-160 log for lithology.	

Construction Details



Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 62.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-060

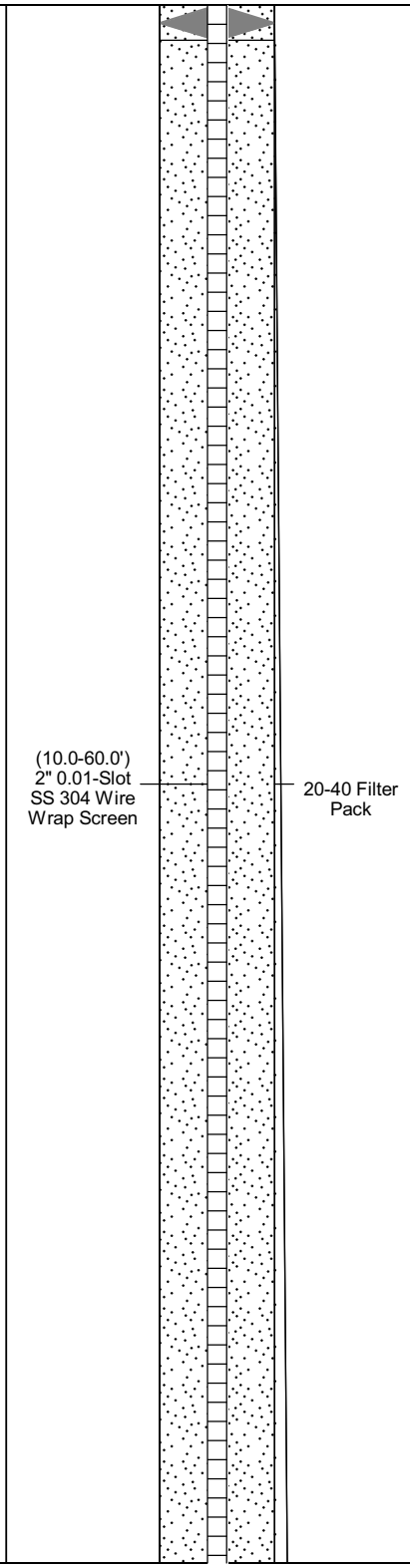
Sheet: 2 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-22-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-008-160 log for lithology.	
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-060

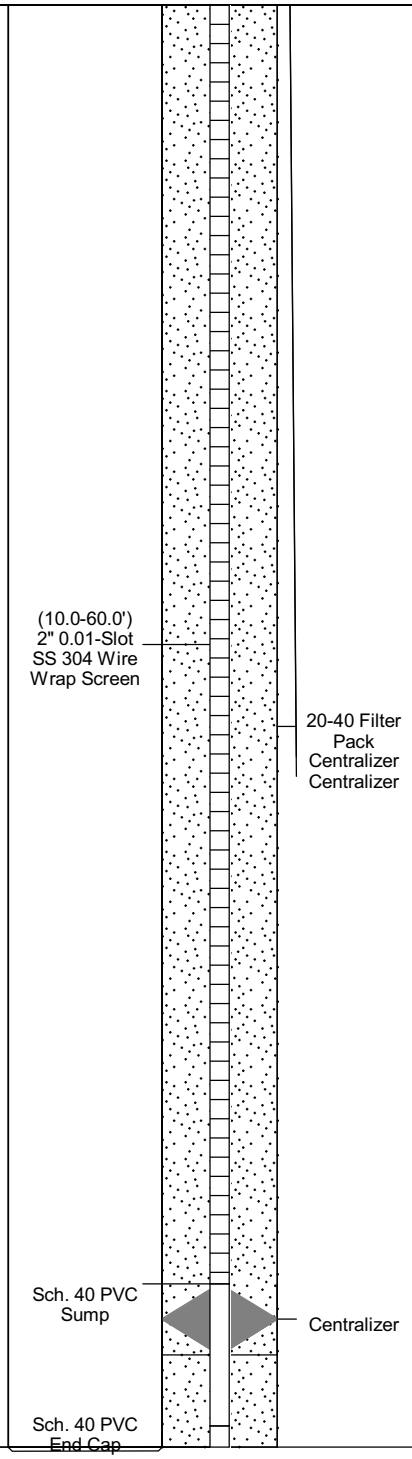
Sheet: 3 of 3

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-22-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-62.3 ft) NOTE: Not logged per scope of work; see CACMW-008-160 log for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63				End of Boring at 62.3 ft bgs.	
64					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-110

Sheet: 1 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-22-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–20				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-008-160 for lithology.		6" Borehole; Cement Grout w/5% bentonite; (0.0-60.0') 2" Sch. 40 PVC Casing; Bentonite Chips

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method: Sonic
Sampling Dimensions:
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 112.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-110

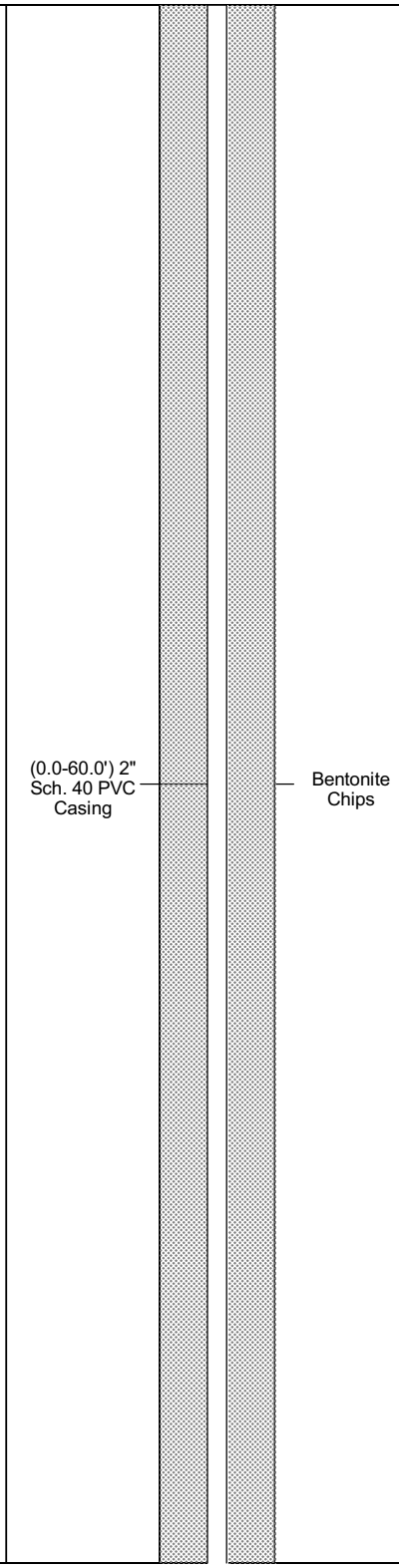
Sheet: 2 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-22-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-008-160 for lithology.	
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					



Remarks:

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Soil Boring Log

Boring No.: CACMW-008-110

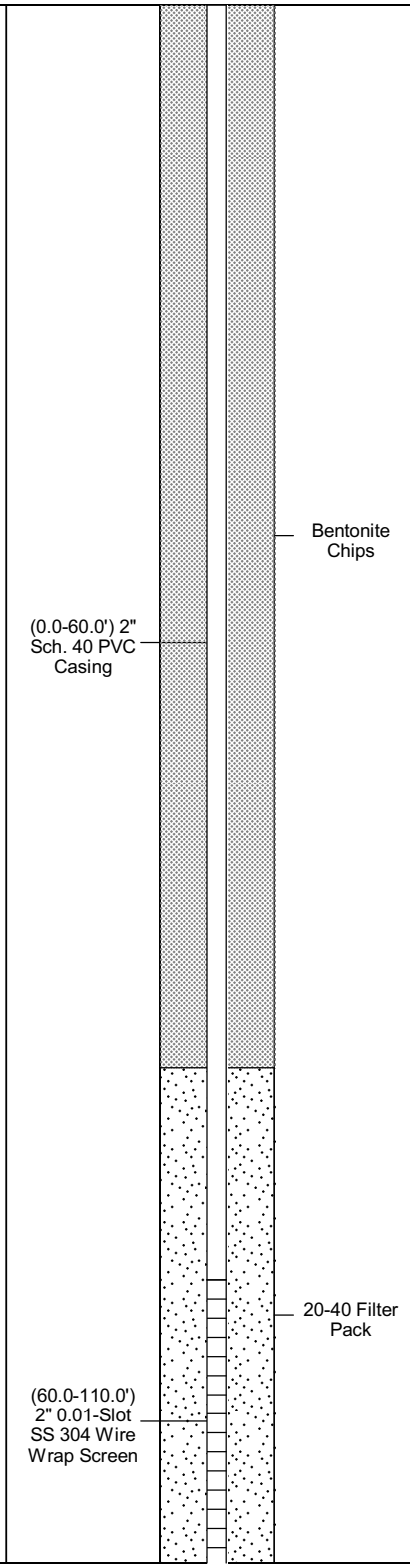
Sheet: 3 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-22-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-008-160 for lithology.	
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					



Remarks:

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Soil Boring Log

Boring No.: CACMW-008-110

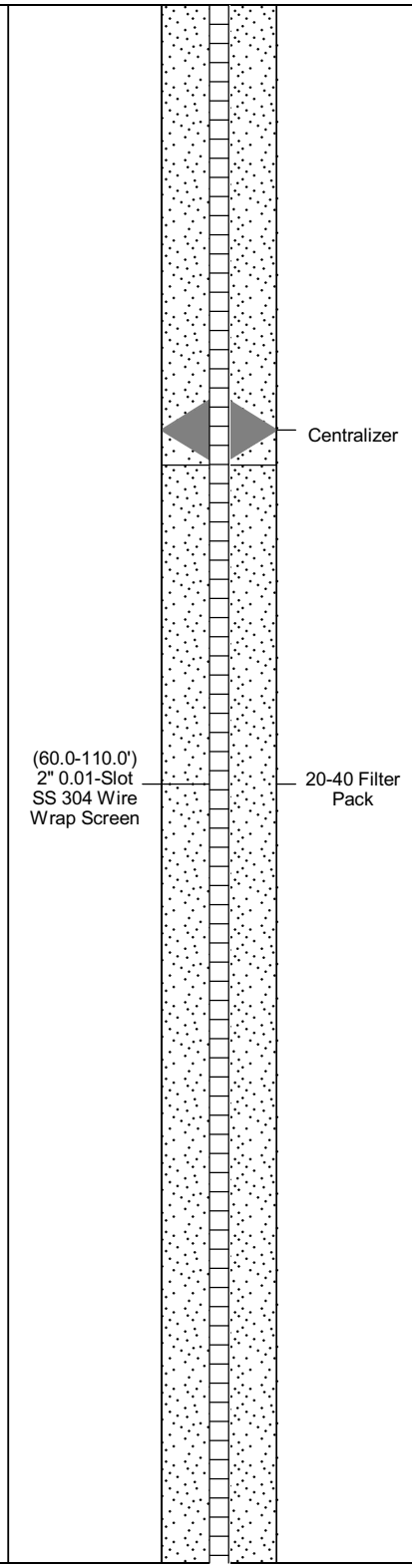
Sheet: 4 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-22-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-008-160 for lithology.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

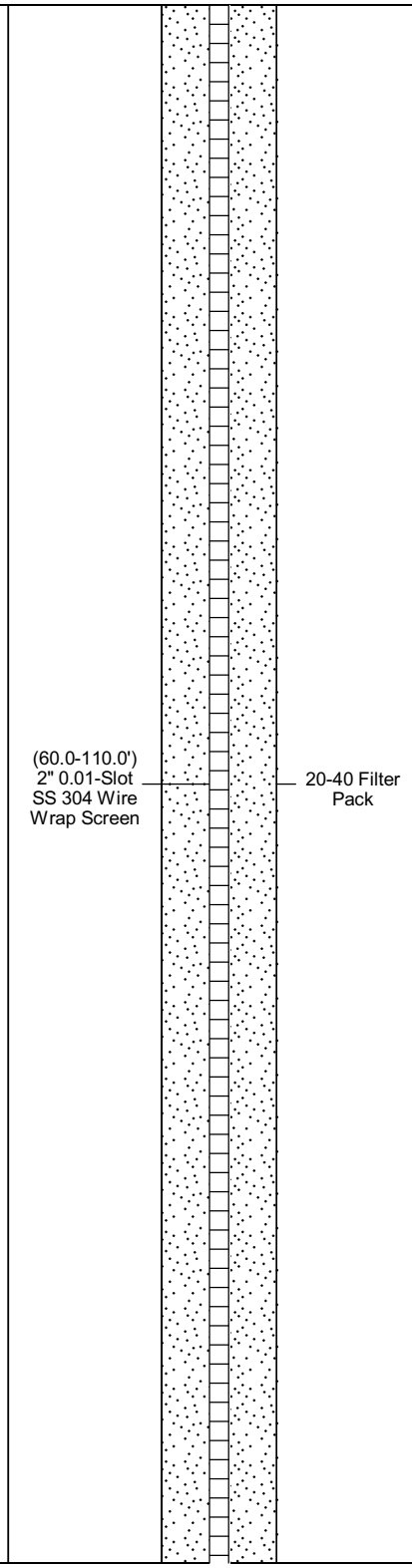
Boring No.: CACMW-008-110

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-22-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-008-160 for lithology.	
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-110

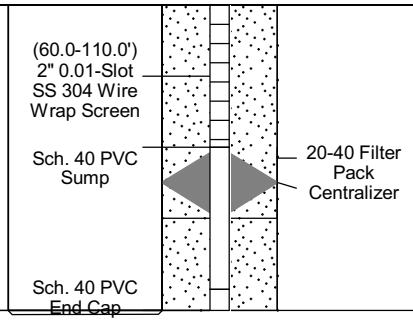
Sheet: 6 of 6

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started: 06-22-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(0.0-112.3 ft) NOTE: Not logged per scope of work; see CACMW-008-160 for lithology.	
110					
111					
112					
113				End of Boring at 112.3 ft bgs.	
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-160

Sheet: 1 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started : 06-21-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Construction Details
1–6	5.4			(0.0-10.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, subangular to subround; trace silt; dry to moist; 10YR4/3 - brown.		6" Borehole; Cement Grout w/5% bentonite
7–11	6			(10.0-28.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; wet; 10YR4/1 - dark gray.		(0.0-110.0') 2" Sch. 40 PVC Casing; Bentonite Chips
12–16						
17–18	7.2					
19–20						

Drilling Co.: Northern Sonic
Driller: Denzil Roberts
Drilling Method : Roto-Sonic
Drill Rig: Roto-Sonic
Remarks:

Sampling Method : Sonic
Sampling Dimensions: 10 - 20 ft
First Encountered Water (ft bgs): ▽ NA
Total Depth (ft bgs): 162.3 ft bgs
Surface Elev: NA
North Coor: NA
East Coor: NA

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-160

Sheet: 2 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started : 06-21-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
21				(10.0-28.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; wet; 10YR4/1 - dark gray.	
22					
23	7.2				
24					
25					
26					
27					
28				(28.0-55.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; wet; 10YR4/1 - dark gray.	
29					
30					
31					
32					
33					
34	14				
35					
36					
37					
38					
39					
40					
41					
42					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-160

Sheet: 3 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started : 06-21-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
43				(28.0-55.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround; some fine to very coarse-grained sand, angular to subround; wet; 10YR 4/1 - dark gray.	
44	14				
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55	18			(55.0-107.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 2.5Y 4/1 - dark gray.	
56					
57					
58					
59					
60					
61					
62					
63					
64					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-160

Sheet: 4 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started : 06-21-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
65	18			(55.0-107.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 2.5Y 4/1 - dark gray.	
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76	18				
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Ahtna ARCADIS JV

Boring No.: CACMW-008-160

Sheet: 5 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started : 06-21-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
87				(55.0-107.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 2.5Y 4/1 - dark gray.	
88					
89					
90					
91					
92					
93					
94					
95					
96	17.5				
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107	16.5			(107.0-126.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand and granules to large pebbles, subangular to subround; wet; 2.5Y 4/1 - dark gray.	
108					

(0.0-110.0') 2" Sch. 40 PVC Casing

Bentonite Chips

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-160

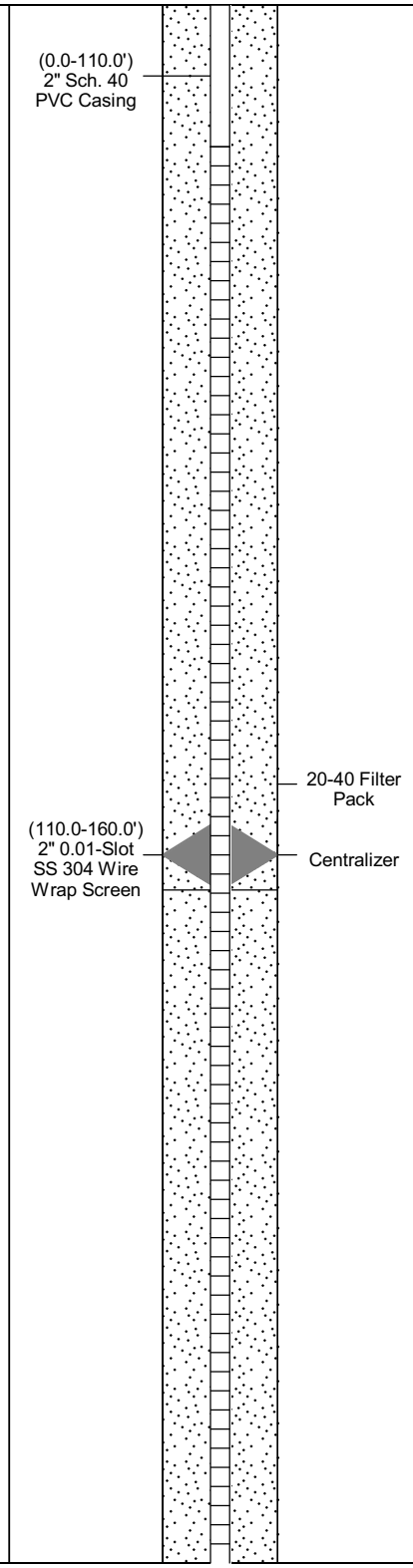
Sheet: 6 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started : 06-21-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
109				(107.0-126.0 ft) Well-graded sand with gravel (SW): fine to very coarse-grained sand and granules to large pebbles, subangular to subround; wet; 2.5Y 4/1 - dark gray.	
110					
111					
112					
113					
114					
115					
116					
117	16.5				
118					
119					
120					
121					
122					
123					
124					
125					
126				(126.0-150.0 ft) Well-graded sand (SW): very fine to coarse-grained sand, subangular to subround; trace granules, subangular to subround; wet; 10YR 4/1 - dark gray.	
127					
128	18				
129					
130					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-160

Sheet: 7 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started : 06-21-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
131				(126.0-150.0 ft) Well-graded sand (SW): very fine to coarse-grained sand, subangular to subround; trace granules, subangular to subround; wet; 10YR 4/1 - dark gray.	
132					
133					
134					
135					
136					
137					
138	18				
139					
140					
141					
142					
143					
144					
145					
146					
147					
148					
149	13.7				
150				(150.0-162.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 2.5Y 4/1 - dark gray.	
151					
152					

(110.0-160.0') 2" 0.01-Slot SS 304 Wire Wrap Screen

20-40 Filter Pack

Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

Soil Boring Log

Boring No.: CACMW-008-160

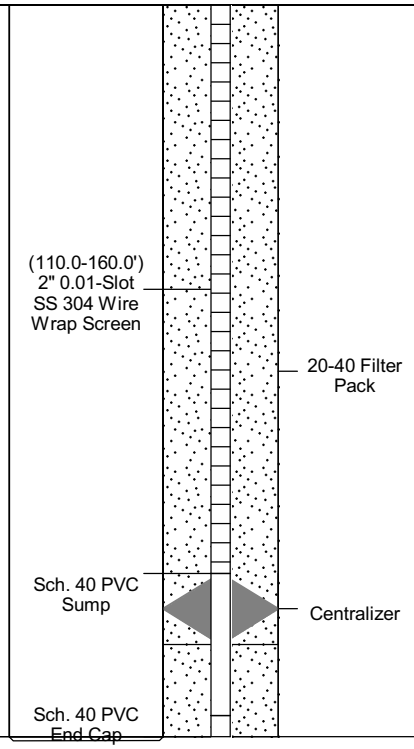
Sheet: 8 of 8

Project Site: AFCEC
Project Name: Eielson AFB DGI-PSC
Project Number: 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS

Date Started : 06-21-2024
Date Completed: 06-22-2024

Logger: Nicholas Icks
Reviewer: Kim Heinze

Depth (feet)	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes
153				(150.0-162.0 ft) Well-graded gravel with sand (GW): granules to very large pebbles, subangular to subround and fine to very coarse-grained sand, angular to subround; wet; 2.5Y 4/1 - dark gray.	
154					
155					
156					
157	13.7				
158					
159					
160					
161					
162					
				End of Boring at 162.3 ft bgs.	
163					
164					
165					
166					
167					
168					
169					
170					
171					
172					
173					
174					



Remarks:

AFCEC SOIL BORING AND CONSTRUCTION_REV C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-BENTLEY PROJECTS\GINT PROJECTS\AFCEC\AFCEC PROJECT.GPJ AFCEC DATA TEMPLATE.GDT 9/4/24

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-001-060			Date	06/28/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	10	Bottom of Screen (ft bmp)	60
Weather	74 degrees Fahrenheit	Time Begin	11:40	Time End	13:57

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	58
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.5
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	62	Post-Dev Well Depth (ft bmp)	NA
Pre-Dev DTW (ft bmp)	7.98	Post-Dev DTW (ft bmp)	NA
Pre-Dev Water Column (ft)	54.02	Post-Dev Water Column (ft)	NA
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	8.78	Color	NA
Total Well Volumes Purged	7.40	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
11:45	7.95	0.5	0	0.00	0.339	887.1	3.9	7.63	98.4	10.53	NR
11:50	7.93	0.5	5	2.50	0.336	972.2	3.8	7.61	93.5	8.96	NR
11:55	7.95	0.5	10	5.00	0.339	718.2	3.8	7.6	88.5	2.26	NR
12:00	7.95	0.5	15	7.50	0.34	477.5	3.7	7.58	83	1.18	NR
12:05	7.95	0.5	20	10.00	0.341	399.5	3.7	7.56	81.2	0.92	NR
12:10	7.95	0.5	25	12.50	0.343	330.1	3.7	7.54	78.8	0.74	NR
12:15	7.95	0.5	30	15.00	0.344	292.0	3.7	7.54	76.2	0.6	NR
12:20	7.95	0.5	35	17.50	0.345	245.3	3.7	7.55	73.5	0.56	NR
12:25	7.95	0.5	40	20.00	0.347	246.1	3.8	7.55	70.7	0.56	NR
12:30	7.95	0.5	45	22.50	0.348	194.3	3.7	7.55	68.5	0.56	NR
12:35	7.95	0.5	50	25.00	0.348	208.8	3.8	7.55	66.1	0.5	NR
12:40	7.96	0.5	55	27.50	0.349	207.8	3.8	7.57	64.5	0.45	NR
12:45	7.95	0.5	60	30.00	0.348	196.9	3.7	7.57	61.2	0.41	NR
12:50	7.95	0.5	65	32.50	0.35	173.9	3.8	7.57	58.7	0.35	NR
12:55	7.95	0.5	70	35.00	0.349	169.8	3.8	7.58	56	0.33	NR
13:00	7.95	0.5	75	37.50	0.351	151.6	3.8	7.59	53.2	0.25	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

13:05	7.95	0.5	80	40.00	0.352	133.2	3.8	7.59	50.3	0.3	NR
13:10	7.95	0.5	85	42.50	0.351	131.9	3.8	7.6	48	0.28	NR
13:15	7.95	0.5	90	45.00	0.351	112.2	3.8	7.59	45.3	0.27	NR
13:20	7.95	0.5	95	47.50	0.352	116.4	3.8	7.58	43	0.26	NR
13:25	7.95	0.5	100	50.00	0.355	89.76	3.8	7.58	41	0.26	NR
13:30	7.95	0.5	105	52.50	0.356	81.45	3.8	7.56	39.7	0.26	NR
13:35	7.95	0.5	110	55.00	0.357	71.46	3.8	7.54	37.8	0.22	NR
13:40	7.95	0.5	115	57.50	0.357	67.07	3.8	7.54	35.7	0.22	NR
13:44	7.95	0.5	119	59.50	0.358	55.01	3.8	7.54	33.7	0.22	NR
13:50	7.95	0.5	125	62.50	0.358	56.7	3.8	7.54	31.5	0.19	NR
13:55	7.95	0.5	130	65.00	0.358	44.03	3.8	7.54	29.2	0.2	NR

Development Personnel:	Nate Hager, Caleb Renner, Nicholas Icks
Notes:	Second attempt at CACMW-001-060 development; used slug to surge 10 times per 2-ft throw through screen.

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-001-060		Date	06/28/2024	
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	10	Bottom of Screen (ft bmp)	60
Weather	65F Smoke	Time Begin	08:48	Time End	

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0
Land Surface Elevation (ft)	NA	Development Method	QWater Well Developer
Pre-Dev Well Depth (ft bmp)	62	Post-Dev Well Depth (ft bmp)	NA
Pre-Dev DTW (ft bmp)	7.91	Post-Dev DTW (ft bmp)	NA
Pre-Dev Water Column (ft)	54.09	Post-Dev Water Column (ft)	NA
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	8.79	Color	NA
Total Well Volumes Purged		Odor	NA
		Appearance	NA

Development Personnel:	Nathan Hager, Caleb Renner, and Nick Icks
Notes:	Initial attempt at CACMW-001-060 development. Qwater inertia pump check valve lodged in well at approximately bottom of screen/ top of sump; attempt abandoned

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-001-110			Date	06/28/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	60	Bottom of Screen (ft bmp)	110
Weather		Time Begin	10:59	Time End	13:55

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	110
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.67
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	113.3	Post-Dev Well Depth (ft bmp)	113.31
Pre-Dev DTW (ft bmp)	6.05	Post-Dev DTW (ft bmp)	7.74
Pre-Dev Water Column (ft)	107.25	Post-Dev Water Column (ft)	105.57
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	17.43	Color	NA
Total Well Volumes Purged	0.77	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
13:35	7.75	0.674	0	0.00	0.3827	121.2	4.6	7.42	59.2	0.39	NR
13:40	7.75	0.674	5	3.37	0.3831	81.06	4.6	7.4	54.4	0.34	NR
13:45	7.75	0.674	10	6.74	0.383	73.63	4.6	7.44	52.3	0.33	NR
13:50	NR	0.674	15	10.11	0.383	54.64	4.6	7.43	50	0.3	NR
13:55	75	0.674	20	13.48	0.3825	43.35	4.6	7.42	48	0.25	NR

Development Personnel: Nathan Hager, Will Rhodes

Notes: Surged 50 ft screen with surge block with 2 ft throws twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-001-160			Date	06/28/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	112	Bottom of Screen (ft bmp)	162
Weather		Time Begin	13:47	Time End	16:45

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.21
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	162.6	Post-Dev Well Depth (ft bmp)	NA
Pre-Dev DTW (ft bmp)	7.39	Post-Dev DTW (ft bmp)	NA
Pre-Dev Water Column (ft)	155.21	Post-Dev Water Column (ft)	NA
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	25.22	Color	NA
Total Well Volumes Purged	0.56	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
15:31	7.41	0.211	0	0.00	0.188	464	5.5	7.37	53.5	0.43	NR
15:46	7.42	0.211	15	3.17	0.188	319	5.4	7.42	50.4	0.33	NR
15:51	7.41	0.211	20	4.22	0.187	246	5.3	7.37	47.7	0.26	NR
15:57	7.41	0.211	26	5.49	0.187	166	5.3	7.36	44.6	0.22	NR
16:03	7.41	0.211	32	6.76	0.187	148	5.2	7.37	41.9	0.23	NR
16:08	7.41	0.211	37	7.81	0.186	104	5.2	7.37	39.5	0.23	NR
16:13	7.41	0.211	42	8.87	0.187	79	5.3	7.34	36.7	0.23	NR
16:17	7.41	0.211	46	9.71	0.187	73	5.5	7.36	34.6	0.22	NR
16:23	7.41	0.211	52	10.98	0.187	63	5.3	7.3	32.6	0.2	NR
16:27	7.41	0.211	56	11.82	0.187	58	5.3	7.37	30.3	0.19	NR
16:32	7.41	0.211	61	12.88	0.187	67	5.3	7.37	27.9	0.16	NR
16:38	7.41	0.211	67	14.15	0.187	48.5	5.3	7.36	26	0.16	NR

Development Personnel:	Nathan Hager, Will Rhodes
Notes:	Surged 10 times in 2 foot throws for screened interval twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-002-060			Date	06/26/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	10	Bottom of Screen (ft bmp)	60
Weather		Time Begin	10:29	Time End	15:15

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	59
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.67
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	62.95	Post-Dev Well Depth (ft bmp)	62.95
Pre-Dev DTW (ft bmp)	6.92	Post-Dev DTW (ft bmp)	6.93
Pre-Dev Water Column (ft)	56.03	Post-Dev Water Column (ft)	56.02
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	9.1	Color	NA
Total Well Volumes Purged	7.18	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
13:23	6.96	0.674	0	0.00	0.3928	265.0	4	7.9	88.3	1.32	NR
13:33	6.96	0.674	10	6.74	0.3945	176.3	4.4	7.76	41.5	1.01	NR
13:38	6.99	0.674	15	10.11	0.3914	117.3	4.2	7.81	19.7	0.74	NR
13:45	6.99	0.674	22	14.83	0.3962	120.4	4.4	7.95	47.5	14.47	NR
13:50	6.95	0.674	27	18.20	0.4005	86.96	4.6	7.93	22.6	12.69	NR
13:55	6.95	0.674	32	21.57	0.3997	58.13	4.5	7.95	7.2	1.82	NR
14:00	6.95	0.674	37	24.94	0.40001	55.19	4.5	7.99	-8.5	0.19	NR
14:05	6.95	0.674	42	28.31	0.4038	80.1	4.7	7.95	-17.4	0.1	NR
14:10	6.95	0.674	47	31.68	0.3995	49.4	4.5	7.91	-25.1	1.91	NR
14:15	6.95	0.674	52	35.05	0.3991	47.03	4.5	8.03	-32.1	0.28	NR
14:20	6.95	0.674	57	38.42	0.4019	50.51	4.7	8.11	-38.3	0.21	NR
14:25	6.95	0.674	62	41.79	0.4028	56.33	4.8	8.19	-42.2	0.28	NR
14:30	6.95	0.674	67	45.16	0.4074	42.04	5.3	8.11	-43.2	0.57	NR
14:35	6.95	0.674	72	48.53	0.4069	54.66	5	8.13	-43.8	0.81	NR
14:40	6.95	0.674	77	51.90	0.4079	43.00	5.2	8.14	-44.2	0.79	NR
14:45	6.95	0.674	82	55.27	0.3964	31.71	4.3	8.18	-47.5	0.69	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

14:50	6.95	0.674	87	58.64	0.3957	23.85	4.3	8.25	-49.3	0.63	NR
14:55	6.95	0.674	92	62.01	0.3941	28.59	4.2	8.27	-53.5	0.54	NR
15:00	6.95	0.674	97	65.38	0.3941	25.12	4.2	8.33	-56.8	0.48	NR

Development Personnel:	Nathan Hager, Caleb Renner
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-002-110			Date	06/29/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	60	Bottom of Screen (ft bmp)	110
Weather	80- hazy	Time Begin	10:58	Time End	14:00

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	108
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.26
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	112.45	Post-Dev Well Depth (ft bmp)	112.51
Pre-Dev DTW (ft bmp)	7.07	Post-Dev DTW (ft bmp)	7.12
Pre-Dev Water Column (ft)	105.38	Post-Dev Water Column (ft)	105.39
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	17.12	Color	NA
Total Well Volumes Purged	1.46	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
11:54	7.12	0.26	0	0.00	0.401	High	4.9	7.33	87.1	3.75	NR
12:02	7.12	0.26	8	2.08	0.403	282.9	4.9	7.33	59.1	0.33	NR
12:11	7.12	0.26	17	4.42	0.4	509.6	4.8	7.31	31.3	0.31	NR
12:20	7.12	0.26	26	6.76	0.399	411.2	4.7	7.3	11.9	0.26	NR
12:31	7.12	0.26	37	9.62	0.397	232.5	4.6	7.29	-7.1	0.17	NR
12:45	7.12	0.26	51	13.26	0.396	131	4.6	7.29	-20.5	0.14	NR
12:55	7.12	0.26	61	15.86	0.397	84.81	4.7	7.29	-27	0.12	NR
13:06	7.12	0.26	72	18.72	0.397	68.33	4.8	7.29	-30.4	0.11	NR
13:17	7.12	0.26	83	21.58	0.396	57.95	4.7	7.3	-32.8	0.11	NR
13:30	7.12	0.26	96	24.96	0.397	45.64	4.8	7.31	-35.3	0.1	NR

Development Personnel:	Caleb Renner, will Rhodes
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-002-160			Date	06/29/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	110	Bottom of Screen (ft bmp)	160
Weather	75 hazy	Time Begin	08:07	Time End	10:45

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	159
MP Elevation (ft)	NA	Pumping Rate (gpm)	0
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	162.3	Post-Dev Well Depth (ft bmp)	162.26
Pre-Dev DTW (ft bmp)	6.92	Post-Dev DTW (ft bmp)	6.95
Pre-Dev Water Column (ft)	155.38	Post-Dev Water Column (ft)	155.31
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	25.25	Color	NA
Total Well Volumes Purged		Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
09:23	6.96	NR	0	0.00	0.196	High	4.9	7.14	37.9	9.84	NR
09:30	7.96	NR	7	NR	0.197	250.6	4.9	7.07	19.2	7.69	NR
09:36	6.96	NR	13	NR	0.196	474.8	4.9	7.08	10.8	6.62	NR
09:42	6.96	NR	19	NR	0.195	453.1	4.9	7.11	4.3	5.62	NR
09:51	6.96	NR	28	NR	0.195	222.9	4.9	7.13	-1.9	4.34	NR
10:01	6.96	NR	38	NR	0.195	138.9	4.9	7.13	-4.9	3.58	NR
10:11	6.96	NR	48	NR	0.195	88.1	4.9	7.14	-6.9	2.74	NR
10:23	6.96	NR	60	NR	0.195	62.10	4.9	7.12	-7.4	2.1	NR
10:36	6.96	NR	73	NR	0.195	40.57	4.9	7.11	-8.1	1.54	NR

Development Personnel:	Caleb Renner, Will Rhodes
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-003-060			Date	06/29/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	10	Bottom of Screen (ft bmp)	60
Weather		Time Begin	08:28	Time End	10:30

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.42
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	62.79	Post-Dev Well Depth (ft bmp)	61.01
Pre-Dev DTW (ft bmp)	6.15	Post-Dev DTW (ft bmp)	6.14
Pre-Dev Water Column (ft)	56.64	Post-Dev Water Column (ft)	54.87
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	9.2	Color	NA
Total Well Volumes Purged	2.75	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (mL/min)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
09:30	6.17	1600	0	0.00	0.594	858.1	4	7.04	122.3	0.25	NR
09:35	6.17	1600	5	2.11	0.597	697.5	3.9	7	120.2	0.2	NR
09:39	6.17	1600	9	3.80	0.597	465.7	3.9	7	117.9	0.19	NR
09:45	6.17	1600	15	6.34	0.599	385.6	3.9	7.02	116.1	0.18	NR
09:50	6.17	1600	20	8.45	0.6	321.7	4	7.05	110.6	0.21	NR
09:55	6.17	1600	25	10.56	0.601	222.2	4	7.04	110.2	0.2	NR
10:00	6.17	1600	30	12.67	0.602	191.9	4	7.03	109.6	0.19	NR
10:05	6.17	1600	35	14.78	0.603	163.1	4	7.04	107.7	0.19	NR
10:10	6.17	1600	40	16.89	0.604	120.2	4	7.04	107.1	0.18	NR
10:15	6.17	1600	45	19.00	0.605	100.6	4	7.05	105.8	0.18	NR
10:20	6.17	1600	50	21.11	0.606	80.04	4	7.05	105.1	0.18	NR
10:25	6.17	1600	55	23.22	0.608	66.2	4	7.04	103.6	0.17	NR
10:30	6.17	1600	60	25.33	0.609	49.1	4.1	7.04	102	0.17	NR

Development Personnel:	Nathan Hager; Nicholas Icks
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-003-110			Date	06/29/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	60	Bottom of Screen (ft bmp)	110
Weather		Time Begin	15:09	Time End	17:43

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	111.36	Post-Dev Well Depth (ft bmp)	NA
Pre-Dev DTW (ft bmp)	6.04	Post-Dev DTW (ft bmp)	NA
Pre-Dev Water Column (ft)	105.32	Post-Dev Water Column (ft)	NA
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	17.11	Color	NA
Total Well Volumes Purged		Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (mL/min)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
16:00	6.14	NR	1425	NR	0.634	153.3	4.9	7.15	-202.3	0.07	NR
16:15	6.14	NR	0	0.00	0.637	1100	5	7.26	-23.6	0.26	NR
16:24	6.14	NR	9	NR	0.64	266.9	5	7.21	-44.2	0.16	NR
16:30	6.14	NR	15	NR	0.639	795.1	5	7.23	-78.4	0.13	NR
16:35	6.14	NR	20	NR	0.636	503.5	4.9	7.18	-108.2	0.15	NR
16:40	6.14	NR	25	NR	0.635	431.5	4.9	7.17	-127	0.09	NR
16:45	6.14	NR	30	NR	0.634	307.4	4.9	7.17	-144	0.09	NR
16:50	6.14	NR	35	NR	0.635	238.8	4.9	7.16	-161.6	0.08	NR
16:55	6.14	NR	40	NR	0.635	191.8	4.9	7.13	-179.5	0.08	NR
17:05	6.14	NR	50	NR	0.633	112.9	4.8	7.1	-224.2	0.07	NR
17:10	6.14	NR	55	NR	0.633	113.8	4.8	7.13	-242.8	0.07	NR
17:15	6.14	NR	60	NR	0.633	100.6	4.8	7.1	-250.2	0.08	NR
17:20	6.14	NR	65	NR	0.635	88.40	4.9	7.12	-256	0.08	NR
17:23	6.14	NR	68	NR	NR	90.88	4.9	7.13	-288.6	0.634	NR
17:27	6.14	NR	72	NR	0.633	71.44	4.9	7.11	-305.9	NR	NR
17:31	6.14	NR	76	NR	0.631	63.51	4.9	7.11	-311.6	0.07	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

17:34	6.14	NR	79	NR	0.631	57.25	4.9	7.12	-319.2	0.07	NR
17:37	6.14	NR	82	NR	0.631	55.1	4.9	7.11	-320.1	0.07	NR
17:40	6.14	NR	85	NR	0.631	51.18	4.9	7.11	-325.6	0.07	NR
17:43	6.14	NR	88	NR	0.63	50	4.9	7.1	-327	NR	NR

Development Personnel:	Nicholas Icks
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-003-160			Date	06/29/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	110	Bottom of Screen (ft bmp)	160
Weather		Time Begin	11:01	Time End	13:55

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.42
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	161.15	Post-Dev Well Depth (ft bmp)	162.1
Pre-Dev DTW (ft bmp)	6.18	Post-Dev DTW (ft bmp)	6.22
Pre-Dev Water Column (ft)	154.97	Post-Dev Water Column (ft)	155.88
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	25.18	Color	NA
Total Well Volumes Purged	1.68	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (mL/min)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
12:15	6.35	1600	0	0.00	0.3769	1100	5.3	7.49	65.5	0.62	NR
12:19	6.35	1600	4	1.69	0.3214	491.8	5.4	7.21	13.3	0.32	NR
12:24	6.34	1600	9	3.80	0.3196	496.7	5.4	7.17	-32.2	0.22	NR
12:30	6.35	1600	15	6.34	0.315	852.2	5.4	7.13	-63.1	0.16	NR
12:35	6.35	1600	20	8.45	0.3165	727.9	5.4	7.14	-91	0.14	NR
12:40	6.35	1600	25	10.56	0.318	764.2	5.4	7.14	-118.9	0.13	NR
12:45	6.35	1600	30	12.67	0.319	NR	5.4	7.15	-159.3	0.13	NR
12:50	6.35	1600	35	14.78	0.3199	233.3	5.4	7.14	-180.2	0.12	NR
12:55	6.35	1600	40	16.89	0.3208	183.4	5.4	7.14	-211.6	0.12	NR
13:00	6.35	1600	45	19.01	0.3207	166.5	5.4	7.12	-237.4	0.11	NR
13:05	6.35	1600	50	21.12	0.324	184.7	5.4	7.14	-261.3	0.11	NR
13:10	6.35	1600	55	23.23	0.3235	152.8	5.4	7.13	-290	0.11	NR
13:15	6.35	1600	60	25.34	0.3251	142.1	5.4	7.14	-309.4	0.1	NR
13:20	6.35	1600	65	27.45	0.3246	124.5	5.4	7.14	-320.4	0.1	NR
13:25	6.35	1600	70	29.56	0.3242	109.0	5.4	7.12	-337.5	0.1	NR
13:30	6.35	1600	75	31.67	0.3235	80.85	5.4	7.14	-346	0.1	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

13:35	6.35	1600	80	33.78	0.3252	84.4	5.4	7.13	-356.3	0.1	NR
13:40	6.35	1600	85	35.89	0.3245	77.51	5.4	7.12	-361.9	0.1	NR
13:45	6.35	1600	90	38.00	0.3271	69.18	5.4	7.14	-363.8	0.1	NR
13:50	6.35	1600	95	40.11	0.326	60.38	5.4	7.15	-365.2	0.09	NR
13:55	6.35	1600	100	42.22	0.3297	45.23	5.4	7.15	-369.4	0.09	NR

Development Personnel:	Nicholas Icks
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04	1.5 = 0.09	2.5 = 0.26	3.5 = 0.50	6 = 1.47
	1.25 = 0.06	2 = 0.16	3 = 0.37	4 = 0.65	

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-004-060			Date	06/29/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	10	Bottom of Screen (ft bmp)	60
Weather	80 hazy	Time Begin	14:09	Time End	18:00

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	58
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.32
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	62.69	Post-Dev Well Depth (ft bmp)	62.7
Pre-Dev DTW (ft bmp)	7.25	Post-Dev DTW (ft bmp)	7.32
Pre-Dev Water Column (ft)	55.44	Post-Dev Water Column (ft)	55.38
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	9.01	Color	NA
Total Well Volumes Purged	3.23	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
16:18	7.32	0.32	0	0.00	0.375	418.4	4.5	7.3	95.3	1.99	NR
16:27	7.32	0.32	9	2.88	0.377	741	4.3	7.31	74.6	0.63	NR
16:39	7.32	0.32	21	6.72	0.38	452.7	4.3	7.45	48.1	0.42	NR
16:49	7.32	0.32	31	9.92	0.383	262.6	4.4	7.47	23	0.29	NR
17:01	7.32	0.32	43	13.76	0.386	122.2	4.4	7.48	2.1	0.38	NR
17:12	7.32	0.32	54	17.28	0.389	75.08	4.4	7.45	-16.6	0.34	NR
17:32	7.32	0.32	74	23.68	0.396	57.16	4.6	7.43	28.4	0.33	Pump stopped briefly effecting stabilization path
17:44	7.32	0.32	86	27.52	0.394	25.72	4.4	7.46	-8	0.18	NR
17:49	7.32	0.32	91	29.12	0.394	21.15	4.4	7.47	-18.7	0.14	NR

Development Personnel:	Caleb Renner, will Rhodes
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-004-110			Date	07/01/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	60	Bottom of Screen (ft bmp)	110
Weather	65 cloudy	Time Begin	07:41	Time End	10:21

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	108
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.32
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	113.01	Post-Dev Well Depth (ft bmp)	112.56
Pre-Dev DTW (ft bmp)	7.02	Post-Dev DTW (ft bmp)	7.08
Pre-Dev Water Column (ft)	105.99	Post-Dev Water Column (ft)	105.48
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	17.22	Color	NA
Total Well Volumes Purged	1.82	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
08:34	7.18	0.32	0	0.00	0.6823	High	5	7.6	76.1	2.47	NR
08:44	7.14	0.32	10	3.20	0.6657	237.5	5	7.64	47.5	0.47	NR
08:55	7.14	0.32	21	6.72	0.6534	788.5	5	7.6	33.4	0.18	NR
09:03	7.14	0.32	29	9.28	0.6509	607.3	5	7.57	26.5	0.14	NR
09:08	7.14	0.32	34	10.88	0.6501	408.4	4.9	7.56	24.3	0.15	NR
09:13	7.14	0.32	39	12.48	0.6503	327.4	4.9	7.56	22.4	0.14	NR
09:18	7.14	0.32	44	14.08	0.6531	229.7	5	7.56	20.6	0.15	NR
09:23	7.14	0.32	49	15.68	0.6544	211.4	5.2	7.56	19.3	0.22	NR
09:28	7.14	0.32	54	17.28	0.6536	181	4.9	7.57	18.8	0.24	NR
09:33	7.14	0.32	59	18.88	0.6521	137.2	5	7.55	18	0.23	NR
09:38	7.14	0.32	64	20.48	0.6533	125	4.8	7.57	17.6	0.23	NR
09:43	7.14	0.32	69	22.08	0.6518	111.8	5	7.56	16.7	0.19	NR
09:52	7.14	0.32	78	24.96	0.6523	101.6	5	7.56	15.6	0.18	NR
09:57	7.14	0.32	83	26.56	0.6529	81.86	5	7.56	15.1	0.17	NR
10:02	7.14	0.32	88	28.16	0.6521	64.07	5	7.56	15.1	0.15	NR
10:07	7.14	0.32	93	29.76	0.6531	54.73	5	7.56	14.9	0.12	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

10:12	7.14	0.32	98	31.36	0.65	42.86	4.9	7.56	14.7	0.11	NR

Development Personnel:	Caleb Renner
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-004-160		Date	07/01/2024	
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	110	Bottom of Screen (ft bmp)	160
Weather	63 degrees Fahrenheit; cloudy; wildfire smoke	Time Begin	07:43	Time End	10:30

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.11
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	161.36	Post-Dev Well Depth (ft bmp)	161.95
Pre-Dev DTW (ft bmp)	7.14	Post-Dev DTW (ft bmp)	7.18
Pre-Dev Water Column (ft)	154.22	Post-Dev Water Column (ft)	154.77
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	25.06	Color	NA
Total Well Volumes Purged	0.35	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (mL/min)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
09:01	7.19	400	0	0.00	0.3374	733	5.2	7.59	61	0.2	NR
09:07	7.19	400	6	0.63	0.3385	727.4	5.2	7.61	44.9	0.9	NR
09:13	7.19	400	12	1.26	0.338	465.4	5.2	7.63	29.1	0.09	NR
09:19	7.19	400	18	1.89	0.3385	350.9	5.2	7.64	21.3	0.08	NR
09:24	7.19	400	23	2.42	0.3392	257.4	5.2	7.64	14	0.07	NR
09:30	7.19	400	29	3.05	0.3392	219.9	5.2	7.64	6.5	0.07	NR
09:35	7.19	400	34	3.58	0.3388	182.3	5.2	7.64	0.1	0.07	NR
09:40	7.19	400	39	4.11	0.339	151.5	5.2	7.65	-4.4	0.06	NR
09:45	5.3	400	44	4.64	0.34	121.4	5.2	7.66	-10.6	0.06	NR
09:50	7.19	400	49	5.17	0.3389	100.5	5.3	7.65	-14.1	0.06	NR
09:55	7.19	400	54	5.70	0.34	87.98	5.2	7.62	-18.3	0.06	NR
10:00	7.19	400	59	6.23	0.34	80.35	5.2	7.65	-21.2	0.06	NR
10:05	7.19	400	64	6.76	0.3397	67.86	5.2	7.66	-23.9	0.06	NR
10:10	7.19	400	69	7.29	0.3404	60.35	5.2	7.59	-24.1	0.06	NR
10:15	7.19	400	74	7.82	0.3391	55.0	5.2	7.57	-25.5	0.06	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

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MONITORING WELL DEVELOPMENT LOG

10:20	7.19	400	79	8.35	0.3389	50.08	5.2	7.58	-28.5	0.06	NR
10:25	7.19	400	84	8.88	0.3383	46.43	5.2	7.62	-31.7	0.06	NR

Development Personnel: Nathan Hager

Notes: Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs

1 = 0.04	1.5 = 0.09	2.5 = 0.26	3.5 = 0.50	6 = 1.47
1.25 = 0.06	2 = 0.16	3 = 0.37	4 = 0.65	

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-005-060			Date	07/02/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	10	Bottom of Screen (ft bmp)	60
Weather	70, cloudy	Time Begin	14:49	Time End	18:15

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.32
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	62.88	Post-Dev Well Depth (ft bmp)	62.9
Pre-Dev DTW (ft bmp)	7.3	Post-Dev DTW (ft bmp)	7.3
Pre-Dev Water Column (ft)	55.58	Post-Dev Water Column (ft)	55.6
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	9.03	Color	NA
Total Well Volumes Purged	5.81	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
15:25	7.45	0.32	0	0.00	0.401	High	5.1	7.65	129	4.8	NR
15:50	7.38	0.32	25	8.00	0.399	429.3	4.7	7.7	87.2	0.99	NR
16:03	7.38	0.32	38	12.16	0.398	310.5	4.6	7.73	72.1	0.11	NR
16:16	7.38	0.32	51	16.32	0.4	297.6	4.8	7.71	62.3	0.12	NR
16:34	7.38	0.32	69	22.08	0.4	235.2	4.7	7.72	52.3	0.07	NR
16:48	7.38	0.32	83	26.56	0.4	219.5	4.7	7.73	48.1	0.07	NR
17:03	7.38	0.32	98	31.36	0.4	146.8	4.7	7.71	44.6	0.05	NR
17:19	7.38	0.32	114	36.48	0.4	115.1	4.7	7.71	41.8	0.05	NR
17:35	7.38	0.32	130	41.60	0.4	83.12	4.7	7.69	39.9	0.04	NR
18:00	7.38	0.32	155	49.60	0.401	66.08	4.7	7.66	44.4	0.03	NR
18:09	7.38	0.32	164	52.48	0.402	46.33	4.7	7.67	43.8	0.03	NR

Development Personnel:	Caleb Renner, will Rhodes
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-005-160			Date	07/03/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	110	Bottom of Screen (ft bmp)	160
Weather		Time Begin	07:23	Time End	11:00

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.3
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	162.2	Post-Dev Well Depth (ft bmp)	162.4
Pre-Dev DTW (ft bmp)	7.47	Post-Dev DTW (ft bmp)	7.47
Pre-Dev Water Column (ft)	154.73	Post-Dev Water Column (ft)	154.93
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	25.14	Color	NA
Total Well Volumes Purged	1.92	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
08:16	7.71	0.3	0	0.00	0.339	High	5.5	7.5	73.9	0.98	NR
08:29	7.71	0.3	13	3.90	0.278	High	5.2	7.75	10.2	0.2	NR
08:40	7.65	0.3	24	7.20	0.27	376.4	5.3	7.83	-14.9	0.11	NR
08:51	7.62	0.3	35	10.50	0.269	673.1	5.2	7.92	-26.5	0.09	NR
09:04	7.62	0.3	48	14.40	0.27	659.8	5.3	8	7.99	0.08	NR
09:22	7.62	0.3	66	19.80	0.27	285.2	5.3	7.99	-125.1	0.07	NR
09:37	7.62	0.3	81	24.30	0.28	155.7	5.3	8.03	-149.2	0.08	NR
09:48	7.62	0.3	92	27.60	0.276	129	5.3	8.04	-153.2	0.07	NR
10:03	7.62	0.3	107	32.10	0.274	101.7	5.3	8.04	-153.3	0.07	NR
10:19	7.62	0.3	123	36.90	0.269	70.71	5.3	8.03	-151.9	0.07	NR
10:40	7.62	0.3	144	43.20	0.265	62.8	5.3	8.05	-149.6	0.07	NR
10:57	7.62	0.3	161	48.30	0.259	38.76	5.3	8.05	-145.9	0.07	NR

Development Personnel: Nathan Hager, Caleb Renner

Notes: Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-006-060			Date	07/01/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	10	Bottom of Screen (ft bmp)	60
Weather	70 cloudy	Time Begin	10:31	Time End	11:57

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	59
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.32
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	NA	Post-Dev Well Depth (ft bmp)	66.61
Pre-Dev DTW (ft bmp)	7.5	Post-Dev DTW (ft bmp)	7.52
Pre-Dev Water Column (ft)	NA	Post-Dev Water Column (ft)	59.09
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	NA	Color	NA
Total Well Volumes Purged		Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
11:20	7.52	0.32	0	0.00	0.6486	357.5	4.1	7.68	109	3	NR
11:25	7.52	0.32	5	1.60	0.649	138.6	4.1	7.66	97.9	1.8	NR
11:30	7.52	0.32	10	3.20	0.648	110	4.1	7.63	83.5	1	NR
11:35	7.2	0.32	15	4.80	0.6482	74.78	4.1	7.63	73	0.7	NR
11:40	7.52	0.32	20	6.40	0.648	37.66	4.1	7.63	63.5	0.51	NR
11:45	7.52	0.32	25	8.00	0.6483	15.99	4.1	7.62	56.1	0.47	NR
11:50	7.52	0.32	30	9.60	0.6482	7.45	4.1	7.62	49.7	0.52	NR

Development Personnel:	Caleb Renner
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-006-110			Date	07/01/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	60	Bottom of Screen (ft bmp)	110
Weather		Time Begin	10:50	Time End	14:15

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.67
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	111.49	Post-Dev Well Depth (ft bmp)	110.75
Pre-Dev DTW (ft bmp)	7.72	Post-Dev DTW (ft bmp)	NA
Pre-Dev Water Column (ft)	103.77	Post-Dev Water Column (ft)	NA
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	16.86	Color	NA
Total Well Volumes Purged	5.00	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
12:00	7.9	0.674	0	0.00	0.621	1100	4.7	7.79	50.8	0.3	NR
12:05	7.9	0.674	5	3.37	0.624	1100	4.7	7.78	30.9	0.12	NR
12:10	7.91	0.674	10	6.74	0.624	408.2	4.7	7.77	12.3	0.07	NR
12:15	7.91	0.674	15	10.11	0.626	752.6	4.7	7.78	-4.3	0.05	NR
12:20	7.91	0.674	20	13.48	0.624	821.6	4.7	7.8	-23.9	0.05	NR
12:26	7.91	0.674	26	17.52	0.621	563.2	4.7	7.79	-43.3	0.05	NR
12:30	7.91	0.674	30	20.22	0.619	461.1	4.7	7.8	-55.5	0.05	NR
12:35	7.91	0.674	35	23.59	0.618	333.3	4.7	7.81	-72.5	0.05	NR
12:40	7.91	0.674	40	26.96	0.617	305.2	4.7	7.81	-90	0.04	NR
12:45	7.91	0.674	45	30.33	0.616	280.4	4.7	7.81	-111.1	0.04	NR
12:50	7.91	0.674	50	33.70	0.616	211.6	4.7	7.81	-132.2	0.05	NR
12:55	7.91	0.674	55	37.07	0.615	183.6	4.7	7.81	-152.5	0.04	NR
13:00	7.91	0.674	60	40.44	0.614	170.5	4.7	7.91	-174.9	0.37	NR
13:05	7.91	0.674	65	43.81	0.614	154.1	4.7	7.79	-195.5	0.07	NR
13:10	7.91	0.674	70	47.18	0.613	134.7	4.7	7.82	-222.2	0.06	NR
13:15	7.91	0.674	75	50.55	0.613	117.0	4.7	7.83	-244.8	0.05	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

13:20	7.91	0.674	80	53.92	0.613	115.9	4.8	7.82	-267	0.06	NR
13:25	7.91	0.674	85	57.29	0.612	106.5	4.7	7.77	-287.6	0.06	NR
13:30	7.91	0.674	90	60.66	0.612	97	4.7	7.81	-319.9	0.07	NR
13:35	7.91	0.674	95	64.03	0.627	88.64	4.8	7.82	-329	0.06	NR
13:40	7.91	0.674	100	67.40	0.627	84.7	4.7	7.81	-345	0.06	NR
13:45	7.91	0.674	105	70.77	0.627	64.2	4.8	7.81	-359	0.06	NR
13:50	7.91	0.674	110	74.14	0.627	59.8	4.8	7.82	-368	0.06	NR
13:55	7.91	0.674	115	77.51	0.626	56.2	4.8	7.77	-375	0.06	NR
14:00	7.92	0.674	120	80.88	0.625	55.3	4.7	7.81	-380	0.06	NR
14:05	7.92	0.674	125	84.25	0.624	49.66	4.8	7.8	-383	0.06	NR

Development Personnel: Nathan Hager

Notes: Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs

1 = 0.04	1.5 = 0.09	2.5 = 0.26	3.5 = 0.50	6 = 1.47
1.25 = 0.06	2 = 0.16	3 = 0.37	4 = 0.65	

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-006-160			Date	07/01/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	110	Bottom of Screen (ft bmp)	160
Weather	65 cloudy	Time Begin	12:02	Time End	04:06

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	158
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.32
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	162.46	Post-Dev Well Depth (ft bmp)	162.28
Pre-Dev DTW (ft bmp)	7.56	Post-Dev DTW (ft bmp)	7.62
Pre-Dev Water Column (ft)	154.9	Post-Dev Water Column (ft)	154.66
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	25.17	Color	NA
Total Well Volumes Purged	2.03	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
13:30	7.67	0.32	0	0.00	0.3375	1100	5	7.71	108.9	2.43	NR
13:35	7.67	0.32	5	1.60	0.3358	527.4	5.1	7.66	100.2	0.67	NR
13:40	7.67	0.32	10	3.20	0.3344	771.4	5	7.63	90.8	0.25	NR
13:45	7.67	0.32	15	4.80	0.3331	887.4	5.2	7.63	84.3	0.16	NR
13:50	7.67	0.32	20	6.40	0.3323	937.6	5.1	7.64	79	0.14	NR
13:55	7.67	0.32	25	8.00	0.3308	812.8	5.1	7.62	75.1	0.12	NR
14:00	7.67	0.32	30	9.60	0.3301	645.6	5.1	7.6	71.4	0.09	NR
14:05	7.67	0.32	35	11.20	0.3298	535.2	5.1	7.56	70.3	0.1	NR
14:10	7.67	0.32	40	12.80	0.3298	446.9	5.2	7.56	67	0.1	NR
14:15	7.67	0.32	45	14.40	0.3302	364.4	5.1	7.59	64	0.11	NR
14:20	7.67	0.32	50	16.00	0.3301	309.9	5.2	7.59	60.7	0.12	NR
14:25	7.67	0.32	55	17.60	0.3304	265.6	5.1	7.56	60.1	0.14	NR
14:30	7.67	0.32	60	19.20	0.3303	248.4	5.1	7.57	57.9	0.15	NR
14:35	7.67	0.32	65	20.80	0.3301	230.4	5.2	7.57	66.5	0.15	Pump stopped for ~10 seconds
14:40	7.67	0.32	70	22.40	0.3302	269.8	5.2	7.56	62.1	1.13	NR
14:45	7.67	0.32	75	24.00	0.3296	208.6	5.2	7.59	58.1	0.21	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

14:50	7.67	0.32	80	25.60	0.329	180.8	5.2	7.59	56.1	0.14	NR
14:55	7.67	0.32	85	27.20	0.3285	157.2	5.3	7.59	54.4	0.12	NR
15:00	7.67	0.32	90	28.80	0.329	151.3	5.3	7.6	52.7	0.11	NR
15:05	7.67	0.32	95	30.40	328.5	126.8	5.3	7.61	51.5	0.1	NR
15:10	7.67	0.32	100	32.00	328.5	116.2	5.3	7.61	50.6	0.1	NR
15:15	7.67	0.32	105	33.60	0.3283	106.7	5.3	7.58	50	0.08	NR
15:20	7.67	0.32	110	35.20	0.328	102.1	5.4	7.61	49.7	0.09	NR
15:30	7.67	0.32	120	38.40	0.3278	90.22	5.4	7.62	47.6	0.07	NR
15:40	7.67	0.32	130	41.60	0.3268	66.71	5.4	7.63	46.5	0.07	NR
15:50	7.67	0.32	140	44.80	0.3268	59.26	5.4	7.64	45	0.06	NR
16:00	7.67	0.32	150	48.00	0.3265	51.69	5.4	7.64	43.8	0.05	NR
16:10	7.68	0.32	160	51.20	0.3264	47.13	5.5	7.66	42.1	0.05	NR

Development Personnel: Caleb Renner, Nathan Hager

Notes: Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs

1 = 0.04	1.5 = 0.09	2.5 = 0.26	3.5 = 0.50	6 = 1.47
1.25 = 0.06	2 = 0.16	3 = 0.37	4 = 0.65	

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-007-060			Date	07/01/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	10	Bottom of Screen (ft bmp)	60
Weather	70 degrees Fahrenheit; overcast	Time Begin	14:36	Time End	17:00

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	60	Post-Dev Well Depth (ft bmp)	NA
Pre-Dev DTW (ft bmp)	7.01	Post-Dev DTW (ft bmp)	NA
Pre-Dev Water Column (ft)	52.99	Post-Dev Water Column (ft)	NA
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	8.61	Color	NA
Total Well Volumes Purged		Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (mL/min)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
15:30	7.15	NR	0	0.00	0.645	520.6	4.3	7.77	14.4	0.16	NR
15:35	7.15	NR	5	NR	0.651	747.0	4.3	7.76	2.6	0.1	NR
15:40	7.15	NR	10	NR	0.653	650.6	4.3	7.76	-11.1	0.07	NR
15:45	7.15	NR	15	NR	0.653	339.8	4.3	7.77	-23.9	0.06	NR
15:50	7.15	NR	20	NR	0.654	213.2	4.3	7.77	-32.6	0.06	NR
15:53	NR	NR	23	NR	0.656	170.6	4.3	7.66	-46.9	0.05	NR
15:58	7.15	NR	28	NR	0.658	150.0	4.3	7.79	-56.9	0.05	NR
16:05	7.15	NR	35	NR	0.658	128.6	4.3	7.77	-68.5	0.05	NR
16:10	7.15	NR	40	NR	0.658	116.2	4.3	7.79	-79.2	0.05	NR
16:15	7.15	NR	45	NR	0.659	95.95	4.3	7.79	-89.2	0.04	NR
16:20	7.15	NR	50	NR	0.659	86.61	4.2	7.79	-98	0.05	NR
16:25	7.15	NR	55	NR	0.66	74.36	4.2	7.8	-105.9	0.05	NR
16:30	7.15	NR	60	NR	0.659	62.1	4.2	7.8	-115	0.04	NR
16:35	NR	NR	65	NR	0.659	70.96	4.2	7.8	-125.2	0.4	NR
16:40	7.15	NR	70	NR	0.659	60.86	4.2	7.8	-132.5	0.04	NR
16:45	7.15	NR	75	NR	0.66	50	4.2	7.78	-137.9	0.04	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Development Personnel:	Nicholas Icks
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04	1.5 = 0.09	2.5 = 0.26	3.5 = 0.50	6 = 1.47
	1.25 = 0.06	2 = 0.16	3 = 0.37	4 = 0.65	

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-007-110			Date	07/02/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	60	Bottom of Screen (ft bmp)	110
Weather	65 cloudy	Time Begin	07:22	Time End	10:42

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	108
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.24
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	112.62	Post-Dev Well Depth (ft bmp)	112.06
Pre-Dev DTW (ft bmp)	7.27	Post-Dev DTW (ft bmp)	7.28
Pre-Dev Water Column (ft)	105.35	Post-Dev Water Column (ft)	104.78
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	17.12	Color	NA
Total Well Volumes Purged	1.72	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
08:26	7.37	0.24	0	0.00	0.391	High	4.9	7.54	89.1	0.99	NR
08:36	7.34	0.24	10	2.40	0.386	349.6	4.7	7.73	50.6	0.17	NR
08:54	7.34	0.24	28	6.72	0.381	752.1	4.7	7.8	21.9	0.12	NR
09:07	7.34	0.24	41	9.84	0.381	593.5	4.7	7.81	16.3	0.11	NR
09:18	7.34	0.24	52	12.48	0.377	371.5	4.7	7.82	6.9	0.16	NR
09:28	7.34	0.24	62	14.88	0.378	228.8	4.7	7.82	2.6	0.18	NR
09:40	7.34	0.24	74	17.76	0.377	174.1	4.7	7.83	-1.8	1.21	NR
09:50	7.34	0.24	84	20.16	0.377	120	4.7	7.83	-3.9	0.13	NR
10:03	7.34	0.24	97	23.28	0.377	86.83	4.7	7.86	-6.6	0.09	NR
10:14	7.34	0.24	108	25.92	0.375	58.67	4.7	7.84	-8	0.09	NR
10:29	7.34	0.24	123	29.52	0.374	41.71	4.7	7.84	-9.1	0.08	NR

Development Personnel:	Caleb Renner, will Rhodes
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04	1.5 = 0.09	2.5 = 0.26	3.5 = 0.50	6 = 1.47
	1.25 = 0.06	2 = 0.16	3 = 0.37	4 = 0.65	

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-007-160			Date	07/02/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	110	Bottom of Screen (ft bmp)	160
Weather	60 degrees Fahrenheit; cloudy with light rain	Time Begin	07:23	Time End	11:00

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	158
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.42
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	162.55	Post-Dev Well Depth (ft bmp)	NA
Pre-Dev DTW (ft bmp)	7.13	Post-Dev DTW (ft bmp)	NA
Pre-Dev Water Column (ft)	155.42	Post-Dev Water Column (ft)	NA
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	25.25	Color	NA
Total Well Volumes Purged	1.92	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (mL/min)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
09:00	7.18	1600	0	0.00	0.354	653.0	5	7.3	90.3	0.19	NR
09:05	7.18	1600	5	2.11	0.36	547.6	5	7.37	80.3	0.13	NR
09:10	7.18	1600	10	4.22	0.366	459.7	5.1	7.43	69.6	0.1	NR
09:15	7.18	1600	15	6.33	0.367	298.1	5.1	7.44	62.1	0.09	NR
09:20	7.18	1600	20	8.44	0.365	246.7	5.1	7.44	56.2	0.09	NR
09:23	NR	1600	23	9.71	0.363	207.1	5.1	7.46	48.7	0.09	NR
09:30	7.18	1600	30	12.67	0.363	185.6	5.1	7.46	44.5	0.08	NR
09:35	7.18	1600	35	14.78	0.365	171.1	5.1	7.47	40.2	0.08	NR
09:40	7.18	1600	40	16.89	0.364	166.6	5.1	7.47	36.4	0.09	NR
09:45	7.18	1600	45	19.00	0.363	142.8	5.1	7.48	30.9	0.09	NR
09:50	7.18	1600	50	21.11	0.362	130.9	5.1	7.48	27.4	0.08	NR
09:55	7.18	1600	55	23.22	0.364	119.7	5.1	7.48	22.8	0.08	NR
10:00	7.18	1600	60	25.33	0.364	115.8	5.1	7.49	19.2	0.08	NR
10:05	7.18	1600	65	27.44	0.364	103.9	5.1	7.48	14.7	0.08	NR
10:10	7.18	1600	70	29.55	0.363	96.10	5.1	7.49	10.9	0.08	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

10:15	7.18	1600	75	31.66	0.363	91.78	5.1	7.49	6.6	0.08	NR
10:20	7.18	1600	80	33.77	0.362	84.57	5.1	7.48	2.5	0.08	NR
10:25	7.18	1600	85	35.88	0.362	73.92	5.1	7.49	-1.3	0.08	NR
10:30	7.18	1600	90	37.99	0.362	71.3	5.1	7.48	-5	0.08	NR
10:35	7.18	1600	95	40.10	0.361	63.74	5.1	7.48	-9.2	0.08	NR
10:40	7.18	1600	100	42.21	0.361	61.1	5.1	7.48	-11.5	0.09	NR
10:45	7.18	1600	105	44.32	0.359	55.98	5.1	7.48	-14.4	0.08	NR
10:50	7.18	1600	110	46.43	0.361	53.49	5.2	7.48	-17.3	0.08	NR
10:55	7.18	1600	115	48.54	0.359	47.48	5.1	7.48	-20.1	0.08	NR

Development Personnel:	Nicholas Icks
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04	1.5 = 0.09	2.5 = 0.26	3.5 = 0.50	6 = 1.47
	1.25 = 0.06	2 = 0.16	3 = 0.37	4 = 0.65	

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-008-060			Date	07/02/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	10	Bottom of Screen (ft bmp)	60
Weather	70 degrees Fahrenheit; sunny	Time Begin	15:04	Time End	17:15

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.42
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	61.2	Post-Dev Well Depth (ft bmp)	NA
Pre-Dev DTW (ft bmp)	7.24	Post-Dev DTW (ft bmp)	NA
Pre-Dev Water Column (ft)	53.96	Post-Dev Water Column (ft)	NA
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	8.77	Color	NA
Total Well Volumes Purged	3.37	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (mL/min)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
15:50	7.32	1600	0	0.00	0.627	386.9	4.2	7.42	97.9	0.55	NR
15:55	7.32	1600	5	2.11	0.628	224.2	4.1	7.41	95.7	0.34	NR
16:00	7.32	1600	10	4.22	0.628	149.3	4.2	7.41	93.2	0.24	NR
16:05	7.32	1600	15	6.33	NR	101.0	4.1	7.42	91.6	0.19	NR
16:10	7.32	1600	20	8.44	NR	83.37	4.1	7.42	90.3	0.15	NR
16:15	7.32	1600	25	10.55	NR	79.52	4.1	7.44	88.6	0.14	NR
16:19	7.32	1600	29	12.24	NR	69.69	4.2	7.42	87.6	0.14	NR
16:25	7.32	1600	35	14.78	NR	72.86	4.1	7.43	86.7	0.14	NR
16:30	7.32	1600	40	16.89	NR	75.82	4.2	7.42	85.5	0.14	NR
16:38	7.32	1600	48	20.27	NR	70.87	4.1	7.42	84.2	0.13	NR
16:50	7.32	1600	60	25.34	NR	58.23	4.1	7.42	82.6	0.14	NR
16:55	7.32	1600	65	27.45	NR	57.48	4.1	7.42	81.9	0.13	NR
17:00	7.32	1600	70	29.56	NR	50	4.1	7.42	80.8	0.14	NR

Development Personnel: Nicholas Icks

Notes: Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

Ahtna ARCADIS JV

MONITORING WELL DEVELOPMENT LOG

Well Diameter (in) = Unit Volume (gallon per ft of water column)					
Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-008-110			Date	07/02/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	60	Bottom of Screen (ft bmp)	110
Weather	65 cloudy	Time Begin	11:36	Time End	14:35

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	108
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.35
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	111.81	Post-Dev Well Depth (ft bmp)	111.16
Pre-Dev DTW (ft bmp)	7.28	Post-Dev DTW (ft bmp)	7.36
Pre-Dev Water Column (ft)	104.53	Post-Dev Water Column (ft)	103.8
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	16.99	Color	NA
Total Well Volumes Purged	2.47	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (gpm)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
12:27	7.47	0.35	0	0.00	0.43	1100	4.8	7.87	97.9	2.76	NR
12:44	7.39	0.35	17	5.95	0.417	376	4.8	7.87	53.1	0.31	NR
12:54	7.39	0.35	27	9.45	0.41	436.7	4.9	7.87	41.5	0.27	NR
13:04	7.39	0.35	37	12.95	0.399	406.1	4.9	7.83	34.9	0.23	NR
13:16	7.39	0.35	49	17.15	0.391	354.3	5	7.82	29.5	0.14	NR
13:32	7.39	0.35	65	22.75	0.383	155.5	5	7.82	26.4	0.09	NR
13:44	7.39	0.35	77	26.95	0.381	110.9	5	7.82	25.4	0.08	NR
13:54	7.39	0.35	87	30.45	0.378	75.37	5	7.82	25.5	0.07	NR
14:09	7.39	0.35	102	35.70	0.378	62.12	5.1	7.84	25.3	0.07	NR
14:27	7.39	0.35	120	42.00	0.375	30.22	5.1	7.83	25.2	0.06	NR

Development Personnel:	Caleb Renner , will Rhodes
Notes:	Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04 1.25 = 0.06	1.5 = 0.09 2 = 0.16	2.5 = 0.26 3 = 0.37	3.5 = 0.50 4 = 0.65	6 = 1.47

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

Site/Project Information

Well ID	CACMW-008-160			Date	07/02/2024
Project No.	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS				
Site Location	Eielson AFB DGI-PSC	Top of Screen (ft bmp)	110	Bottom of Screen (ft bmp)	160
Weather		Time Begin	11:21	Time End	14:45

Development Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	NR
MP Elevation (ft)	NA	Pumping Rate (gpm)	0.9
Land Surface Elevation (ft)	NA	Development Method	Submersible
Pre-Dev Well Depth (ft bmp)	162.9	Post-Dev Well Depth (ft bmp)	162.95
Pre-Dev DTW (ft bmp)	7.42	Post-Dev DTW (ft bmp)	NA
Pre-Dev Water Column (ft)	155.48	Post-Dev Water Column (ft)	NA
Casing Diameter (in) / Type	2/PVC	**Field Parameters**	
Initial Well Volume (gallons)	25.26	Color	NA
Total Well Volumes Purged	50.36	Odor	NA
		Appearance	NA

Time	Measured DTW (ft bmp)	Pumping Rate (mL/min)	Elapsed Time (min)	Gallons Removed	Conductivity (mS/cm)	Turbidity (NTU)	Temp (°C)	pH (s.u.)	ORP (mV)	DO (mg/L)	Remarks
12:00	7.57	1600	1415	598.08	0.326	533	5.2	7.46	-39.5	0.12	NR
12:25	7.57	1600	0	0.00	0.421	446.9	5	7.58	24.6	0.58	NR
12:29	7.57	1600	4	1.69	0.415	650.8	5.1	7.59	1.8	0.32	NR
12:35	7.57	1600	10	4.23	0.408	759.8	5.1	7.59	-11.3	0.24	NR
12:40	7.57	1600	15	6.34	0.398	856.4	5.1	7.56	-20.4	0.2	NR
12:45	7.57	1600	20	8.45	0.382	738.3	5.1	7.52	-26	0.17	NR
12:50	7.57	1600	25	10.56	0.374	691.2	5.2	7.5	-30.8	0.15	NR
12:55	7.57	1600	30	12.67	0.37	607.3	5.1	7.49	-35.2	0.14	NR
13:00	7.57	1600	35	1,232.06	0.327	96.13	5.3	7.35	-56.3	0.06	NR
13:05	7.57	1600	40	625.55	0.357	493.0	5.2	7.44	-42.2	NR	NR
13:10	7.57	1600	45	627.66	0.352	383.0	5.1	7.42	-44.2	0.11	NR
13:15	7.57	1600	50	629.77	0.347	NR	5.2	7.4	-45.7	0.09	NR
13:20	7.57	1600	55	631.88	0.344	294.0	5.2	7.39	-47.2	0.09	NR
13:25	7.57	1600	60	633.99	0.344	252.6	5.2	7.39	-49.2	0.09	NR
13:30	7.57	1600	65	636.10	0.333	217.8	5.2	7.38	-50.7	0.09	NR
13:35	7.57	1600	70	638.21	0.339	201.0	5.3	7.38	-52.2	0.08	NR

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

MONITORING WELL DEVELOPMENT LOG

13:40	7.57	1600	75	640.32	0.337	178.5	5.3	7.38	-53.6	0.07	NR
13:45	7.57	1600	80	642.43	0.331	145.7	5.2	7.36	-54.3	0.06	NR
13:50	7.57	1600	85	644.54	0.329	130.6	5.3	7.35	-54.9	0.06	NR
13:55	7.57	1600	90	646.65	0.328	109.0	5.3	7.34	-55.4	0.06	NR
14:05	7.57	1600	100	1,259.53	0.326	96.35	5.3	7.35	-56.6	0.06	NR
14:10	7.57	1600	105	1,261.64	0.325	91.89	5.3	7.34	-57.8	0.05	NR
14:15	7.57	1600	110	1,263.75	0.325	74.56	5.3	7.33	-58.9	0.06	NR
14:20	7.57	1600	115	1,265.86	0.321	66.4	5.3	7.32	-59	0.05	NR
14:25	7.57	1600	120	1,267.97	0.321	63.22	5.3	7.32	-60	0.06	NR
14:35	7.57	1600	130	1,272.20	0.32	49.55	5.3	7.31	-61.3	0.05	NR

Development Personnel: Nicholas Icks

Notes: Surged 10 times per each 2-ft throw throughout entire length of 50-ft screen, twice

Well Diameter (in) = Unit Volume (gallon per ft of water column)

Well Volume Calcs	1 = 0.04	1.5 = 0.09	2.5 = 0.26	3.5 = 0.50	6 = 1.47
	1.25 = 0.06	2 = 0.16	3 = 0.37	4 = 0.65	

ft -bmp - feet below measuring point
mV-millivolts
mg/L- Miligrams per liter
NTU - Nephelometric Turbidity Units

°F / °C- Degrees Fahrenheit/Celsius
gpm - gallons per minute
DTW - depth to water

mS/cm-Milisiemens per centimeter
ft-feet
in - Inches

Field Parameter/Stability Guidance: Three consecutive readings - pH (± 0.1 s.u), specific conductance (± 3% mS/cm), temperature (± 3% °F/°C), turbidity (±10% when turbidity is ≤ 10 NTU), DO (10% mg/L), ORP (±10 mV)

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-001-060			**Date**	07/09/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	58 °F, Light Rain, SE winds at 3 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	10 to 60	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	7.47	**Total Depth (ft-bmp)**	60.55	**Water Column(ft)**	53.08	**Gallons in Well**	8.63
MP Elevation	530.62	**Pump Intake (ft-bmp)**	14	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-001-060-070924	**Sampled by**	Caleb Renner
Purge Start	13:01	**Well Volumes Purged**	1.16	**Replicate/ Code No.**	N/A	**Sample Time**	13:54
Purge End	14:45	**Gallons Purged**	10.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:01	0	0	400	7.48	0.00	7.11	0.336	44.12	7.36	3.7	93.5	Clear	None
13:06	5	5	400	7.48	0.53	7.14	0.327	46.07	1.57	3.6	73.7	Clear	None
13:11	5	10	400	7.48	1.06	7.18	0.344	74.28	0.95	3.4	51.6	Clear	None
13:16	5	15	400	7.48	1.59	7.20	0.362	82.19	0.73	3.4	34.6	Clear	None
13:21	5	20	400	7.48	2.11	7.04	0.600	27.82	0.72	3.8	50.8	Clear	None
13:26	5	25	400	7.48	2.64	7.14	0.633	24.09	0.73	3.8	56.4	Clear	None
13:31	5	30	400	7.48	3.17	7.18	0.644	23.32	0.68	3.9	57.4	Clear	None
13:36	5	35	400	7.48	3.70	7.19	0.652	20.25	0.59	3.9	57.1	Clear	None
13:41	5	40	400	7.48	4.23	7.21	0.658	19.1	0.52	3.9	56.0	Clear	None
13:46	5	45	400	7.48	4.76	7.22	0.660	15.61	0.46	4.0	55.1	Clear	None
13:51	5	50	400	7.48	5.28	7.32	0.664	13.65	0.41	3.9	54.1	Clear	None

Analytical Methods	Container	Number	Preservative
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ML HDPE	1	None
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
SM5310C	250 ml amber glass	1	Hcl
USEPA Method 1633/ENV-WCOL-0158	2 500 mL HDPE + 1 125 mL HDPE	3	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Comments: Ferrous iron 1.96 mg/L
Sulfide 0.07 mg/l

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:	CACMW-001-060	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-001-110			**Date**	07/09/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	58 °F, Light Rain, winds at 0 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	60 to 110	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	7.34	**Total Depth (ft-bmp)**	112.6	**Water Column(ft)**	105.26	**Gallons in Well**	17.1
MP Elevation	530.52	**Pump Intake (ft-bmp)**	65	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-001-110-070924	**Sampled by**	Nathan Hager
Purge Start	13:00	**Well Volumes Purged**	0.58	**Replicate/ Code No.**	N/A	**Sample Time**	14:00
Purge End	15:30	**Gallons Purged**	10.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:05	0	0	400	7.35	0.00	7.20	0.668	4.9	1.87	4.5	154.1	Clear	None
13:10	5	5	400	7.35	1.06	7.32	0.634	2.92	0.65	4.4	133.3	Clear	None
13:15	5	10	400	7.35	1.59	7.31	0.631	0.83	0.49	4.4	135.0	Clear	None
13:20	5	15	400	7.35	2.11	7.33	0.631	1.86	0.46	4.5	131.9	Clear	None
13:25	5	20	400	7.35	2.64	7.35	0.632	2.28	0.40	4.4	127.4	Clear	None
13:30	5	25	400	7.35	3.17	7.37	0.631	3.64	0.36	4.4	124.8	Clear	None
13:35	5	30	400	7.35	3.70	7.39	0.632	2.14	0.35	4.5	122.7	Clear	None
13:40	5	35	400	7.35	4.23	7.43	0.632	1.12	0.33	4.4	119.9	Clear	None
13:45	5	40	400	7.35	4.76	7.44	0.631	3.93	0.32	4.4	118.5	Clear	None

Analytical Methods	Container	Number	Preservative
USEPA Method 1633/ENV-WCOL-0158	2 500 mL Hdpe + 1 125 mL Hdpe	3	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 mL HDPE	1	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SM5310C	250 mL amber glass	1	HCl
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None

Comments: Pump intake set to 65' below top of casing. Sulfide = 0.10 mg/l. Ferrous iron 2.19 mg/ l

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:	CACMW-001-110	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-001-160			**Date**	07/10/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	70 °F, Sunny, SE winds at 4 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	112 to 162	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.97	**Total Depth (ft-bmp)**	162.43	**Water Column(ft)**	155.46	**Gallons in Well**	25.26
MP Elevation	530.14	**Pump Intake (ft-bmp)**	114	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-001-160-071024	**Sampled by**	Caleb Renner
Purge Start	13:36	**Well Volumes Purged**	0.1	**Replicate/ Code No.**	N/A	**Sample Time**	14:00
Purge End	14:30	**Gallons Purged**	2.50				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:38	0	0	400	6.97	0.00	7.12	0.357	9.56	6.40	5.8	119.4	Clear	None
13:43	5	5	400	6.98	0.74	7.66	0.341	3.18	0.96	5.9	99.8	Clear	None
13:48	5	10	400	6.98	1.27	7.72	0.339	3.29	0.65	6.3	92.0	Clear	None
13:53	5	15	400	6.98	1.80	7.71	0.338	2.23	0.50	6.0	85.7	Clear	None

Analytical Methods	Container	Number	Preservative
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
SM5310C	250 ml amber glass	1	Hcl
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None

Comments: Ferrous iron 2.78 mg/L
Sulfide 0.04 mg/l

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Eielson

Well Locked at Arrival: yes

Condition of Well: Good condition

Well Locked at Departure: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Completion: Stick-up

Key Number To Well: 3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-002-060			**Date**	07/10/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	70 °F, Partly Cloudy, winds at 0 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	10 to 60	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.49	**Total Depth (ft-bmp)**	62	**Water Column(ft)**	55.51	**Gallons in Well**	9.02
MP Elevation	529.69	**Pump Intake (ft-bmp)**	30.5	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-002-060-071024	**Sampled by**	Nathan Hager
Purge Start	14:00	**Well Volumes Purged**	1.11	**Replicate/ Code No.**	N/A	**Sample Time**	15:00
Purge End	15:35	**Gallons Purged**	10.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
14:25	0	0	350	6.49	2.31	7.36	0.653	0.29	0.71	5.3	103.9	Clear	None
14:30	5	5	350	6.49	2.77	7.22	0.653	5.1	0.47	5.4	102.7	Clear	None
14:35	5	10	350	6.49	3.24	7.31	0.655	4.45	0.30	5.3	101.2	Clear	None
14:40	5	15	350	6.49	3.70	7.33	0.653	2.72	0.28	5.2	100.4	Clear	None
14:45	5	20	350	6.49	4.16	7.30	0.653	2.1	0.25	5.2	99.6	Clear	None
14:50	5	25	350	6.49	4.62	7.36	0.653	2.64	0.25	5.2	98.9	Clear	None
14:55	5	30	350	6.49	5.09	7.35	0.653	3.18	0.20	5.0	98.0	Clear	None

Analytical Methods	Container	Number	Preservative
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 mL HDPE	1	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
USEPA Method 1633/ENV-WCOL-0158	2 500mL HDPE + 1 125 HDPE	3	None
SM5310C	250 mL amber glass	1	HCl
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3

Comments: Intake set t 30.5 below top of casing. iPad shut down due to heat before first parameter was recorded, continued purging while iPad cooled down in cooler. Ferris iron = 2.41 mg/L. Sulfide =0.0 mg/L (ran test twice).

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Information

Well Location:	CACMW-002-060	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-002-110			**Date**	07/11/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	57.2 degrees F and Light Rain. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	60 to 110	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.52	**Total Depth (ft-bmp)**	111.25	**Water Column(ft)**	104.73	**Gallons in Well**	17.02
MP Elevation	529.88	**Pump Intake (ft-bmp)**	81	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-002-110-071124	**Sampled by**	Christopher Metz
Purge Start	11:35	**Well Volumes Purged**	0.11	**Replicate/ Code No.**	N/A	**Sample Time**	12:40
Purge End	12:53	**Gallons Purged**	1.90				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:35	0	0	240	6.52	0.00	7.50	0.615	3.62	4.61	6.5	116.1	Clear	None
11:40	5	5	240	6.56	0.32	7.41	0.613	9.28	0.82	6.3	113.1	Clear	None
11:45	5	10	240	6.56	0.57	7.42	0.615	11.51	0.38	6.3	109.0	Clear	None
11:50	5	15	240	6.56	0.95	7.44	0.617	3.16	0.28	6.6	106.6	Clear	None
11:55	5	20	240	6.56	1.27	7.44	0.619	8.85	0.24	6.5	105.4	Clear	None
12:00	5	25	240	6.56	1.59	7.45	0.619	2.7	0.21	6.1	103.5	Clear	None
12:05	5	30	240	6.56	1.90	7.45	0.620	8.71	0.19	6.1	102.6	Clear	None

Analytical Methods	Container	Number	Preservative
SM5310C	250 ml amber glass	1	HCl
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SM2320B/ENV-MTJL-0114	250 mL plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml HDPE + 1 125 ml HDPE	3	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml HDPE	1	None

Comments: Hach Tests
Ferrous iron: 2.58 mg/L
Sulfide: 0.03 mg/L

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Information

Well Location:	Woods	Well Locked at Arrival:	no
Condition of Well:	Good condition	Well Locked at Departure:	no
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-002-160			**Date**	07/11/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	Rain, 50F			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	110 to 160	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.46	**Total Depth (ft-bmp)**	161.61	**Water Column(ft)**	155.15	**Gallons in Well**	25.21
MP Elevation	529.63	**Pump Intake (ft-bmp)**	130	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-002-160-071124	**Sampled by**	Christopher Metz
Purge Start	09:05	**Well Volumes Purged**	0.06	**Replicate/ Code No.**	N/A	**Sample Time**	10:00
Purge End	10:43	**Gallons Purged**	1.59				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
09:05	0	0	200	6.47	0.00	6.72	0.470	6.7	2.60	7.1	120.1	Clear	None
09:10	5	5	200	6.47	0.26	6.98	0.364	3.75	0.91	6.8	106.8	Clear	None
09:15	5	10	200	6.47	0.53	7.11	0.321	3.2	0.58	6.5	98.3	Clear	None
09:20	5	15	200	6.47	0.79	7.18	0.309	1.42	0.36	6.1	88.4	Clear	None
09:25	5	20	200	6.47	1.06	7.21	0.308	1.53	0.32	6.5	84.3	Clear	None
09:30	5	25	200	6.47	1.32	7.25	0.309	0.36	0.26	6.1	77.9	Clear	None
09:35	5	30	200	6.47	1.59	7.24	0.308	0.86	0.25	6.2	77.0	Clear	None

Analytical Methods	Container	Number	Preservative
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
SM5310C	250 mL Amber	1	HCl
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 mL HDPE	1	None
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml HDPE + 1 125 ml HDPE	3	None
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None

Comments: Hach tests:
Ferrous Iron: 2.55 mg/L
Sulfide: 0.00 mg/L

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Information

Well Location:	Woods	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-003-060			**Date**	07/10/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	72 °F, Overcast, SE winds at 4 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	10 to 60	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	5.72	**Total Depth (ft-bmp)**	60.83	**Water Column(ft)**	55.11	**Gallons in Well**	8.95
MP Elevation	528.93	**Pump Intake (ft-bmp)**	56	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-003-060-071024	**Sampled by**	Caleb Renner
Purge Start	15:33	**Well Volumes Purged**	0.84	**Replicate/ Code No.**	N/A	**Sample Time**	16:40
Purge End	17:06	**Gallons Purged**	7.50				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
15:35	0	0	400	5.72	0.21	7.85	0.727	20.69	7.86	5.9	118.4	Clear	None
15:40	5	5	400	5.72	0.74	8.04	0.731	19.13	2.50	5.9	111.0	Clear	None
15:45	5	10	400	5.72	1.27	8.04	0.732	22.48	2.08	5.7	102.6	Clear	None
15:50	5	15	400	5.72	1.80	7.96	0.731	41.17	1.78	5.7	93.2	Clear	None
15:55	5	20	400	5.72	2.32	7.92	0.732	58.43	1.65	5.6	86.6	Clear	None
16:00	5	25	400	5.72	2.85	7.87	0.732	54.73	1.61	5.7	79.3	Clear	None
16:05	5	30	400	5.72	3.38	7.83	0.731	47.93	1.33	5.6	71.6	Clear	None
16:10	5	35	400	5.72	3.91	7.82	0.732	54.7	1.23	5.5	66.8	Clear	None
16:15	5	40	400	5.72	4.44	7.84	0.730	25.17	1.12	5.7	61.3	Clear	None
16:20	5	45	400	5.72	4.97	8.01	0.730	39.47	0.24	5.6	57.2	Clear	None
16:25	5	50	400	5.72	5.50	7.93	0.731	34.84	0.28	5.6	51.2	Clear	None
16:30	5	55	400	5.72	6.02	7.88	0.731	25.2	0.27	5.3	46.7	Clear	None
16:35	5	60	400	5.72	6.55	7.84	0.731	29.07	0.27	5.5	43.0	Clear	None

Analytical Methods	Container	Number	Preservative
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SM5310C	250 ml amber glass	1	Hcl

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4

Comments: Sulfide .03 mg/l
Ferrous iron "+++" above instrument range

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:	Eielson	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-003-110			**Date**	07/11/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	58 °F, Light Rain, SW winds at 4 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	60 to 110	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	5.54	**Total Depth (ft-bmp)**	112.22	**Water Column(ft)**	106.68	**Gallons in Well**	17.33
MP Elevation	528.85	**Pump Intake (ft-bmp)**	106	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-003-110-071124	**Sampled by**	Caleb Renner
Purge Start	11:24	**Well Volumes Purged**	0.29	**Replicate/ Code No.**	N/A	**Sample Time**	12:05
Purge End	12:32	**Gallons Purged**	5.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:25	0	0	400	5.55	0.11	7.95	0.629	51.14	3.49	5.5	122.7	Clear	None
11:30	5	5	400	5.55	0.63	7.89	0.646	48.53	0.94	5.3	117.2	Clear	None
11:35	5	10	400	5.55	1.16	7.91	0.656	41.31	0.56	5.3	111.9	Clear	None
11:40	5	15	400	5.55	1.69	7.97	0.658	38.43	0.49	5.5	106.1	Clear	None
11:45	5	20	400	5.55	2.22	8.02	0.667	31.48	0.40	5.4	102.0	Clear	None
11:50	5	25	400	5.55	2.75	8.14	0.671	32.33	0.41	5.6	96.3	Clear	None
11:55	5	30	400	5.55	3.28	8.17	0.672	29.24	0.40	5.5	91.2	Clear	None
12:00	5	35	400	5.55	3.80	8.15	0.669	24.77	0.42	5.4	87.5	Clear	None

Analytical Methods	Container	Number	Preservative
SM5310C	250 ml amber glass	1	Hcl
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None

Comments: Sulfide 0.03 mg/l
Ferrous iron “+++” — out of range

Well Casing Volume Conversion

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:	EAFB	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-003-160			**Date**	07/11/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	56 °F, Moderate rain, S winds at 4 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	110 to 160	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	5.76	**Total Depth (ft-bmp)**	161.91	**Water Column(ft)**	156.15	**Gallons in Well**	25.37
MP Elevation	528.9	**Pump Intake (ft-bmp)**	156	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-003-160-071124	**Sampled by**	Caleb Renner
Purge Start	08:51	**Well Volumes Purged**	0.2	**Replicate/ Code No.**	N/A	**Sample Time**	09:27
Purge End	10:41	**Gallons Purged**	5.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
08:55	0	0	400	5.76	0.42	6.70	0.443	24.05	0.04	5.4	163.6	Clear	None
09:00	5	5	400	5.76	0.95	6.88	0.340	17.79	0.52	5.5	1,514.0	Clear	None
09:05	5	10	400	5.76	1.48	7.01	0.338	6.13	0.41	5.6	141.3	Clear	None
09:10	5	15	400	5.76	2.01	7.13	0.337	5.25	0.35	5.4	133.2	Clear	None
09:15	5	20	400	5.76	2.54	7.18	0.336	6.11	0.32	5.3	126.7	Clear	None
09:20	5	25	400	5.76	3.06	7.23	0.336	5.63	0.36	5.2	120.6	Clear	None
09:25	5	30	400	5.76	3.59	7.25	0.336	7	0.37	5.3	117.3	Clear	None

Analytical Methods	Container	Number	Preservative
SM5310C	250 ml amber glass	1	Hcl
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SW846 9060/ENV-MTJL-0185	125 ml Hdpe	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
SM2320B/ENV-MTJL-0114	250 mL plastic	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3

Comments: Ferrous iron 2.93 mg/l
Sulfide 0.00 mg/l

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Information

Well Location:	Eielson	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-004-060			**Date**	07/11/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	63 °F, Overcast, SW winds at 3 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	10 to 60	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.75	**Total Depth (ft-bmp)**	60.55	**Water Column(ft)**	53.8	**Gallons in Well**	8.74
MP Elevation	529.95	**Pump Intake (ft-bmp)**	40	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-004-060-071124	**Sampled by**	Caleb Renner
Purge Start	13:37	**Well Volumes Purged**	0.57	**Replicate/ Code No.**	N/A	**Sample Time**	14:20
Purge End	14:44	**Gallons Purged**	5.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:40	0	0	400	6.77	0.32	8.45	0.704	5.32	0.74	5.7	111.3	Clear	None
13:45	5	5	400	6.77	0.85	8.35	0.707	3.58	0.39	5.6	110.8	Clear	None
13:50	5	10	400	6.77	1.37	8.30	0.707	4.61	0.29	5.4	106.6	Clear	None
13:55	5	15	400	6.77	1.90	8.26	0.706	3.46	0.28	5.5	99.9	Clear	None
14:00	5	20	400	6.77	2.43	8.26	0.706	3.91	0.26	5.3	93.7	Clear	None
14:05	5	25	400	6.77	2.96	8.27	0.705	4.41	0.22	5.4	87.1	Clear	None
14:10	5	30	400	6.77	3.49	8.26	0.706	4.75	0.22	5.2	81.8	Clear	None
14:15	5	35	400	6.77	4.02	8.22	0.704	4.42	0.21	5.4	78.5	Clear	None

Analytical Methods	Container	Number	Preservative
SM5310C	250 ml amber glass	1	Hcl
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
SM2320B/ENV-MTJL-0114	250 mL plastic	1	None

Comments: Sulfide 0.02 mg/l
Ferrous iron 3.15 mg/l

Well Casing Volume Conversion

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:	EAFB	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-004-110			**Date**	07/12/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	71 °F, Sunny, SE winds at 7 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	60 to 110	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.48	**Total Depth (ft-bmp)**	111.99	**Water Column(ft)**	105.51	**Gallons in Well**	17.14
MP Elevation	529.77	**Pump Intake (ft-bmp)**	90	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-004-110-071224	**Sampled by**	Caleb Renner
Purge Start	12:58	**Well Volumes Purged**	0.23	**Replicate/ Code No.**	N/A	**Sample Time**	13:30
Purge End	13:55	**Gallons Purged**	4.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:00	0	0	400	6.50	0.21	7.57	0.692	15.36	24.44	6.2	143.6	Clear	None
13:05	5	5	400	6.50	0.74	7.71	0.694	17.28	1.08	6.1	141.8	Clear	None
13:10	5	10	400	6.50	1.27	7.65	0.692	24.83	0.67	5.9	138.7	Clear	None
13:15	5	15	400	6.50	1.80	7.61	0.693	27.3	0.59	5.8	133.2	Clear	None
13:20	5	20	400	6.50	2.32	7.64	0.692	20.46	0.59	5.9	127.5	Clear	None
13:25	5	25	400	6.50	2.85	7.64	0.691	23.75	0.55	5.7	122.6	Clear	None

Analytical Methods	Container	Number	Preservative
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
SM5310C	250 ml amber glass	1	Hcl
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA 130.2	250 mL plastic	1	HNO3
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None

Comments: Sulfide 0.05 mg/l
Ferrous iron 2.99 mg/l

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: EAFB

Well Locked at Arrival: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-004-160			**Date**	07/12/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	63 °F, Sunny, E winds at 4 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	110 to 160	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.49	**Total Depth (ft-bmp)**	161.62	**Water Column(ft)**	155.13	**Gallons in Well**	25.21
MP Elevation	529.74	**Pump Intake (ft-bmp)**	140	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-004-160-071224	**Sampled by**	Caleb Renner
Purge Start	10:20	**Well Volumes Purged**	0.2	**Replicate/ Code No.**	CACMW-GW-FD01-071224	**Sample Time**	11:05
Purge End	11:56	**Gallons Purged**	5.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
10:20	0	0	400	6.60	0.00	6.85	0.692	14.04	0.96	6.2	125.6	Clear	None
10:25	5	5	400	6.60	0.53	7.10	0.504	14.01	0.37	6.0	121.3	Clear	None
10:30	5	10	400	6.60	1.06	7.22	0.355	15.62	0.31	5.9	119.0	Clear	None
10:35	5	15	400	6.60	1.59	7.28	0.350	8.03	0.32	6.1	115.7	Clear	None
10:40	5	20	400	6.60	2.11	7.42	0.349	5.71	0.21	6.0	110.1	Clear	None
10:45	5	25	400	6.60	2.64	7.49	0.350	3.4	0.18	6.0	105.6	Clear	None
10:50	5	30	400	6.60	3.17	7.53	0.351	2.29	0.20	5.9	103.6	Clear	None
10:55	5	35	400	6.60	3.70	7.55	0.352	2.95	0.21	5.9	102.3	Clear	None

Analytical Methods	Container	Number	Preservative
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
SM5310C	250 ml amber glass	1	Hcl
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA 130.2	250 mL plastic	1	HNO3
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None

Comments: Sulfide 0.04 mg/l
Ferrous iron 3.20 mg/l

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Information

Well Location:	EAFB	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-005-060			**Date**	07/11/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	Overcast, 55F			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	10 to 60	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.88	**Total Depth (ft-bmp)**	62.49	**Water Column(ft)**	55.61	**Gallons in Well**	9.04
MP Elevation	529.97	**Pump Intake (ft-bmp)**	19.6	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-005-060-071124	**Sampled by**	Christopher Metz
Purge Start	14:35	**Well Volumes Purged**	0.23	**Replicate/ Code No.**	N/A	**Sample Time**	15:45
Purge End	15:54	**Gallons Purged**	2.05				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
14:36	0	0	250	6.88	0.00	7.41	0.643	30.76	2.34	6.3	125.0	Clear	None
14:41	5	5	250	6.87	0.40	7.39	0.642	40.44	1.06	6.3	123.4	Clear	None
14:46	5	10	250	6.87	0.70	7.40	0.643	65.82	0.66	6.3	0.6	Clear	None
14:51	5	15	250	6.87	1.06	7.40	0.642	79.64	0.67	6.3	119.0	Clear	None
14:56	5	20	250	6.87	1.39	7.41	0.642	44.83	0.54	6.3	117.8	Clear	None
15:01	5	25	250	6.87	1.72	7.42	0.642	34.96	0.43	6.1	115.5	Clear	None
15:06	5	30	250	6.87	2.05	7.43	0.642	41.43	0.38	6.1	114.1	Clear	None

Analytical Methods	Container	Number	Preservative
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml plastic	1	None
USEPA 353.2 (nitrate/nitrite)	250 mL plastic	1	H2SO4
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml HDPE + 1 125 ml HDPE	3	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
SM2320B/ENV-MTJL-0114	250 mL plastic	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None

Comments: Hach tests
Ferrous iron: 2.64 mg/L
Sulfide: 0.02 mg/L

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Information

Well Location:	Woods	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-005-110			**Date**	07/12/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	Clear, 70F			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	60 to 110	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.75	**Total Depth (ft-bmp)**	111.39	**Water Column(ft)**	104.64	**Gallons in Well**	17
MP Elevation	529.96	**Pump Intake (ft-bmp)**	70	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-005-110-071224	**Sampled by**	Christopher Metz
Purge Start	13:50	**Well Volumes Purged**	0.05	**Replicate/ Code No.**	N/A	**Sample Time**	14:45
Purge End	14:46	**Gallons Purged**	0.79				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:50	0	0	200	6.75	0.00	7.49	0.641	10.91	0.82	7.5	102.9	Clear	None
13:55	5	5	200	6.74	0.26	7.49	0.640	6.24	0.41	7.5	99.4	Clear	None
14:00	5	10	200	6.75	0.53	7.51	0.641	5.71	0.32	7.4	98.1	Clear	None
14:05	5	15	200	6.75	0.79	7.56	0.638	7.7	0.24	7.5	95.7	Clear	None

Analytical Methods	Container	Number	Preservative
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185, USEPA 300 (anions)	125 ml HDPE	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA 130.2	250 mL plastic	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml HDPE + 1 125 ml HDPE	3	None
SM5310C	250 ml amber glass	1	HCl
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None

Comments: HACH Tests
Ferrous iron: out of range
Sulfide: 0.06 mg/L

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot — 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Gravel
Condition of Well: Good condition
Well Locked at Arrival: yes
Well Locked at Departure: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Completion: Stick-up

Key Number To Well: 3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-005-160			**Date**	07/12/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	Clear, 70F			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	110 to 160	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.92	**Total Depth (ft-bmp)**	161.98	**Water Column(ft)**	155.06	**Gallons in Well**	25.2
MP Elevation	530.04	**Pump Intake (ft-bmp)**	120	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-005-160-071224	**Sampled by**	Christopher Metz
Purge Start	11:05	**Well Volumes Purged**	0.08	**Replicate/ Code No.**	N/A	**Sample Time**	12:20
Purge End	12:30	**Gallons Purged**	1.98				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:05	0	0	250	6.92	0.00	7.42	0.331	8.62	0.84	8.7	-3.2	Clear	None
11:10	5	5	250	6.94	0.33	7.55	0.327	6.46	0.47	8.3	-18.5	Clear	None
11:15	5	10	250	6.94	0.73	7.63	0.326	6	0.28	7.8	-38.4	Clear	None
11:20	5	15	250	6.94	1.06	7.65	0.326	7.99	0.22	7.6	-51.8	Clear	None
11:25	5	20	250	6.94	1.32	7.66	0.327	6.59	0.18	7.8	-62.8	Clear	None
11:30	5	25	250	6.94	1.65	7.67	0.327	9.95	0.17	7.8	-69.5	Clear	None
11:35	5	30	250	6.94	1.98	7.65	0.326	8.22	0.16	7.8	-75.7	Clear	None

Analytical Methods	Container	Number	Preservative
SM5310C	250 ml amber glass	1	HCl
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml HDPE + 1 125 ml HDPE	3	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA 130.2	250 mL plastic	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml HDPE	1	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4

Comments: HACH Tests
Ferrous iron: 2.87 mg/L
Sulfide: 0.02 mg/L

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Information

Well Location:	Woods	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-006-060			**Date**	07/15/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	51.3 degrees F and Cloudy. The wind is blowing E/SE at 6.9 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	10 to 60	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.95	**Total Depth (ft-bmp)**	61.44	**Water Column(ft)**	54.49	**Gallons in Well**	8.85
MP Elevation	530.17	**Pump Intake (ft-bmp)**	36	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-006-060-071524	**Sampled by**	Christopher Metz
Purge Start	09:50	**Well Volumes Purged**	0.19	**Replicate/ Code No.**	N/A	**Sample Time**	11:45
Purge End	11:45	**Gallons Purged**	1.65				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
09:50	0	0	250	6.95	0.00	7.12	0.654	4.44	0.29	5.3	178.1	Clear	None
09:55	5	5	250	6.96	0.33	7.28	0.648	4.26	0.21	5.4	172.5	Clear	None
10:00	5	10	250	6.96	0.66	7.33	0.647	2.57	0.18	5.3	169.0	Clear	None
10:05	5	15	250	6.96	0.99	7.39	0.647	3.68	0.14	5.1	163.7	Clear	None
10:10	5	20	250	6.96	1.32	7.44	0.646	5.09	0.13	5.1	158.8	Clear	None
10:15	5	25	250	6.96	1.65	7.46	0.647	3.11	0.12	5.1	156.0	Clear	None

Analytical Methods	Container	Number	Preservative
SM2320B/ENV-MTJL-0114	250 mL plastic	1	None
SM5310C	250 ml Amber glass	1	HCl
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.2	250 mL plastic	1	HNO3
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml plastic	1	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None

Comments: HACH Tests
Ferrous Iron: out of range
Sulfide: 0.00 mg/L

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot — 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Location:	Gravel	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-006-110			**Date**	07/15/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	63.1 degrees F and Mostly Cloudy. The wind is blowing N at 4.7 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	60 to 110	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	7.18	**Total Depth (ft-bmp)**	110.6	**Water Column(ft)**	103.42	**Gallons in Well**	16.8
MP Elevation	530.39	**Pump Intake (ft-bmp)**	86	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-006-110-071524	**Sampled by**	Christopher Metz
Purge Start	15:30	**Well Volumes Purged**	0.09	**Replicate/ Code No.**	N/A	**Sample Time**	16:40
Purge End	16:40	**Gallons Purged**	1.59				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
15:30	0	0	300	7.18	0.00	7.74	0.630	7.01	5.59	5.8	158.4	Clear	None
15:35	5	5	300	7.20	0.40	7.30	0.629	7.2	1.69	5.7	157.5	Clear	None
15:40	5	10	300	7.20	0.79	7.54	0.629	6.16	0.82	5.5	155.8	Clear	None
15:45	5	15	300	7.20	1.19	7.53	0.627	4.84	0.42	5.8	152.6	Clear	None
15:50	5	20	300	7.20	1.59	7.49	0.625	6.3	0.28	5.6	149.6	Clear	None

Analytical Methods	Container	Number	Preservative
SM5310C	250 ml Amber glass	1	HCl
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.2	250 mL plastic	1	HNO3
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml HDPE	1	None
SM2320B/ENV-MTJL-0114	250 mL plastic	1	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None

Comments: HACH Tests
Ferrous iron: out of range
Sulfide: 0.04 mg/L

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Gravel

Well Locked at Arrival: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-006-160			**Date**	07/15/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	58.3 degrees F and Mostly Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	110 to 160	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.99	**Total Depth (ft-bmp)**	161.35	**Water Column(ft)**	154.36	**Gallons in Well**	25.08
MP Elevation	530.12	**Pump Intake (ft-bmp)**	136	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-006-160-071524	**Sampled by**	Christopher Metz
Purge Start	13:40	**Well Volumes Purged**	0.05	**Replicate/ Code No.**	N/A	**Sample Time**	14:40
Purge End	14:40	**Gallons Purged**	1.19				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:40	0	0	300	6.99	0.00	7.31	0.310	13.27	0.79	6.3	135.5	Clear	None
13:45	5	5	300	7.01	0.40	7.29	0.310	8.14	0.55	6.6	134.2	Clear	None
13:50	5	10	300	7.01	0.79	7.33	0.309	6.74	0.41	6.2	131.8	Clear	None
13:55	5	15	300	7.01	1.19	7.33	0.309	6.89	0.33	6.4	129.2	Clear	None

Analytical Methods	Container	Number	Preservative
SM2320B/ENV-MTJL-0114	250 mL plastic	1	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.2	250 mL plastic	1	HNO3
SM5310C	250 ml Amber glass	1	HCl
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml plastic	1	None
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None

Comments: HACH Tests
Ferrous Iron: 3.21 mg/L
Sulfide: 0.00 mg/L

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Gravel

Well Locked at Arrival: yes

Condition of Well: Good condition

Well Locked at Departure: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Completion: Stick-up

Key Number To Well: 3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-007-060			**Date**	07/15/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	55 °F, Overcast, W winds at 3 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	10 to 60	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.46	**Total Depth (ft-bmp)**	60.99	**Water Column(ft)**	54.53	**Gallons in Well**	8.86
MP Elevation	529.67	**Pump Intake (ft-bmp)**	51	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-007-060-071524	**Sampled by**	Caleb Renner
Purge Start	09:52	**Well Volumes Purged**	0.56	**Replicate/ Code No.**	CACMW-GW-FD02-071524	**Sample Time**	10:25
Purge End	11:10	**Gallons Purged**	5.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
09:55	0	0	400	6.46	0.32	7.16	0.777	16.96	0.51	5.2	179.0	Clear	None
10:00	5	5	400	6.46	0.85	7.39	0.724	24.18	0.46	5.1	170.1	Clear	None
10:05	5	10	400	6.46	1.37	7.50	0.718	34.86	0.48	5.1	163.5	Clear	None
10:10	5	15	400	6.46	1.90	7.59	0.712	34.55	0.45	5.1	158.2	Clear	None
10:15	5	20	400	6.46	2.43	7.62	0.713	25.07	0.42	5.2	154.3	Clear	None
10:20	5	25	400	6.46	2.96	7.67	0.715	18.06	0.43	5.2	151.3	Clear	None

Analytical Methods	Container	Number	Preservative
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
SM5310C	250 ml amber glass	1	Hcl
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA 130.2	250 mL plastic	1	HNO3

Comments: Sulfide .06 mg/l
Ferrous iron outside of range +

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: EAFB

Well Locked at Arrival: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-007-110			**Date**	07/15/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	61 °F, Overcast, SW winds at 3 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	60 to 110	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.69	**Total Depth (ft-bmp)**	111.48	**Water Column(ft)**	104.79	**Gallons in Well**	17.03
MP Elevation	529.86	**Pump Intake (ft-bmp)**	101	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-007-110-071524	**Sampled by**	Caleb Renner
Purge Start	13:59	**Well Volumes Purged**	0.29	**Replicate/ Code No.**	N/A	**Sample Time**	14:30
Purge End	15:04	**Gallons Purged**	5.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
14:00	0	0	400	6.71	0.11	8.42	0.690	33.1	5.48	6.1	161.6	Clear	None
14:05	5	5	400	6.71	0.63	8.72	0.686	34.55	0.94	5.7	152.2	Clear	None
14:10	5	10	400	6.71	1.16	8.62	0.684	16.82	0.51	5.8	147.1	Clear	None
14:15	5	15	400	6.71	1.69	8.49	0.684	28.37	0.37	5.7	141.4	Clear	None
14:20	5	20	400	6.71	2.22	8.41	0.685	33.4	0.30	5.6	137.2	Clear	None
14:25	5	25	400	6.71	2.75	8.42	0.685	15.77	0.27	5.6	132.8	Clear	None

Analytical Methods	Container	Number	Preservative
SM5310C	250 ml amber glass	1	Hcl
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B,USEPA 130.2	250 mL plastic	1	HNO3
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4

Comments: Ferrous iron out of range + Sulfide 0.04 mg/l

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: EAFB

Well Locked at Arrival: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-007-160			**Date**	07/15/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	59 °F, Overcast, SW winds at 3 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	110 to 160	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.57	**Total Depth (ft-bmp)**	161.98	**Water Column(ft)**	155.41	**Gallons in Well**	25.25
MP Elevation	529.7	**Pump Intake (ft-bmp)**	151	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-007-160-071524	**Sampled by**	Caleb Renner
Purge Start	11:56	**Well Volumes Purged**	0.16	**Replicate/ Code No.**	N/A	**Sample Time**	12:30
Purge End	13:05	**Gallons Purged**	4.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:57	0	0	400	6.57	0.11	8.45	0.365	3.61	1.99	5.8	129.5	Clear	None
12:02	5	5	400	6.57	0.63	8.42	0.355	33.69	0.56	5.7	125.6	Clear	None
12:07	5	10	400	6.57	1.16	8.26	0.354	19.28	0.37	5.6	125.1	Clear	None
12:12	5	15	400	6.57	1.69	8.08	0.353	8.59	0.30	5.7	125.5	Clear	None
12:17	5	20	400	6.57	2.22	7.97	0.352	7.96	0.28	5.8	125.0	Clear	None
12:22	5	25	400	6.57	2.75	7.96	0.349	10.35	0.29	5.7	123.5	Clear	None
12:27	5	30	400	6.57	3.28	7.95	0.350	13.26	0.30	5.7	121.7	Clear	None

Analytical Methods	Container	Number	Preservative
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None
SM5310C	250 ml amber glass	1	Hcl
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA 130.2	250 mL plastic	1	HNO3
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4

Comments: Ferrous iron 2.55 mg/l
Sulfide 0.06 mg/l

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well Location:	EAFB	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-008-060			**Date**	07/16/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	59 °F, Sunny, SW winds at 3 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	10 to 60	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.70	**Total Depth (ft-bmp)**	161.81	**Water Column(ft)**	155.11	**Gallons in Well**	25.2
MP Elevation	529.88	**Pump Intake (ft-bmp)**	24	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-008-060-071624	**Sampled by**	Caleb Renner
Purge Start	10:56	**Well Volumes Purged**	0.2	**Replicate/ Code No.**	N/A	**Sample Time**	11:35
Purge End	11:57	**Gallons Purged**	5.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:00	0	0	400	6.72	0.42	8.84	0.648	11.02	1.40	4.5	117.2	Clear	None
11:05	5	5	400	6.72	0.95	8.74	0.653	11.36	0.75	4.6	116.2	Clear	None
11:15	10	15	400	6.72	2.01	8.52	0.676	14.26	0.40	4.4	115.4	Clear	None
11:20	5	20	400	6.72	2.54	8.44	0.680	15.8	0.32	4.4	113.0	Clear	None
11:25	5	25	400	6.72	3.06	8.44	0.680	13.31	0.27	4.4	110.8	Clear	None
11:30	5	30	400	6.72	3.59	8.44	0.679	24.79	0.24	4.4	108.7	Clear	None

Analytical Methods	Container	Number	Preservative
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
SM5310C	250 ml amber glass	1	HCl
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA 130.2	250 mL plastic	1	HNO3
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None

Comments: Ferrous iron 3.24 mg/l
Sulfide 0.06 mg/l

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: EAFB

Well Locked at Arrival: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-008-110			**Date**	07/16/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	54 °F, Overcast, S winds at 2 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	60 to 110	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.75	**Total Depth (ft-bmp)**	110.89	**Water Column(ft)**	104.14	**Gallons in Well**	16.92
MP Elevation	529.86	**Pump Intake (ft-bmp)**	74	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-008-110-071624	**Sampled by**	Caleb Renner
Purge Start	08:59	**Well Volumes Purged**	0.3	**Replicate/ Code No.**	CACMW-GW-FD03-071624	**Sample Time**	09:40
Purge End	10:20	**Gallons Purged**	5.00				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
09:00	0	0	400	6.76	0.11	7.20	0.932	5.48	1.59	5.1	194.2	Clear	None
09:05	5	5	400	6.76	0.63	7.71	0.726	7.43	0.49	4.9	170.0	Clear	None
09:10	5	10	400	6.76	1.16	7.86	0.710	12.29	0.39	4.9	158.2	Clear	None
09:15	5	15	400	6.76	1.69	7.89	0.710	5.21	0.32	4.9	152.0	Clear	None
09:20	5	20	400	6.76	2.22	7.86	0.708	8.92	0.34	4.8	147.4	Clear	None
09:25	5	25	400	6.76	2.64	7.76	0.708	8.12	0.40	4.8	143.8	Clear	None
09:30	5	30	400	6.76	3.28	7.74	0.706	3.01	0.47	3.6	139.5	Clear	None
09:35	5	35	400	6.76	3.80	7.73	0.705	3	0.37	3.0	136.0	Clear	None

Analytical Methods	Container	Number	Preservative
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
SM2320B/ENV-MTJL-0114 (bicarbonate)	250 mL plastic	1	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml Hdpe	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
SM5310C	250 ml amber glass	1	Hcl

Comments: Ferrous iron out of range + Sulfide 0.02 mg/l

Well Casing Volume Conversion

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:	EAFB	Well Locked at Arrival:	yes
Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Well ID**	CACMW-008-160			**Date**	07/16/2024
Project Name/Location	Eielson AFB DGI-PSC		**Weather(°F)**	58.3 degrees F and Partly Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of PVC	**Screen Setting (ft-bgs)**	110 to 160	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.89	**Total Depth (ft-bmp)**	161.81	**Water Column(ft)**	154.92	**Gallons in Well**	25.17
MP Elevation	529.94	**Pump Intake (ft-bmp)**	125	**Purge Method**	Low-Flow	**Sample Method**	Grab
Able to be Sampled	yes	**Reason**	N/A	**Sample ID**	CACMW-008-160-071624	**Sampled by**	Christopher Metz
Purge Start	11:28	**Well Volumes Purged**	0.06	**Replicate/ Code No.**	N/A	**Sample Time**	12:30
Purge End	12:30	**Gallons Purged**	1.59				

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:28	0	0	300	6.89	0.00	6.79	0.409	8.13	2.26	6.4	157.4	Clear	None
11:33	5	5	300	6.89	0.40	7.19	0.327	10.16	0.58	6.3	142.3	Clear	None
11:38	5	10	300	6.89	0.79	7.34	0.321	6.71	0.22	5.9	131.9	Clear	None
11:43	5	15	300	6.89	1.19	7.40	0.322	7.4	0.15	6.0	126.7	Clear	None
11:48	5	20	300	6.89	1.59	7.41	0.321	6.18	0.14	5.9	124.6	Clear	None

Analytical Methods	Container	Number	Preservative
SM2320B/ENV-MTJL-0114	250 mL plastic	1	None
USEPA Method 1633/ENV-WCOL-0158	2 500 ml Hdpe + 1 125 ml Hdpe	3	None
USEPA 6010B (Fe/Mg/Ca/Mn)	250 mL plastic (field filtered [0.45 µM])	1	HNO3
SW2540D/ENV-MTJL-0153	1 liter plastic	1	None
SM5310C	250 ml Amber glass	1	HCl
SW846 9056(fluoride, chloride, sulfate) + /ENV-MTJL-0185	125 ml HDPE	1	None
SM2540C/ENV-MTJL-0176	1 liter plastic	1	None
7470A / ENV-SOP-MTJL-0215, USEPA 6020A (RCRA Metals), USEPA 6010B, USEPA Method 130.1	250 mL plastic	1	HNO3
USEPA 353.2/ENV-SOP-MTJL-0359	250 mL plastic	1	H2SO4

Comments: HACH Tests
Ferrous iron: 2.50 mg/L
Sulfide: 0.00 mg/L

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot — 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Woods

Well Locked at Arrival: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Condition of Well:	Good condition	Well Locked at Departure:	yes
Well Completion:	Stick-up	Key Number To Well:	3578

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
N/A = Not available or not applicable

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Gauging Log

Project Name/Location:	Eielson AFB DGI-PSC
Date(s):	7/9/2024 to 7/9/2024
Sampler(s):	Nathan Hager
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Top of Casing (ft-amsl)	GW Elevation (ft-amsl)	Well Depth (ft)	Remarks
CACMW-001-060	7/9/2024	09:45	7.46	530.62	523.16	60.55	
CACMW-001-110	7/9/2024	09:49	7.34	530.52	523.18	112.6	
CACMW-001-160	7/9/2024	09:52	6.96	530.14	523.18	162.43	
CACMW-002-060	7/9/2024	09:59	6.52	529.69	523.17	62	
CACMW-002-110	7/9/2024	10:08	6.67	529.88	523.21	111.25	
CACMW-002-160	7/9/2024	10:00	6.5	529.63	523.13	161.61	
CACMW-003-060	7/9/2024	10:12	5.74	528.93	523.19	60.83	
CACMW-003-110	7/9/2024	10:19	5.62	528.85	523.23	112.22	
CACMW-003-160	7/9/2024	10:15	5.8	528.9	523.1	161.91	
CACMW-004-060	7/9/2024	10:32	6.84	529.95	523.11	60.55	
CACMW-004-110	7/9/2024	10:25	6.62	529.77	523.15	111.99	
CACMW-004-160	7/9/2024	10:28	6.72	529.74	523.02	161.62	
CACMW-005-060	7/9/2024	10:36	6.88	529.97	523.09	62.49	
CACMW-005-110	7/9/2024	10:42	6.88	529.96	523.08	111.39	
CACMW-005-160	7/9/2024	10:39	7.04	530.04	523	161.98	
CACMW-005-160	7/9/2024	10:39	7.04	530.04	523	161.98	
CACMW-006-110	7/9/2024	10:54	7.3	530.39	523.09	110.6	
CACMW-006-160	7/9/2024	10:50	7.11	530.12	523.01	161.35	
CACMW-007-060	7/9/2024	10:58	6.59	529.67	523.08	60.99	
CACMW-007-110	7/9/2024	11:05	6.82	529.86	523.04	111.48	
CACMW-007-160	7/9/2024	11:05	6.68	529.7	523.02	161.98	
CACMW-008-060	7/9/2024	11:15	6.83	529.88	523.05	60.28	
CACMW-008-110	7/9/2024	11:09	6.86	529.86	523	110.89	
CACMW-008-160	7/9/2024	11:12	6.97	529.94	522.97	161.81	

Appendix A6 - Slug Test Field Inputs
Data Gap Investigation Report
Eielson Air Force Base, Alaska

Date	Well ID	Interval (ft bgs)	Total Depth of Borehole (TD) (ft)	Stick Up Height (ft ags)	Static Water Level (SWL) (ft)	Length of Water Column with Packer (Lw) (ft)	Depth Transducer Submerged Below SWL (Ts) (ft)	Effective Screen Length (Ls) (ft)	Outer Screen Radius (Rs) (ft)	Outer Borehole Radius (Rb) (ft)	Effective Inner Casing Radius (Rc) (ft)	Radius of Transducer Cable (rt) (ft)	Test Number	Manifold Pressure Applied (psi)	Manifold Pressure Theoretrical Change in Head (ft)	Pressurized Start Time	Pressure Release Time	Pressurized PT Reading (ft H2O)
7/23/2024	CACMW-001-060	12.5-15.5	60.55	0.7	7.62	7.88	1.36	3	0.17	0.50	0.026	0.0125	1	0.6	1.38		12:26:00	34.72
7/23/2024	CACMW-001-060	12.5-15.5	60.55	0.7	7.62	7.88	1.36	3	0.17	0.50	0.026	0.0125	2	0.5	1.15		12:30:00	34.79
7/23/2024	CACMW-001-060	12.5-15.5	60.55	0.7	7.62	7.88	1.36	3	0.17	0.50	0.026	0.0125	3	1.05	2.42		12:24:00	34.78
7/23/2024	CACMW-001-110	62.5-65.5	112.6	0.83	7.51	57.99	1.42	3	0.17	0.50	0.022	0.0125	1	0.45	1.04		13:53:00	34.82
7/23/2024	CACMW-001-110	62.5-65.5	112.6	0.83	7.51	57.99	1.42	3	0.17	0.50	0.022	0.0125	2	0.4	0.92		13:56:00	34.82
7/23/2024	CACMW-001-110	62.5-65.5	112.6	0.83	7.51	57.99	1.42	3	0.17	0.50	0.022	0.0125	3	1	2.31		14:06:00	34.82
7/23/2024	CACMW-001-160	113-116	162.43	0.56	7.16	108.84	2.35	3	0.17	0.50	0.021	0.0125	1	0.5	1.15		16:05:00	35.75
7/23/2024	CACMW-001-160	113-116	162.43	0.56	7.16	108.84	2.35	3	0.17	0.50	0.021	0.0125	2	0.5	1.15		16:08:00	35.74
7/23/2024	CACMW-001-160	113-116	162.43	0.56	7.16	108.84	2.35	3	0.17	0.50	0.021	0.0125	3	1	2.31			35.8
7/24/2024	CACMW-002-060	28.25-31.25	62	0.58	6.71	24.54	2.1	3	0.17	0.50	0.023	0.0125	1	0.45	1.04		08:42:00	35.47
7/24/2024	CACMW-002-060	28.25-31.25	62	0.58	6.71	24.54	2.1	3	0.17	0.50	0.023	0.0125	2	0.45	1.04		08:44:00	35.47
7/24/2024	CACMW-002-060	28.25-31.25	62	0.58	6.71	24.54	2.1	3	0.17	0.50	0.023	0.0125	3	1.05	2.42		08:47:00	35.58
7/24/2024	CACMW-002-110	78.25-81.25	111.25	0.5	6.87	74.38	2.47	3	0.17	0.50	0.022	0.0125	1	0.7	1.61		10:47:00	35.86
7/24/2024	CACMW-002-110	78.25-81.25	111.25	0.5	6.87	74.38	2.47	3	0.17	0.50	0.022	0.0125	2	0.7	1.61		10:49:00	35.9
7/24/2024	CACMW-002-110	78.25-81.25	111.25	0.5	6.87	74.38	2.47	3	0.17	0.50	0.022	0.0125	3	1.4	3.23		10:51:00	36.25
7/24/2024	CACMW-002-160	128.25-131.25	161.61	0.55	6.71	124.54	3.7	3	0.17	0.50	0.022	0.0125	1	0.5	1.15		09:49:00	37.01
7/24/2024	CACMW-002-160	128.25-131.25	161.61	0.55	6.71	124.54	3.7	3	0.17	0.50	0.022	0.0125	2	0.5	1.15		09:51:00	37.03
7/24/2024	CACMW-002-160	128.25-131.25	161.61	0.55	6.71	124.54	3.7	3	0.17	0.50	0.022	0.0125	3	1.05	2.42		09:53:00	37.01
7/24/2024	CACMW-003-060	54.5-57.5	60.83	0.6	5.94	51.56	1.38	3	0.17	0.50	0.022	0.0125	1	0.5	1.15		11:56:00	35.04
7/24/2024	CACMW-003-060	54.5-57.5	60.83	0.6	5.94	51.56	1.38	3	0.17	0.50	0.022	0.0125	2	0.5	1.15		11:57:00	35.05
7/24/2024	CACMW-003-060	54.5-57.5	60.83	0.6	5.94	51.56	1.38	3	0.17	0.50	0.022	0.0125	3	1	2.31		12:10:00	35.31
7/24/2024	CACMW-003-110	104.5-107.5	112.22	0.69	5.84	101.66	1.3	3	0.17	0.50	0.021	0.0125	1	0.6	1.38		14:24:00	34.49
7/24/2024	CACMW-003-110	104.5-107.5	112.22	0.69	5.84	101.66	1.3	3	0.17	0.50	0.021	0.0125	2	0.5	1.15		14:26:00	34.33
7/24/2024	CACMW-003-110	104.5-107.5	112.22	0.69	5.84	101.66	1.3	3	0.17	0.50	0.021	0.0125	3	1	2.31		14:28:00	34.76
7/24/2024	CACMW-003-160	154.5-157.5	161.91	0.72	6	151.5	1.85	3	0.17	0.50	0.021	0.0125	1	0.7	1.61		13:16:00	35.17
7/24/2024	CACMW-003-160	154.5-157.5	161.91	0.72	6	151.5	1.85	3	0.17	0.50	0.021	0.0125	2	0.9	2.08		13:18:00	35.3
7/24/2024	CACMW-003-160	154.5-157.5	161.91	0.72	6	151.5	1.85	3	0.17	0.50	0.021	0.0125	3	2.1	4.84		13:20:00	37.82
7/24/2024	CACMW-004-060	38.75-41.75	60.55	0.81	7.09	34.66	1.68	3	0.17	0.50	0.022	0.0125	1	0.5	1.15		15:32:00	35.1
7/24/2024	CACMW-004-060	38.75-41.75	60.55	0.81	7.09	34.66	1.68	3	0.17	0.50	0.022	0.0125	2	0.55	1.27		15:34:00	35.09
7/24/2024	CACMW-004-060	38.75-41.75	60.55	0.81	7.09	34.66	1.68	3	0.17	0.50	0.022	0.0125	3	1.3	3.00		15:38:00	35.94
7/25/2024	CACMW-004-110	88.75-91.75	111.99	0.6	6.84	84.91	1.9	3	0.17	0.50	0.022	0.0125	1	0.5	1.15		09:44:00	35.42
7/25/2024	CACMW-004-110	88.75-91.75	111.99	0.6	6.84	84.91	1.9	3	0.17	0.50	0.022	0.0125	2	0.55	1.27		09:45:00	35.42
7/25/2024	CACMW-004-110	88.75-91.75	111.99	0.6	6.84	84.91	1.9	3	0.17	0.50	0.022	0.0125	3	1.25	2.88		09:47:00	35.64
7/25/2024	CACMW-004-160	138.75-141.75	161.62	0.59	6.96	134.79	1.3	3	0.17	0.50	0.021	0.0125	1	0.5	1.15		08:46:00	34.84
7/25/2024	CACMW-004-160	138.75-141.75	161.62	0.59	6.96	134.79	1.3	3	0.17	0.50	0.021	0.0125	2	0.7	1.61		08:47:00	34.88
7/25/2024	CACMW-004-160	138.75-141.75	161.62	0.59	6.96	134.79	1.3	3	0.17	0.50	0.021	0.0125	3	1.3	3.00		08:50:00	36.29
7/25/2024	CACMW-005-060	17.75-20.75	62.49	0.54	7.1	13.65	1.28	3	0.17	0.50	0.024	0.0125	1	0.45	1.04		10:38:00	34.75
7/25/2024	CACMW-005-060	17.75-20.75	62.49	0.54	7.1	13.65	1.28	3	0.17	0.50	0.024	0.0125	2	0.7	1.61		10:41:00	34.76
7/25/2024	CACMW-005-060	17.75-20.75	62.49	0.54	7.1	13.65	1.28	3	0.17	0.50	0.024	0.0125	3	1.1	2.54		10:46:00	35.64
7/25/2024	CACMW-005-110	67.75-70.75	111.39	0.68	7.1	63.65	1.87	3	0.17	0.50	0.022	0.0125	1	0.5	1.15		12:41:00	35.33
7/25/2024	CACMW-005-110	67.75-70.75	111.39	0.68	7.1	63.65	1.87	3	0.17	0.50	0.022	0.0125	2	0.6	1.38		12:43:00	35.33
7/25/2024	CACMW-005-110	67.75-70.75	111.39	0.68	7.1	63.65	1.87	3	0.17	0.50	0.022	0.0125	3	1	2.31		12:48:00	35.31

Appendix A6 - Slug Test Field Inputs
Data Gap Investigation Report
Eielson Air Force Base, Alaska

Date	Well ID	Interval (ft bgs)	Total Depth of Borehole (TD) (ft)	Stick Up Height (ft ags)	Static Water Level (SWL) (ft)	Length of Water Column with Packer (Lw) (ft)	Depth Transducer Submerged Below SWL (Ts) (ft)	Effective Screen Length (Ls) (ft)	Outer Screen Radius (Rs) (ft)	Outer Borehole Radius (Rb) (ft)	Effective Inner Casing Radius (Rc) (ft)	Radius of Transducer Cable (rt) (ft)	Test Number	Manifold Pressure Applied (psi)	Manifold Pressure Theoretrical Change in Head (ft)	Pressurized Start Time	Pressure Release Time	Pressurized PT Reading (ft H2O)
7/25/2024	CACMW-005-160	117.75-120.75	161.98	0.52	7.24	113.51	1.29	3	0.17	0.50	0.021	0.0125	1	0.5	1.15		11:23:00	35.04
7/25/2024	CACMW-005-160	117.75-120.75	161.98	0.52	7.24	113.51	1.29	3	0.17	0.50	0.021	0.0125	2	0.5	1.15		11:25:00	35.04
7/25/2024	CACMW-005-160	117.75-120.75	161.98	0.52	7.24	113.51	1.29	3	0.17	0.50	0.021	0.0125	3	1	2.31		11:27:00	35.27
7/25/2024	CACMW-006-060	33.5-36.5	61.44	0.75	7.31	29.19	3	3	0.17	0.50	0.024	0.0125	1	0.5	1.15		13:27:00	36.4
7/25/2024	CACMW-006-060	33.5-36.5	61.44	0.75	7.31	29.19	3	3	0.17	0.50	0.024	0.0125	2	0.5	1.15		13:29:00	36.38
7/25/2024	CACMW-006-060	33.5-36.5	61.44	0.75	7.31	29.19	3	3	0.17	0.50	0.024	0.0125	3	1	2.31		13:32:00	36.37
7/26/2024	CACMW-006-110*	83.5-86.5	110.6	1.06	7.55	78.95	2.9	3	0.17	0.50		0.0125	1	0.5	1.15		08:30:00	36
7/26/2024	CACMW-006-110*	83.5-86.5	110.6	1.06	7.55	78.95	2.9	3	0.17	0.50		0.0125	2	0.55	1.27		08:32:00	36.01
7/26/2024	CACMW-006-110*	83.5-86.5	110.6	1.06	7.55	78.95	2.9	3	0.17	0.50		0.0125	3	1	2.31		08:35:00	35.97
7/25/2024	CACMW-006-160	133.5-136.5	161.35	0.52	7.34	129.16	3	3	0.17	0.50	0.022	0.0125	1	0.6	1.38		14:09:00	36.33
7/25/2024	CACMW-006-160	133.5-136.5	161.35	0.52	7.34	129.16	3	3	0.17	0.50	0.022	0.0125	2	0.6	1.38		14:11:00	36.33
7/25/2024	CACMW-006-160	133.5-136.5	161.35	0.52	7.34	129.16	3	3	0.17	0.50	0.022	0.0125	3	1.1	2.54		14:13:00	36.33
7/26/2024	CACMW-007-060	49.25-52.25	60.99	0.81	6.84	45.41	1.89	3	0.17	0.50	0.022	0.0125	1	0.5	1.15	09:19:00	09:20:00	35.06
7/26/2024	CACMW-007-060	49.25-52.25	60.99	0.81	6.84	45.41	1.89	3	0.17	0.50	0.022	0.0125	2	0.5	1.15	09:21:00	09:22:00	35.06
7/26/2024	CACMW-007-060	49.25-52.25	60.99	0.81	6.84	45.41	1.89	3	0.17	0.50	0.022	0.0125	3	1.1	2.54	09:24:00	09:26:00	35.14
7/26/2024	CACMW-007-110	99.25-102.25	111.48	0.67	7.07	95.18	3.26	3	0.17	0.50	0.022	0.0125	1	0.5	1.15	11:05:00	11:06:00	36.32
7/26/2024	CACMW-007-110	99.25-102.25	111.48	0.67	7.07	95.18	3.26	3	0.17	0.50	0.022	0.0125	2	0.5	1.15	11:07:00	11:08:00	36.33
7/26/2024	CACMW-007-110	99.25-102.25	111.48	0.67	7.07	95.18	3.26	3	0.17	0.50	0.022	0.0125	3	1	2.31	11:09:00	11:10:00	36.32
7/26/2024	CACMW-007-160	149.25-152.25	161.98	0.59	6.94	145.56	2	3	0.17	0.50	0.021	0.0125	1	0.5	1.15	10:08:00	10:09:00	35.19
7/26/2024	CACMW-007-160	149.25-152.25	161.98	0.59	6.94	145.56	2	3	0.17	0.50	0.021	0.0125	2	0.55	1.27	10:10:00	10:11:00	35.2
7/26/2024	CACMW-007-160	149.25-152.25	161.98	0.59	6.94	145.56	2	3	0.17	0.50	0.021	0.0125	3	1.2	2.77	10:13:00	10:14:00	35.26
7/26/2024	CACMW-008-060	23-26	60.28	0.82	7.07	18.93	1.3	3	0.17	0.50	0.023	0.0125	1	0.55	1.27	12:49:00	12:50:00	34.33
7/26/2024	CACMW-008-060	23-26	60.28	0.82	7.07	18.93	1.3	3	0.17	0.50	0.023	0.0125	2	0.65	1.50	12:51:00		34.33
7/26/2024	CACMW-008-060	23-26	60.28	0.82	7.07	18.93	1.3	3	0.17	0.50	0.023	0.0125	3	1.2	2.77	12:54:00	12:55:00	34.95
7/26/2024	CACMW-008-110	73-76	110.89	0.88	7.12	68.88	2.29	3	0.17	0.50	0.022	0.0125	1	0.5	1.15	14:36:00	14:37:00	35.39
7/26/2024	CACMW-008-110	73-76	110.89	0.88	7.12	68.88	2.29	3	0.17	0.50	0.022	0.0125	2	0.5	1.15	14:38:00		35.38
7/26/2024	CACMW-008-110	73-76	110.89	0.88	7.12	68.88	2.29	3	0.17	0.50	0.022	0.0125	3	1	2.31	14:42:00	14:43:00	35.52
7/26/2024	CACMW-008-160	123-126	161.81	0.69	7.22	118.78	2.04	3	0.17	0.50	0.021	0.0125	1	0.5	1.15	13:51:00	13:52:00	35.18
7/26/2024	CACMW-008-160	123-126	161.81	0.69	7.22	118.78	2.04	3	0.17	0.50	0.021	0.0125	2	0.55	1.27	13:53:00	13:54:00	35.18
7/26/2024	CACMW-008-160	123-126	161.81	0.69	7.22	118.78	2.04	3	0.17	0.50	0.021	0.0125	3	1.1	2.54	13:55:00	13:57:00	35.15

Notes:
ags - above ground surface
ft - feet
H2O - water
ID - identification
psi - pounds per square inch
* Transducer files not found; slug test analysis not completed

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-001-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	7/31/2024	**Deployment Time:**	11:30:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	55	**Depth to Groundwater:**	7.5	**Total Well Depth:**	60.44	**Depth Top of PFM:**	32.5	**Depth Bottom of PFM:**	58.5

PFM Number	PFM Serial Number	Deployment Depth
1	45	58.5
2	46	53.25
3	47	48
4	48	42.75
5	44	37.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/14/2024	**Retrieval Time:**	09:15:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	0	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-001-060-37.5-081424-FM-R	8/14/2024	09:30:00	32.5-37.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-001-060-37.5-081424-FM-G	8/14/2024	09:30:00	32.5-37.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-001-060-42.75-081424-FM-R	8/14/2024	10:00:00	37.75-42.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-001-060-42.75-081424-FM-G	8/14/2024	10:10:00	37.75-42.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-001-060-48-081424-FM-R	8/14/2024	12:30:00	43-48 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-001-060-48-081424-FM-G	8/14/2024	12:30:00	43-48 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-001-060-53.25-081524-FM-R	8/15/2024	09:30:00	48.25-53.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-001-060-53.25-081524-FM-G	8/15/2024	09:30:00	48.25-53.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-001-060-58.5-081524-FM-R	8/15/2024	09:45:00	53.5-58.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-001-060-58.5-081524-FM-G	8/15/2024	09:45:00	53.5-58.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: PFM 1 (serial no. 45) stuck between ~ 11 and 16 feet bgs and PFMs 2 and 3 (serial nos. 46 and 47) stuck between ~5 and 11 ft bgs between 1225 on 8/14 and specified retrieval times

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-001-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/21/2024	**Deployment Time:**	08:41:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	7.26	**Total Well Depth:**	60.44	**Depth Top of PFM:**	11.5	**Depth Bottom of PFM:**	32.25

PFM Number	PFM Serial Number	Deployment Depth
1	1	32.25
2	2	27
3	3	21.75
4	4	16.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/4/2024	**Retrieval Time:**	09:59:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	7.43	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-001-060-16.5-090424-FM-R	9/4/2024	10:00:00	11.5-16.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-001-060-16.5-090424-FM-G	9/4/2024	10:00:00	11.5-16.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-001-060-21.75-090424-FM-R	9/6/2024	09:55:00	16.75-21.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-001-060-21.75-090424-FM-G	9/4/2024	10:02:00	16.75-21.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-001-060-27-090424-FM-R	9/4/2024	10:20:00	22-27 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-001-060-27-090424-FM-G	9/4/2024	10:20:00	22-27 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-001-060-32.25-090424-FM-R	9/4/2024	10:25:00	27.25-32.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-001-060-32.25-090424-FM-G	9/4/2024	10:25:00	27.25-32.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-001-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	7/31/2024	**Deployment Time:**	12:30:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	57	**Depth to Groundwater:**	7.35	**Total Well Depth:**	112.5	**Depth Top of PFM:**	82.5	**Depth Bottom of PFM:**	108.5

PFM Number	PFM Serial Number	Deployment Depth
1	41	108.5
2	42	103.25
3	43	98
4	57	92.75
5	58	87.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/14/2024	**Retrieval Time:**	14:15:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:		**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-001-110-87.5-081424-FM-R	8/14/2024	14:25:00	82.5-87.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-001-110-87.5-081424-FM-G	8/14/2024	14:25:00	82.5-87.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-001-110-92.75-081424-FM-R	8/14/2024	14:45:00	87.75-92.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-001-110-92.75-081424-FM-G	8/14/2024	14:45:00	87.75-92.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-001-110-98-081424-FM-R	8/14/2024	15:00:00	93-98 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-001-110-98-081424-FM-G	8/14/2024	15:00:00	93-98 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-001-110-103.25-081424-FM-R	8/14/2024	15:25:00	98.25-103.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-001-110-103.25-081424-FM-G	8/14/2024	15:25:00	98.25-103.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
in = inches
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mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-001-110-108.5-081424-FM-R	8/14/2024	15:40:00	103.5-108.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-001-110-108.5-081424-FM-G	8/14/2024	15:40:00	103.5-108.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110	

Comments: N/A

ft-bmp = feet below measuring point
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ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
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mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-001-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/21/2024	**Deployment Time:**	09:12:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	7.13	**Total Well Depth:**	112.5	**Depth Top of PFM:**	61.5	**Depth Bottom of PFM:**	82.25

PFM Number	PFM Serial Number	Deployment Depth
1	9	82.25
1	10	77
3	11	71.75
4	12	66.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/4/2024	**Retrieval Time:**	10:32:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	7.27	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-001-110-66.5-090424-FM-R	9/4/2024	10:45:00	61.5-66.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-001-110-66.5-090424-FM-G	9/4/2024	10:45:00	61.5-66.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-001-110-71.75-090424-FM-R	9/4/2024	10:50:00	66.75-71.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-001-110-71.75-090424-FM-G	9/4/2024	10:50:00	66.75-71.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-001-110-77-090424-FM-R	9/4/2024	11:00:00	72-77 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-001-110-77-090424-FM-G	9/4/2024	11:00:00	72-77 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-001-110-82.25-090424-FM-R	9/4/2024	11:05:00	77.25-82.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-001-110-82.25-090424-FM-G	9/4/2024	11:05:00	77.25-82.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-001-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	7/31/2024	**Deployment Time:**	13:29:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	60	**Depth to Groundwater:**	6.97	**Total Well Depth:**	162.24	**Depth Top of PFM:**	133	**Depth Bottom of PFM:**	159

PFM Number	PFM Serial Number	Deployment Depth
1	59	159
2	60	153.75
3	25	148.5
4	26	143.25
5	27	138

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/15/2024	**Retrieval Time:**	10:15:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.63	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-001-160-138-081524-FM-R	8/15/2024	10:15:00	133-138 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-001-160-138-081524-FM-G	8/15/2024	10:15:00	133-138 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-001-160-143.25-081524-FM-R	8/15/2024	10:40:00	138.25-143.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-001-160-143.25-081524-FM-G	8/15/2024	10:40:00	138.25-143.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-001-160-148.5-081524-FM-R	8/15/2024	10:55:00	143.5-148.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-001-160-148.5-081524-FM-G	8/15/2024	11:06:00	143.5-148.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-001-160-153.75-081524-FM-R	8/15/2024	11:10:00	148.75-153.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-001-160-153.75-081524-FM-G	8/15/2024	11:10:00	148.85-153.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-001-160-159-081524-FM-R	8/15/2024	11:40:00	154-159 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-001-160-159-081524-FM-G	8/15/2024	11:40:00	154-159 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	164.3	**Top of Screen:**	112	**Bottom of Screen:**	162		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-001-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/21/2024	**Deployment Time:**	09:42:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	6.77	**Total Well Depth:**	162.24	**Depth Top of PFM:**	112	**Depth Bottom of PFM:**	132.75

PFM Number	PFM Serial Number	Deployment Depth
1	41	132.75
2	42	127.5
3	43	122.25
4	44	117

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/4/2024	**Retrieval Time:**	11:12:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.9	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-001-160-117-090424-FM-R	9/4/2024	11:20:00	112-117 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-001-160-117-090424-FM-G	9/4/2024	11:20:00	112-117 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-001-160-122.25-090424-FM-R	9/4/2024	11:25:00	117.25-122.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-001-160-122.25-090424-FM-G	9/4/2024	11:25:00	117.25-122.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-001-160-127.5-090424-FM-R	9/4/2024	11:40:00	122.5-127.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-001-160-127.5-090424-FM-G	9/4/2024	11:40:00	122.5-127.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-001-160-132.75-090424-FM-R	9/4/2024	11:45:00	127.75-132.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-001-160-132.75-090424-FM-G	9/4/2024	11:45:00	127.75-132.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	164.3	**Top of Screen:**	112	**Bottom of Screen:**	162		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-002-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	7/31/2024	**Deployment Time:**	14:30:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	60	**Depth to Groundwater:**	6.53	**Total Well Depth:**	62.03	**Depth Top of PFM:**	32.5	**Depth Bottom of PFM:**	58.5

PFM Number	PFM Serial Number	Deployment Depth
1	28	58.5
2	9	53.25
3	10	48
4	11	42.75
5	12	37.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/15/2024	**Retrieval Time:**	11:50:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.21	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-002-060-37.5-081524-FM-R	8/15/2024	11:50:00	32.5-37.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-002-060-37.5-081524-FM-G	8/15/2024	11:50:00	32.5-37.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-002-060-42.75-081524-FM-R	8/15/2024	12:10:00	37.75-42.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-002-060-42.75-081524-FM-G	8/15/2024	12:21:00	37.75-42.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-002-060-48-081524-FM-R	8/15/2024	12:50:00	43-48 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-002-060-48-081524-FM-G	8/15/2024	12:50:00	43-48 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-002-060-53.25-081524-FM-R	8/15/2024	13:05:00	48.25-53.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-002-060-53.25-081524-FM-G	8/15/2024	13:05:00	48.25-53.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-002-060-58.5-081524-FM-R	8/15/2024	13:20:00	53.5-58.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-002-060-58.5-081524-FM-G	8/15/2024	13:20:00	53.5-58.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60	

Comments: N/A

ft-bmp = feet below measuring point
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ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-002-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/21/2024	**Deployment Time:**	10:23:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	50	**Depth to Groundwater:**	6.31	**Total Well Depth:**	62.03	**Depth Top of PFM:**	11.5	**Depth Bottom of PFM:**	32.25

PFM Number	PFM Serial Number	Deployment Depth
1	33	32.25
2	34	27
3	35	21.75
4	36	16.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/4/2024	**Retrieval Time:**	12:10:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	
Depth to Groundwater:		**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-002-060-16.5-090424-FM-R	9/4/2024	12:15:00	11.5-16.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-002-060-16.5-090424-FM-G	9/4/2024	12:15:00	11.5-16.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-002-060-21.75-090424-FM-R	9/4/2024	12:20:00	16.75-21.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-002-060-21.75-090424-FM-G	9/4/2024	12:20:00	16.75-21.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-002-060-27-090424-FM-R	9/4/2024	12:30:00	22-27 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-002-060-27-090424-FM-G	9/4/2024	12:30:00	22-27 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-002-060-32.25-090424-FM-R	9/4/2024	12:35:00	27.25-32.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-002-060-32.25-090424-FM-G	9/4/2024	12:35:00	27.25-32.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

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mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-002-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	7/31/2024	**Deployment Time:**	15:50:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	60	**Depth to Groundwater:**	6.67	**Total Well Depth:**	111.2	**Depth Top of PFM:**	82.5	**Depth Bottom of PFM:**	108.5

PFM Number	PFM Serial Number	Deployment Depth
1	18	108.5
2	19	103.25
3	20	98
4	13	92.75
5	14	87.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/15/2024	**Retrieval Time:**	15:18:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.35	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-002-110-87.5-081524-FM-R	8/15/2024	15:25:00	82.5-87.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-002-110-87.5-081524-FM-G	8/15/2024	15:25:00	82.5-87.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-002-110-92.75-081524-FM-R	8/15/2024	15:45:00	87.75-92.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-002-110-92.75-081524-FM-G	8/15/2024	15:45:00	87.75-92.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-002-110-98-081524-FM-R	8/15/2024	16:00:00	93-98 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-002-110-98-081524-FM-G	8/15/2024	16:00:00	93-98 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-002-110-103.25-081524-FM-R	8/15/2024	16:15:00	98.25-103.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-002-110-103.25-081524-FM-G	8/15/2024	16:15:00	98.25-103.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
in = inches
ft = feet
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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-002-110-108.5-081524-FM-R	8/15/2024	16:30:00	103.5-108.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-002-110-108.5-081524-FM-G	8/15/2024	16:30:00	103.5-108.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-002-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	FD-4-090424-FM-R,FD-4-090424-FM-G	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/21/2024	**Deployment Time:**	11:11:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	50	**Depth to Groundwater:**	6.43	**Total Well Depth:**	111.2	**Depth Top of PFM:**	61.5	**Depth Bottom of PFM:**	82.25

PFM Number	PFM Serial Number	Deployment Depth
1	45	82.25
2	46	77
3	47	71.75
4	48	66.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/4/2024	**Retrieval Time:**	13:40:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.4	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-002-110-66.5-090424-FM-R	9/4/2024	13:45:00	61.5-66.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-002-110-66.5-090424-FM-G	9/4/2024	13:45:00	61.5-66.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-002-110-71.75-090424-FM-R	9/4/2024	13:50:00	66.75-71.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-002-110-71.75-090424-FM-G	9/4/2024	13:50:00	66.75-71.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-002-110-77-090424-FM-R	9/4/2024	14:05:00	72-77 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-002-110-77-090424-FM-G	9/4/2024	14:05:00	72-77 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-002-110-82.25-090424-FM-R	9/4/2024	14:10:00	77.25-82.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-002-110-82.25-090424-FM-G	9/4/2024	14:10:00	77.25-82.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: Duplicate R/G taken at CACMW-002-110-77

ft-bmp = feet below measuring point
in = inches
ft = feet
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mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-002-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	7/31/2024	**Deployment Time:**	15:20:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	60	**Depth to Groundwater:**	6.51	**Total Well Depth:**	161.5	**Depth Top of PFM:**	132.5	**Depth Bottom of PFM:**	158.5

PFM Number	PFM Serial Number	Deployment Depth
1	29	158.5
2	30	153.25
3	31	148
4	32	142.75
5	17	137.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/15/2024	**Retrieval Time:**	13:33:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.19	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-002-160-137.5-081524-FM-R	8/15/2024	13:55:00	132.5-137.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-002-160-137.5-081524-FM-G	8/15/2024	13:55:00	132.5-137.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-002-160-142.75-081524-FM-R	8/15/2024	14:15:00	137.75-142.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-002-160-142.75-081524-FM-G	8/15/2024	14:15:00	137.75-142.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-002-160-148-081524-FM-R	8/15/2024	14:40:00	143-148 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-002-160-148-081524-FM-G	8/15/2024	14:40:00	143-148 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-002-160-153.25-081524-FM-R	8/15/2024	14:50:00	148.25-153.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-002-160-153.25-081524-FM-G	8/15/2024	14:50:00	148.25-153.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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ft = feet
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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
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Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-002-160-158.5-081524-FM-R	8/15/2024	15:00:00	153.5-158.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-002-160-158.5-081524-FM-G	8/15/2024	15:00:00	153.5-158.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: CACMW-002-160-137.5-081524-FM-R: Top resin sock was torn open and only about 10% of normal volume of resin remained in sock at time of retrieval; sample collected exclusively from lower resin sock.

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-002-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/21/2024	**Deployment Time:**	10:49:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	50	**Depth to Groundwater:**	6.29	**Total Well Depth:**	161.5	**Depth Top of PFM:**	111.5	**Depth Bottom of PFM:**	132.25

PFM Number	PFM Serial Number	Deployment Depth
1	21	132.25
2	22	127
3	23	121.75
4	24	116.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/4/2024	**Retrieval Time:**	12:43:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.44	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-002-160-116.5-090424-FM-R	9/4/2024	13:00:00	111.5-116.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-002-160-116.5-090424-FM-G	9/4/2024	13:00:00	111.5-116.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-002-160-121.75-090424-FM-R	9/4/2024	13:05:00	116.75-121.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-002-160-121.75-090424-FM-G	9/4/2024	13:05:00	116.75-121.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-002-160-127-090424-FM-R	9/4/2024	13:15:00	122-127 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-002-160-127-090424-FM-G	9/4/2024	13:15:00	122-127 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-002-160-132.25-090424-FM-R	9/4/2024	13:20:00	127.25-132.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-002-160-132.25-090424-FM-G	9/4/2024	13:20:00	127.25-132.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

ft-bmp = feet below measuring point
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ft = feet
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mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-003-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	7/31/2024	**Deployment Time:**	16:30:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny		
Temperature:	62	**Depth to Groundwater:**	5.75	**Total Well Depth:**	61.05	**Depth Top of PFM:**	32.5	**Depth Bottom of PFM:**	58.5

PFM Number	PFM Serial Number	Deployment Depth
1	15	58.5
2	16	53.25
3	49	48
4	50	42.75
5	51	37.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/16/2024	**Retrieval Time:**	09:55:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	5.45	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-003-060-37.5-081624-FM-R	8/16/2024	10:00:00	32.5-37.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-003-060-37.5-081624-FM-G	8/16/2024	10:00:00	32.5-37.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-003-060-42.75-081624-FM-R	8/16/2024	10:20:00	37.75-42.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-003-060-42.75-081624-FM-G	8/16/2024	10:20:00	37.75-42.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-003-060-48-081624-FM-R	8/16/2024	10:30:00	43-48 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-003-060-48-081624-FM-G	8/16/2024	10:30:00	43-48 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-003-060-53.25-081624-FM-R	8/16/2024	10:45:00	48.25-53.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-003-060-53.25-081624-FM-G	8/16/2024	10:45:00	48.25-53.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-003-060-58.5-081624-FM-R	8/16/2024	10:55:00	53.5-58.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-003-060-58.5-081624-FM-G	8/16/2024	10:55:00	53.5-58.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-003-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/21/2024	**Deployment Time:**	11:42:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	51	**Depth to Groundwater:**	5.5	**Total Well Depth:**	61.05	**Depth Top of PFM:**	11.5	**Depth Bottom of PFM:**	32.25

PFM Number	PFM Serial Number	Deployment Depth
1	13	32.25
2	14	27
3	15	21.75
4	16	16.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/4/2024	**Retrieval Time:**	14:25:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	5.64	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-003-060-16.5-090424-FM-R	9/4/2024	14:30:00	11.5-16.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-003-060-16.5-090424-FM-G	9/4/2024	14:30:00	11.5-16.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-003-060-21.75-090424-FM-R	9/4/2024	14:35:00	16.75-21.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-003-060-21.75-090424-FM-G	9/4/2024	14:35:00	16.75-21.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-003-060-27-090424-FM-R	9/4/2024	14:45:00	22-27 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-003-060-27-090424-FM-G	9/4/2024	14:45:00	22-27 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-003-060-32.25-090424-FM-R	9/4/2024	14:50:00	27.25-32.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-003-060-32.25-090424-FM-G	9/4/2024	14:50:00	27.25-32.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-003-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	7/31/2024	**Deployment Time:**	17:05:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny		
Temperature:	62	**Depth to Groundwater:**	5.63	**Total Well Depth:**	111.32	**Depth Top of PFM:**	82.5	**Depth Bottom of PFM:**	108.5

PFM Number	PFM Serial Number	Deployment Depth
1	52	108.5
2	1	103.25
3	2	98
4	3	92.75
5	4	87.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/16/2024	**Retrieval Time:**	08:41:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	
Depth to Groundwater:	5.33	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-003-110-87.5-081624-FM-R	8/16/2024	08:40:00	82.5-87.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-003-110-87.5-081624-FM-G	8/16/2024	08:40:00	82.5-87.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-003-110-92.75-081624-FM-R	8/16/2024	09:00:00	87.75-92.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-003-110-92.75-081624-FM-G	8/16/2024	09:00:00	87.75-92.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-003-110-98-081624-FM-R	8/16/2024	09:15:00	93-98 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-003-110-98-081624-FM-G	8/16/2024	09:15:00	93-98 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-003-110-103.25-081624-FM-R	8/16/2024	09:30:00	98.25-103.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-003-110-103.25-081624-FM-G	8/16/2024	09:30:00	98.25-103.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
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ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-003-110-108.5-081624-FM-R	8/16/2024	09:45:00	103.5-108.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-003-110-108.5-081624-FM-G	8/16/2024	09:45:00	103.5-108.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-003-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/22/2024	**Deployment Time:**	08:22:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	5.41	**Total Well Depth:**	111.32	**Depth Top of PFM:**	61.5	**Depth Bottom of PFM:**	82.25

PFM Number	PFM Serial Number	Deployment Depth
1	69	82.25
2	70	77
3	71	71.75
4	72	66.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/5/2024	**Retrieval Time:**	09:10:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	5.56	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-003-110-66.5-090524-FM-R	9/5/2024	09:15:00	61.5-66.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-003-110-66.5-090524-FM-G	9/5/2024	09:15:00	61.5-66.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-003-110-71.75-090524-FM-R	9/5/2024	09:20:00	66.75-71.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-003-110-71.75-090524-FM-G	9/5/2024	09:20:00	66.75-71.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-003-110-77-090524-FM-R	9/5/2024	09:35:00	72-77 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-003-110-77-090524-FM-G	9/5/2024	09:35:00	72-77 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-003-110-82.25-090524-FM-R	9/5/2024	09:40:00	77.25-82.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-003-110-82.25-090524-FM-G	9/5/2024	09:40:00	77.25-82.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

ft-bmp = feet below measuring point
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mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-003-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/1/2024	**Deployment Time:**	09:05:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	50	**Depth to Groundwater:**	5.8	**Total Well Depth:**	161.9	**Depth Top of PFM:**	132.5	**Depth Bottom of PFM:**	158.5

PFM Number	PFM Serial Number	Deployment Depth
1	33	158.5
2	34	153.25
3	35	148
4	36	142.75
5	5	137.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/15/2024	**Retrieval Time:**	16:50:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	5.47	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-003-160-137.5-081524-FM-R	8/15/2024	16:55:00	132.5-137.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-003-160-147.5-081524-FM-G	8/15/2024	17:07:00	132.5-147.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-003-160-142.75-081524-FM-R	8/15/2024	17:15:00	137.75-142.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-003-160-142.75-081524-FM-G	8/15/2024	17:15:00	137.75-142.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-003-160-148-081524-FM-R	8/15/2024	17:35:00	143-148 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-003-160-145-081524-FM-G	8/15/2024	17:35:00	143-145 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-003-160-153.25-081524-FM-R	8/15/2024	17:55:00	148.25-153.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-003-160-153.25-081524-FM-G	8/15/2024	17:55:00	148.25-153.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
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°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-003-160-158.5-081524-FM-R	8/15/2024	18:15:00	153.5-158.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-003-160-158.5-081524-FM-G	8/15/2024	18:15:00	153.5-158.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-003-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	FD-5-090424-FM-R,FD-5-090424-FM-G	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/21/2024	**Deployment Time:**	11:57:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	51	**Depth to Groundwater:**	5.57	**Total Well Depth:**	161.9	**Depth Top of PFM:**	111.5	**Depth Bottom of PFM:**	132.25

PFM Number	PFM Serial Number	Deployment Depth
1	29	132.25
2	30	127
3	31	121.75
4	32	116.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/4/2024	**Retrieval Time:**	15:12:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	5.4	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-003-160-116.5-090424-FM-R	9/4/2024	15:15:00	111.5-116.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-003-160-116.5-090424-FM-G	9/4/2024	15:15:00	111.5-116.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-003-160-121.75-090424-FM-R	9/4/2024	15:20:00	116.75-121.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-003-160-121.75-090424-FM-G	9/4/2024	15:20:00	116.75-121.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-003-160-127-090424-FM-R	9/4/2024	15:30:00	122-127 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-003-160-127-090424-FM-G	9/4/2024	15:30:00	122-127 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-003-160-132.25-090424-FM-R	9/4/2024	15:35:00	127.25-132.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-003-160-132.25-090424-FM-G	9/4/2024	15:35:00	127.25-132.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: Duplicate R/G taken at CACMW-003-160-127

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-004-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	FD-1-081624-FM-R,FD-1-081624-FM-G	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/1/2024	**Deployment Time:**	09:40:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	55	**Depth to Groundwater:**	6.84	**Total Well Depth:**	60.53	**Depth Top of PFM:**	32.5	**Depth Bottom of PFM:**	58.5

PFM Number	PFM Serial Number	Deployment Depth
1	6	58.5
2	7	53.25
3	8	48
4	53	42.75
5	54	37.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/16/2024	**Retrieval Time:**	11:13:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.55	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-004-060-37.5-081624-FM-R	8/16/2024	11:20:00	32.5-37.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-004-060-37.5-081624-FM-G	8/16/2024	11:20:00	32.5-37.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-004-060-42.75-081624-FM-R	8/16/2024	11:40:00	37.75-42.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-004-060-42.75-081624-FM-G	8/16/2024	11:40:00	37.75-42.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-004-060-48-081624-FM-R	8/16/2024	11:50:00	43-48 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-004-060-48-081624-FM-G	8/16/2024	11:50:00	43-48 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-004-060-53.25-081624-FM-R	8/16/2024	12:05:00	48.25-53.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-004-060-53.25-081624-FM-G	8/16/2024	12:05:00	48.25-53.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-004-060-58.5-081624-FM-R	8/16/2024	12:20:00	53.5-58.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-004-060-58.5-081624-FM-G	8/16/2024	12:20:00	53.5-58.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: Duplicate R/G taken at CACMW-004-060-37.5

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-004-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	FD-6-090524-FM-G,FD-6-090524-FM-R	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/22/2024	**Deployment Time:**	08:53:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	6.6	**Total Well Depth:**	60.53	**Depth Top of PFM:**	11.5	**Depth Bottom of PFM:**	32.25

PFM Number	PFM Serial Number	Deployment Depth
1	85	32.25
2	86	27
3	87	21.75
4	88	16.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/5/2024	**Retrieval Time:**	09:45:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.73	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-004-060-16.5-090524-FM-R	9/5/2024	09:50:00	11.5-16.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-004-060-16.5-090524-FM-G	9/5/2024	09:50:00	11.5-16.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-004-060-21.75-090524-FM-R	9/5/2024	09:55:00	16.75-21.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-004-060-21.75-090524-FM-G	9/5/2024	09:55:00	16.75-21.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM GAC	2	CACMW-004-060-27-090524-FM-G	9/5/2024	10:15:00	22-27 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-004-060-27-090524-FM-R	9/5/2024	10:21:00	22-27 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM Resin	1	CACMW-004-060-32.25-090524-FM-R	9/5/2024	10:20:00	27.25-32.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-004-060-32.25-090524-FM-G	9/5/2024	10:20:00	27.25-32.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: Duplicate R/G taken at CACMW-004-060-27

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-004-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/1/2024	**Deployment Time:**	10:45:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny		
Temperature:	56	**Depth to Groundwater:**	6.52	**Total Well Depth:**	111.9	**Depth Top of PFM:**	82.5	**Depth Bottom of PFM:**	108.5

PFM Number	PFM Serial Number	Deployment Depth
1	72	108.5
1	97	103.25
3	98	98
4	99	92.75
5	100	87.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/16/2024	**Retrieval Time:**	14:01:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.34	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-004-110-87.5-081624-FM-R	8/16/2024	14:10:00	82.5-87.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-004-110-87.5-081624-FM-G	8/16/2024	14:10:00	82.5-87.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-004-110-92.75-081624-FM-R	8/16/2024	14:40:00	87.75-92.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-004-110-92.75-081624-FM-G	8/16/2024	14:34:00	87.75-92.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-004-110-98-081624-FM-R	8/16/2024	14:35:00	93-98 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-004-110-98-081624-FM-G	8/16/2024	14:35:00	93-98 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-004-110-103.25-081624-FM-R	8/16/2024	14:50:00	98.25-103.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-004-110-103.25-081624-FM-G	8/16/2024	14:50:00	98.25-103.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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in = inches
ft = feet
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mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-004-110-108.5-081624-FM-R	8/16/2024	15:05:00	103.5-108.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-004-110-108.5-081624-FM-G	8/16/2024	15:05:00	103.5-108.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-004-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	FD-7-090524-FM-G,FD-7-090524-FM-R	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/22/2024	**Deployment Time:**	09:36:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	6.39	**Total Well Depth:**	111.9	**Depth Top of PFM:**	61.5	**Depth Bottom of PFM:**	82.25

PFM Number	PFM Serial Number	Deployment Depth
1	17	82.25
2	18	77
3	19	71.75
4	20	66.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/5/2024	**Retrieval Time:**	11:25:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	5.56	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-004-110-66.5-090524-FM-R	9/5/2024	11:30:00	61.5-66.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-004-110-66.5-090524-FM-G	9/5/2024	11:30:00	61.5-66.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-004-110-71.75-090524-FM-R	9/5/2024	11:35:00	66.75-71.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-004-110-71.75-090524-FM-G	9/5/2024	11:35:00	66.75-71.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-004-110-77-090524-FM-R	9/5/2024	11:45:00	72-77 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-004-110-77-090524-FM-G	9/5/2024	11:45:00	72-77 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-004-110-82.25-090524-FM-R	9/5/2024	11:50:00	77.25-82.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-004-110-82.25-090524-FM-G	9/5/2024	11:50:00	77.25-82.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: Duplicate R/G taken at CACMW-004-110-77

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-004-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/1/2024	**Deployment Time:**	10:15:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	55	**Depth to Groundwater:**	6.71	**Total Well Depth:**	161.6	**Depth Top of PFM:**	132.5	**Depth Bottom of PFM:**	158.5

PFM Number	PFM Serial Number	Deployment Depth
1	55	158.5
2	56	153.25
3	69	148
4	70	142.75
5	71	137.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/16/2024	**Retrieval Time:**	12:50:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.4	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-004-160-137.5-081624-FM-R	8/16/2024	13:00:00	132.5-137.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-004-160-137.5-081624-FM-G	8/16/2024	13:07:00	132.5-137.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-004-160-142.75-081624-FM-R	8/16/2024	13:10:00	137.75-142.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-004-160-142.75-081624-FM-G	8/16/2024	13:10:00	137.75-142.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-004-160-148-081624-FM-R	8/16/2024	13:25:00	143-148 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-004-160-148-081624-FM-G	8/16/2024	13:25:00	143-148 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-004-160-153.25-081624-FM-R	8/16/2024	13:35:00	148.25-153.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-004-160-153.25-081624-FM-G	8/16/2024	13:35:00	148.25-153.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-004-160-158.5-081624-FM-R	8/16/2024	13:50:00	153.5-158.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-004-160-158.5-081624-FM-G	8/16/2024	13:50:00	153.5-158.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-004-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/22/2024	**Deployment Time:**	09:09:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	6.47	**Total Well Depth:**	161.6	**Depth Top of PFM:**	111.5	**Depth Bottom of PFM:**	132.25

PFM Number	PFM Serial Number	Deployment Depth
1	73	132.25
2	74	127
3	75	121.75
4	76	116.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/5/2024	**Retrieval Time:**	10:35:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.66	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-004-160-116.5-090524-FM-R	9/5/2024	10:40:00	111.5-116.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-004-160-116.5-090524-FM-G	9/5/2024	10:40:00	111.5-116.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-004-160-121.75-090524-FM-R	9/5/2024	10:45:00	116.75-121.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-004-160-121.75-090524-FM-G	9/5/2024	10:45:00	116.75-121.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-004-160-127-090524-FM-R	9/5/2024	10:55:00	122-127 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-004-160-127-090524-FM-G	9/5/2024	10:55:00	122-127 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-004-160-132.25-090524-FM-R	9/5/2024	11:00:00	127.25-132.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-004-160-132.25-090524-FM-G	9/5/2024	11:00:00	127.25-132.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

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ft = feet
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mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-005-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/1/2024	**Deployment Time:**	11:20:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny		
Temperature:	57	**Depth to Groundwater:**	6.89	**Total Well Depth:**	62.45	**Depth Top of PFM:**	32.5	**Depth Bottom of PFM:**	58.5

PFM Number	PFM Serial Number	Deployment Depth
1	81	58.5
2	82	53.25
3	83	48
4	84	42.75
5	105	37.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/16/2024	**Retrieval Time:**	15:21:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.63	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-005-060-37.5-081624-FM-R	8/16/2024	15:30:00	32.5-37.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-005-060-37.5-081624-FM-G	8/16/2024	15:30:00	32.5-37.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-005-060-42.75-081624-FM-R	8/16/2024	15:40:00	37.76-42.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-005-060-42.75-081624-FM-G	8/16/2024	15:53:00	37.75-42.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-005-060-48-081624-FM-R	8/16/2024	15:55:00	43-48 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-005-060-48-081624-FM-G	8/16/2024	15:55:00	43-48 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-005-060-53.25-081624-FM-R	8/16/2024	16:10:00	48.25-53.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-005-060-53.25-081624-FM-G	8/16/2024	16:10:00	48.25-53.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-005-060-58.5-081624-FM-R	8/16/2024	16:25:00	53.5-58.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-005-060-58.5-081624-FM-G	8/16/2024	16:25:00	53.5-58.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-005-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/22/2024	**Deployment Time:**	10:07:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	6.66	**Total Well Depth:**	62.45	**Depth Top of PFM:**	11.5	**Depth Bottom of PFM:**	32.25

PFM Number	PFM Serial Number	Deployment Depth
1	57	32.25
2	58	27
3	59	21.75
4	60	16.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/5/2024	**Retrieval Time:**	12:15:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.56	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-005-060-16.5-090524-FM-R	9/5/2024	12:20:00	11.5-16.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-005-060-16.5-090524-FM-G	9/5/2024	12:20:00	11.5-16.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-005-060-21.75-090524-FM-R	9/5/2024	12:25:00	16.75-21.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-005-060-21.75-090524-FM-G	9/5/2024	12:25:00	16.75-21.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-005-060-27-090524-FM-R	9/5/2024	12:35:00	22-27 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-005-060-27-090524-FM-G	9/5/2024	12:35:00	22-27 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-005-060-32.25-090524-FM-R	9/5/2024	12:40:00	27.25-32.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-005-060-32.25-090524-FM-G	9/5/2024	12:40:00	27.25-32.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-005-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/1/2024	**Deployment Time:**	12:45:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny		
Temperature:	60	**Depth to Groundwater:**	6.88	**Total Well Depth:**	111.25	**Depth Top of PFM:**	82.5	**Depth Bottom of PFM:**	108.5

PFM Number	PFM Serial Number	Deployment Depth
1	79	108.5
2	80	103.25
3	73	98
4	74	92.75
5	75	87.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/16/2024	**Retrieval Time:**	17:58:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.62	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-005-110-87.5-081624-FM-R	8/16/2024	18:05:00	82.5-87.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-005-110-87.5-081624-FM-G	8/16/2024	18:05:00	82.5-87.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-005-110-92.75-081624-FM-R	8/16/2024	18:20:00	87.75-92.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-005-110-92.75-081624-FM-G	8/16/2024	18:20:00	87.75-92.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-005-110-98-081624-FM-R	8/16/2024	18:30:00	93-98 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-005-110-98-081624-FM-G	8/16/2024	18:42:00	93-98 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-005-110-103.25-081624-FM-R	8/16/2024	18:45:00	98.25-103.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-005-110-103.25-081624-FM-G	8/16/2024	18:45:00	98.25-103.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-005-110-108.5-081624-FM-R	8/16/2024	19:00:00	103.5-108.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-005-110-108.5-081624-FM-G	8/16/2024	19:00:00	103.5-108.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-005-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/22/2024	**Deployment Time:**	10:55:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	49	**Depth to Groundwater:**	6.66	**Total Well Depth:**	111.25	**Depth Top of PFM:**	61.5	**Depth Bottom of PFM:**	82.25

PFM Number	PFM Serial Number	Deployment Depth
1	37	82.25
2	38	77
3	39	71.75
4	40	66.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/5/2024	**Retrieval Time:**	13:22:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.84	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-005-110-66.5-090524-FM-R	9/5/2024	13:45:00	61.5-66.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-005-110-66.5-090524-FM-G	9/5/2024	13:45:00	61.5-66.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-005-110-71.75-090524-FM-R	9/5/2024	13:50:00	66.75-71.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-005-110-71.75-090524-FM-G	9/5/2024	13:50:00	66.75-71.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-005-110-77-090524-FM-R	9/5/2024	13:55:00	72-77 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-005-110-77-090524-FM-G	9/5/2024	13:55:00	72-77 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-005-110-82.25-090524-FM-R	9/5/2024	14:00:00	77.25-82.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-005-110-82.25-090524-FM-G	9/5/2024	14:00:00	77.25-82.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

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ft = feet
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mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-005-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/1/2024	**Deployment Time:**	11:55:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	57	**Depth to Groundwater:**	7.05	**Total Well Depth:**	161.2	**Depth Top of PFM:**	132.5	**Depth Bottom of PFM:**	158.5

PFM Number	PFM Serial Number	Deployment Depth
1	106	158.5
2	107	153.25
3	108	148
4	77	142.75
5	78	137.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/16/2024	**Retrieval Time:**	16:37:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.78	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-005-160-137.5-081624-FM-R	8/16/2024	16:50:00	132.5-137.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-005-160-137.5-081624-FM-G	8/16/2024	17:00:00	132.5-137.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-005-160-142.75-081624-FM-R	8/16/2024	17:00:00	137.75-142.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-005-160-142.75-081624-FM-G	8/16/2024	17:00:00	137.75-142.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-005-160-148-081624-FM-R	8/16/2024	17:15:00	143-148 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-005-160-148-081624-FM-G	8/16/2024	17:15:00	143-148 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-005-160-153.25-081624-FM-R	8/16/2024	17:30:00	148.25-153.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-005-160-153.25-081624-FM-G	8/16/2024	17:30:00	148.25-153.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-005-160-158.5-081624-FM-R	8/16/2024	17:45:00	153.5-158.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-005-160-158.5-081624-FM-G	8/16/2024	17:45:00	153.5-158.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-005-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/22/2024	**Deployment Time:**	10:19:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	49	**Depth to Groundwater:**	6.82	**Total Well Depth:**	161.2	**Depth Top of PFM:**	111.5	**Depth Bottom of PFM:**	132.25

PFM Number	PFM Serial Number	Deployment Depth
1	93	132.25
2	94	127
3	95	121.75
4	96	116.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/5/2024	**Retrieval Time:**	12:50:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.6	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-005-160-116.5-090524-FM-R	9/5/2024	13:00:00	111.5-116.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-005-160-116.5-090524-FM-G	9/5/2024	13:00:00	111.5-116.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-005-160-121.75-090524-FM-R	9/5/2024	13:05:00	116.75-121.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-005-160-121.75-090524-FM-G	9/5/2024	13:05:00	116.75-121.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-005-160-127-090524-FM-R	9/5/2024	13:15:00	122-127 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-005-160-127-090524-FM-G	9/5/2024	13:15:00	122-127 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM GAC	1	CACMW-005-160-132.25-090524-FM-G	9/5/2024	13:20:00	127.25-132.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-005-160-132.25-090524-FM-R	9/5/2024	13:20:00	127.25-132.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C

Retrieval Comments: N/A

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ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-006-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/1/2024	**Deployment Time:**	13:15:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny		
Temperature:	67	**Depth to Groundwater:**	7.1	**Total Well Depth:**	61.5	**Depth Top of PFM:**	32.5	**Depth Bottom of PFM:**	58.5

PFM Number	PFM Serial Number	Deployment Depth
1	76	58.5
2	113	53.25
3	114	48
4	115	42.75
5	116	37.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/17/2024	**Retrieval Time:**	08:45:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.82	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-006-060-42.75-081724-FM-R	8/17/2024	09:02:00	37.75-42.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-006-060-42.75-081724-FM-G	8/17/2024	08:55:00	37.75-42.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	5	CACMW-006-060-37.5-081724-FM-R	8/17/2024	08:50:00	32.5-37.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-006-060-37.5-081724-FM-G	8/17/2024	09:06:00	32.5-37.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM GAC	2	CACMW-006-060-53.25-081724-FM-G	8/17/2024	09:10:00	48.25-53.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-006-060-53.25-081724-FM-R	8/17/2024	09:10:00	48.25-53.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM Resin	3	CACMW-006-060-48-081724-FM-R	8/17/2024	09:05:00	43-48 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-006-060-48-081724-FM-G	8/17/2024	09:24:00	43-48 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-006-060-58.5-081724-FM-R	8/17/2024	09:30:00	53.5-58.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-006-060-58.5-081724-FM-G	8/17/2024	09:30:00	53.5-58.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-006-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	FD-8-090524-FM-R,FD-8-090524-FM-G	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/22/2024	**Deployment Time:**	11:17:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	6.85	**Total Well Depth:**	61.5	**Depth Top of PFM:**	11.5	**Depth Bottom of PFM:**	32.25

PFM Number	PFM Serial Number	Deployment Depth
1	64	32.25
2	66	27
3	67	21.75
4	68	16.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/5/2024	**Retrieval Time:**	14:20:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	7.05	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-006-060-16.5-090524-FM-R	9/5/2024	14:20:00	11.5-16.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-006-060-16.5-090524-FM-G	9/5/2024	14:20:00	11.5-16.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-006-060-21.75-090524-FM-R	9/5/2024	14:25:00	16.75-21.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-006-060-21.75-090524-FM-G	9/5/2024	14:25:00	16.75-21.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-006-060-27-090524-FM-R	9/5/2024	14:35:00	22-27 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-006-060-27-090524-FM-G	9/5/2024	14:35:00	22-27 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-006-060-32.25-090524-FM-R	9/5/2024	14:40:00	27.25-32.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-006-060-32.25-090524-FM-G	9/5/2024	14:40:00	27.25-32.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: Duplicate R/G taken at CACMW-006-060-27

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-006-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/2/2024	**Deployment Time:**	09:40:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	50	**Depth to Groundwater:**	7.26	**Total Well Depth:**	110.6	**Depth Top of PFM:**	82.5	**Depth Bottom of PFM:**	108.5

PFM Number	PFM Serial Number	Deployment Depth
1	94	108.5
2	95	103.25
3	96	98
4	62	92.75
5	63	87.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/17/2024	**Retrieval Time:**	10:36:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	7.03	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-006-110-87.5-081724-FM-R	8/17/2024	10:35:00	82.5-87.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-006-110-87.5-081724-FM-G	8/17/2024	10:35:00	82.5-87.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-006-110-92.75-081724-FM-R	8/17/2024	10:40:00	87.75-92.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-006-110-92.75-081724-FM-G	8/17/2024	10:40:00	87.75-92.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-006-110-98-081724-FM-R	8/17/2024	10:55:00	93-98 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-006-110-98-081724-FM-G	8/17/2024	10:55:00	93-98 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-006-110-103.25-081724-FM-R	8/17/2024	11:00:00	98.25-103.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-006-110-103.25-081724-FM-G	8/17/2024	11:00:00	98.25-103.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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ft = feet
mL/min = milliliters per minute

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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-006-110-108.5-081724-FM-R	8/17/2024	11:15:00	103.5-108.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-006-110-108.5-081724-FM-G	8/17/2024	11:15:00	103.5-108.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-006-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	FD-9-090624-FM-R,FD-9-090624-FM-G	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/23/2024	**Deployment Time:**	08:44:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Temperature:	47	**Depth to Groundwater:**		**Total Well Depth:**	110.6	**Depth Top of PFM:**	61.5
Depth Bottom of PFM:	82.25						

PFM Number	PFM Serial Number	Deployment Depth
1	89	82.25
2	90	77
3	91	71.75
4	92	66.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/6/2024	**Retrieval Time:**	09:55:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	7.39	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-006-110-66.5-090624-FM-R	9/6/2024	10:00:00	61.5-66.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-006-110-66.5-090624-FM-G	9/6/2024	10:00:00	61.5-66.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-006-110-71.75-090624-FM-R	9/6/2024	10:10:00	66.75-71.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-006-110-71.75-090624-FM-G	9/6/2024	10:05:00	66.75-71.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM GAC	2	CACMW-006-110-77-090624-FM-G	9/6/2024	10:10:00	72-77 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-006-110-82.25-090624-FM-R	9/6/2024	10:15:00	77.25-82.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-006-110-82.25-090624-FM-G	9/6/2024	10:15:00	77.25-82.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-006-110-77-090624-FM-R	9/6/2024	10:10:00	72-77 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C

Retrieval Comments: Duplicate R/G taken at CACMW-006-110-66.5

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-006-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/2/2024	**Deployment Time:**	09:00:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	50	**Depth to Groundwater:**	7.07	**Total Well Depth:**	161.25	**Depth Top of PFM:**	132.5	**Depth Bottom of PFM:**	158.5

PFM Number	PFM Serial Number	Deployment Depth
1	85	158.5
2	86	153.25
3	87	148
4	88	142.75
5	93	137.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/17/2024	**Retrieval Time:**	09:30:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.85	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-006-160-137.5-081724-FM-R	8/17/2024	09:35:00	132.5-137.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-006-160-137.5-081724-FM-G	8/17/2024	09:35:00	132.5-137.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-006-160-142.75-081724-FM-R	8/17/2024	09:50:00	137.75-142.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-006-160-142.75-081724-FM-G	8/17/2024	09:50:00	137.75-142.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-006-160-148-081724-FM-R	8/17/2024	09:55:00	143-148 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-006-160-148-081724-FM-G	8/17/2024	09:55:00	143-148 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-006-160-153.25-081724-FM-R	8/17/2024	10:10:00	148.25-153.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-006-160-153.25-081724-FM-G	8/17/2024	10:10:00	148.25-153.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-006-160-158.5-081724-FM-R	8/17/2024	10:15:00	153.5-158.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-006-160-158.5-081724-FM-G	8/17/2024	10:15:00	153.5-158.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-006-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/23/2024	**Deployment Time:**	08:16:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	47	**Depth to Groundwater:**	6.84	**Total Well Depth:**	161.25	**Depth Top of PFM:**	111.5	**Depth Bottom of PFM:**	132.25

PFM Number	PFM Serial Number	Deployment Depth
1	49	132.25
2	50	127
3	51	121.75
4	51	116.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/6/2024	**Retrieval Time:**	09:10:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	7.12	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-006-160-116.5-090624-FM-R	9/6/2024	09:15:00	111.5-116.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-006-160-116.5-090624-FM-G	9/6/2024	09:15:00	111.5-116.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-006-160-121.75-090624-FM-R	9/6/2024	09:20:00	116.75-121.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-006-160-121.75-090624-FM-G	9/6/2024	09:20:00	116.75-121.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-006-160-127-090624-FM-R	9/6/2024	09:25:00	122-127 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-006-160-127-090624-FM-G	9/6/2024	09:25:00	122-127 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-006-160-132.25-090624-FM-R	9/6/2024	09:30:00	127.25-132.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-006-160-132.25-090624-FM-G	9/6/2024	09:30:00	127.25-132.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

ft-bmp = feet below measuring point
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ft = feet
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mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-007-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	CACMW-007-060-37.5-081724-FM-R,CACMW-007-060-37.5-081724-FM-G				

Deployment

Deployment Date:	8/2/2024	**Deployment Time:**	10:10:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	50	**Depth to Groundwater:**	6.54	**Total Well Depth:**	60.2	**Depth Top of PFM:**	32.5	**Depth Bottom of PFM:**	58.5

PFM Number	PFM Serial Number	Deployment Depth
1	61	58.5
2	64	53.25
3	101	48
4	102	42.75
5	103	37.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/17/2024	**Retrieval Time:**	11:15:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.3	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-007-060-37.5-081724-FM-R	8/17/2024	11:20:00	32.5-37.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-007-060-37.5-081724-FM-G	8/17/2024	11:33:00	32.5-37.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-007-060-42.75-081724-FM-R	8/17/2024	11:40:00	37.75-42.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-007-060-42.75-081724-FM-G	8/17/2024	11:40:00	37.75-42.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-007-060-48-081724-FM-R	8/17/2024	11:45:00	43-48 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-007-060-48-081724-FM-G	8/17/2024	11:45:00	43-48 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-007-060-53.25-081724-FM-R	8/17/2024	12:00:00	48.25-53.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-007-060-53.25-081724-FM-G	8/17/2024	12:00:00	48.25-53.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-007-060-58.5-081724-FM-R	8/17/2024	12:05:00	53.5-58.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-007-060-58.5-081724-FM-G	8/17/2024	12:05:00	53.5-58.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-007-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/23/2024	**Deployment Time:**	09:49:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**		**Total Well Depth:**	60.2	**Depth Top of PFM:**	11.5	**Depth Bottom of PFM:**	32.25

PFM Number	PFM Serial Number	Deployment Depth
1	25	32.25
2	26	27
3	27	21.75
4	28	16.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/6/2024	**Retrieval Time:**	10:38:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.57	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-007-060-16.5-090624-FM-R	9/6/2024	10:45:00	11.5-16.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-007-060-16.5-090624-FM-G	9/6/2024	10:45:00	11.5-16.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-007-060-21.75-090624-FM-R	9/6/2024	10:45:00	16.75-21.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-007-060-21.75-090624-FM-G	9/6/2024	10:45:00	16.75-21.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-007-060-27-090624-FM-R	9/6/2024	10:55:00	22-27 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-007-060-27-090624-FM-G	9/6/2024	10:55:00	22-27 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM GAC	1	CACMW-007-060-32.25-090624-FM-G	9/6/2024	11:00:00	27.25-32.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-007-060-32.25-090624-FM-R	9/6/2024	11:00:00	27.25-32.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C

Retrieval Comments: N/A

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ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-007-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/2/2024	**Deployment Time:**	12:05:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	6.76	**Total Well Depth:**	111.35	**Depth Top of PFM:**	82.5	**Depth Bottom of PFM:**	108.5

PFM Number	PFM Serial Number	Deployment Depth
1	117	108.5
2	118	103.25
3	119	98
4	120	92.75
5	37	87.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/17/2024	**Retrieval Time:**	13:25:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:		**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-007-110-87.5-081724-FM-R	8/17/2024	13:30:00	82.5-87.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-007-110-87.5-081724-FM-G	8/17/2024	13:30:00	82.5-87.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-007-110-92.75-081724-FM-R	8/17/2024	13:40:00	87.75-92.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-007-110-92.75-081724-FM-G	8/17/2024	13:40:00	87.75-92.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-007-110-103.25-081724-FM-R	8/17/2024	14:00:00	98.25-103.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-007-110-103.25-081724-FM-G	8/17/2024	14:00:00	98.25-103.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-007-110-98-081724-FM-R	8/17/2024	13:55:00	93-98 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-007-110-98-081724-FM-G	8/17/2024	13:55:00	93-98 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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ft = feet
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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-007-110-108.5-081724-FM-R	8/17/2024	14:15:00	103.5-108.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-007-110-108.5-081724-FM-G	8/17/2024	14:15:00	103.5-108.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-007-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	FD-10-090624-FM-R,FD-10-090624-FM-G	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/23/2024	**Deployment Time:**	10:26:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Temperature:	48	**Depth to Groundwater:**		**Total Well Depth:**	111.35	**Depth Top of PFM:**	61.5
Depth Bottom of PFM:	82.25						

PFM Number	PFM Serial Number	Deployment Depth
1	81	82.25
2	82	77
3	83	71.75
4	84	66.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/6/2024	**Retrieval Time:**	12:45:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.72	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-007-110-66.5-090624-FM-R	9/6/2024	12:55:00	61.5-66.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-007-110-66.5-090624-FM-G	9/6/2024	12:55:00	61.5-66.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-007-110-71.75-090624-FM-R	9/6/2024	13:00:00	66.75-71.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-007-110-71.75-090624-FM-G	9/6/2024	13:00:00	66.75-71.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-007-110-77-090624-FM-R	9/6/2024	13:05:00	72-77 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-007-110-77-090624-FM-G	9/6/2024	13:05:00	72-77 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-007-110-82.25-090624-FM-R	9/6/2024	13:10:00	77.25-82.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-007-110-82.25-090624-FM-G	9/6/2024	13:10:00	77.25-82.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: Duplicate R/G taken at CACMW-007-110-66.5

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
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mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-007-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	FD-2-081724-FM-G,FD-2-081724-FM-G	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/2/2024	**Deployment Time:**	10:50:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	50	**Depth to Groundwater:**	6.62	**Total Well Depth:**	162.1	**Depth Top of PFM:**	132.5	**Depth Bottom of PFM:**	158.5

PFM Number	PFM Serial Number	Deployment Depth
1	104	158.5
2	65	153.25
3	66	148
4	67	142.75
5	68	137.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/17/2024	**Retrieval Time:**	12:44:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.43	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-007-160-137.5-081724-FM-R	8/17/2024	12:50:00	132.5-137.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-007-160-137.5-081724-FM-G	8/17/2024	12:50:00	132.5-137.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-007-160-142.74-081724-FM-R	8/17/2024	12:55:00	137.75-142.74 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-007-160-142.75-081724-FM-G	8/17/2024	12:55:00	137.75-142.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-007-160-148-081724-FM-R	8/17/2024	13:05:00	143-148 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-007-160-148-081724-FM-G	8/17/2024	13:05:00	143-148 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-007-160-153.25-081724-FM-R	8/17/2024	13:10:00	148.25-153.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-007-160-153.25-081724-FM-G	8/17/2024	13:10:00	148.25-153.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
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ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-007-160-158.5-081724-FM-R	8/17/2024	13:25:00	153.5-158.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-007-160-158.5-081724-FM-G	8/17/2024	13:25:00	153.5-158.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: Duplicate R/G taken at CACMW-007-160-148

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-007-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/23/2024	**Deployment Time:**	10:03:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Temperature:	48	**Depth to Groundwater:**		**Total Well Depth:**	162.1	**Depth Top of PFM:**	111.5
Depth Bottom of PFM:	132.25						

PFM Number	PFM Serial Number	Deployment Depth
1	77	132.25
2	78	127
3	79	121.75
4	80	116.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/6/2024	**Retrieval Time:**	12:08:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.66	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-007-160-116.5-090624-FM-R	9/6/2024	12:10:00	111.5-116.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-007-160-116.5-090624-FM-G	9/6/2024	12:10:00	111.5-116.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-007-160-121.75-090624-FM-R	9/6/2024	12:15:00	116.75-121.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-007-160-121.75-090624-FM-G	9/6/2024	12:15:00	116.75-121.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-007-160-127-090624-FM-R	9/6/2024	12:20:00	122-127 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-007-160-127-090624-FM-G	9/6/2024	12:20:00	122-127 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-007-160-132.25-090624-FM-R	9/6/2024	12:20:00	127.25-132.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-007-160-132.25-090624-FM-G	9/6/2024	12:20:00	127.25-132.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-008-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/2/2024	**Deployment Time:**	12:40:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**	6.75	**Total Well Depth:**	60.35	**Depth Top of PFM:**	32.5	**Depth Bottom of PFM:**	58.5

PFM Number	PFM Serial Number	Deployment Depth
1	38	58.5
2	39	53.25
3	40	48
4	21	42.75
5	22	37.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/17/2024	**Retrieval Time:**	14:15:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.55	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-008-060-37.5-081724-FM-R	8/17/2024	14:20:00	32.5-37.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-008-060-37.5-081724-FM-G	8/17/2024	14:20:00	32.5-37.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-008-060-42.75-081724-FM-R	8/17/2024	14:40:00	37.75-42.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-008-060-42.75-081724-FM-G	8/17/2024	14:40:00	37.75-42.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-008-060-48-081724-FM-R	8/17/2024	14:45:00	43-48 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-008-060-48-081724-FM-G	8/17/2024	14:45:00	43-48 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-008-060-53.25-081724-FM-R	8/17/2024	15:00:00	48.25-53.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-008-060-53.25-081724-FM-G	8/17/2024	15:00:00	48.25-53.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-008-060-58.5-081724-FM-R	8/17/2024	15:05:00	53.5-58.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-008-060-58.5-081724-FM-G	8/17/2024	15:05:00	53.5-58.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-008-060	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	CACMW-008-060-27-090624-FM-G,CACMW-008-060-27-090624-FM-R				

Deployment

Deployment Date:	8/23/2024	**Deployment Time:**	10:53:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	48	**Depth to Groundwater:**		**Total Well Depth:**	60.35	**Depth Top of PFM:**	11.5	**Depth Bottom of PFM:**	32.25

PFM Number	PFM Serial Number	Deployment Depth
1	53	32.25
2	54	27
3	55	21.75
4	56	16.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/6/2024	**Retrieval Time:**	13:50:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.8	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-008-060-16.5-090624-FM-R	9/6/2024	14:00:00	11.5-16.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-008-060-16.5-090624-FM-G	9/6/2024	14:00:00	11.5-16.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-008-060-21.75-090624-FM-R	9/6/2024	14:05:00	16.75-21.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-008-060-21.75-090624-FM-G	9/6/2024	14:05:00	16.75-21.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-008-060-27-090624-FM-R	9/6/2024	14:10:00	22-27 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-008-060-27-090624-FM-G	9/6/2024	14:10:00	22-27 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-008-060-32.25-090624-FM-R	9/6/2024	14:15:00	27.25-32.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-008-060-32.25-090624-FM-G	9/6/2024	14:15:00	27.25-32.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

ft-bmp = feet below measuring point
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ft = feet
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mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	62.3	**Top of Screen:**	10	**Bottom of Screen:**	60		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-008-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	FD-3-081724-FM-R,FD-3-081724-FM-G	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/2/2024	**Deployment Time:**	13:50:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	49	**Depth to Groundwater:**	6.79	**Total Well Depth:**	110.8	**Depth Top of PFM:**	82.5	**Depth Bottom of PFM:**	108.5

PFM Number	PFM Serial Number	Deployment Depth
1	92	108.5
2	109	103.25
3	110	98
4	111	92.75
5	112	87.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/17/2024	**Retrieval Time:**	16:03:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.52	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-008-110-87.5-081724-FM-R	8/17/2024	16:05:00	82.5-87.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-008-110-87.5-081724-FM-G	8/17/2024	16:05:00	82.5-87.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-008-110-92.75-081724-FM-R	8/17/2024	16:10:00	87.75-92.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-008-110-92.75-081724-FM-G	8/17/2024	16:10:00	87.75-92.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-008-110-98-081724-FM-R	8/17/2024	16:25:00	93-98 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-008-110-98-081724-FM-G	8/17/2024	16:25:00	93-98 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-008-110-103.25-081724-FM-R	8/17/2024	16:30:00	98.25-103.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-008-110-103.25-081724-FM-G	8/17/2024	16:30:00	98.25-103.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

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Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-008-110-108.5-081724-FM-R	8/17/2024	16:40:00	103.5-108.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-008-110-108.5-081724-FM-G	8/17/2024	16:40:00	103.5-108.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: Duplicate R/G taken at CACMW-008-110-98

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-008-110	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/23/2024	**Deployment Time:**	11:35:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Temperature:	48	**Depth to Groundwater:**		**Total Well Depth:**	110.8	**Depth Top of PFM:**	61.5
Depth Bottom of PFM:	82.25						

PFM Number	PFM Serial Number	Deployment Depth
1	5	82.25
2	6	77
3	7	71.75
4	8	66.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/6/2024	**Retrieval Time:**	15:25:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.85	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-008-110-66.5-090624-FM-R	9/6/2024	15:30:00	61.5-66.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-008-110-66.5-090624-FM-G	9/6/2024	15:30:00	61.5-66.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-008-110-71.75-090624-FM-R	9/6/2024	15:35:00	66.75-71.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-008-110-71.75-090624-FM-G	9/6/2024	15:35:00	66.75-71.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-008-110-77-090624-FM-R	9/6/2024	15:40:00	72-77 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-008-110-77-090624-FM-G	9/6/2024	15:40:00	72-77 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-008-110-82.25-090624-FM-R	9/6/2024	15:45:00	77.25-82.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-008-110-82.25-090624-FM-G	9/6/2024	15:45:00	77.25-82.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**
Total Well Depth (ft-bmp):	112.3	**Top of Screen:**	60	**Bottom of Screen:**	110	

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-008-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/2/2024	**Deployment Time:**	13:15:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy		
Temperature:	49	**Depth to Groundwater:**	6.9	**Total Well Depth:**	161.4	**Depth Top of PFM:**	132.5	**Depth Bottom of PFM:**	158.5

PFM Number	PFM Serial Number	Deployment Depth
1	23	158.5
2	24	153.25
3	89	148
4	90	142.75
5	91	137.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	8/17/2024	**Retrieval Time:**	15:12:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Depth to Groundwater:	6.7	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	5	CACMW-008-160-137.5-081724-FM-R	8/17/2024	15:15:00	132.5-137.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	5	CACMW-008-160-137.5-081724-FM-G	8/17/2024	15:15:00	132.5-137.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	4	CACMW-008-160-142.75-081724-FM-R	8/17/2024	15:20:00	137.75-142.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	4	CACMW-008-160-142.75-081724-FM-G	8/17/2024	15:20:00	137.75-142.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-008-160-148-081724-FM-R	8/17/2024	15:35:00	143-148 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	3	CACMW-008-160-148-081724-FM-G	8/17/2024	15:35:00	143-148 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-008-160-153.25-081724-FM-R	8/17/2024	15:40:00	148.25-153.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	2	CACMW-008-160-153.25-081724-FM-G	8/17/2024	15:40:00	148.25-153.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

ft-bmp = feet below measuring point
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NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

PFM Resin	1	CACMW-008-160-158.5-081724-FM-R	8/17/2024	15:50:00	153.5-158.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 deg C
PFM GAC	1	CACMW-008-160-158.5-081724-FM-G	8/17/2024	15:50:00	153.5-158.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Project Number:	30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Client:**	AFCEC	**Well ID:**	CACMW-008-160	**New Well:**	yes
Project Name/Location	Eielson AFB DGI-PSC	**Measuring Point:**	TOC	**Type of Sample Point:**	Groundwater Well		
Duplicate ID:	N/A	**MS/MSD Sample ID:**	N/A				

Deployment

Deployment Date:	8/23/2024	**Deployment Time:**	11:14:00	**Deployment Technician Name:**	Nicholas Icks	**Weather Condition:**	Cloudy
Temperature:	48	**Depth to Groundwater:**		**Total Well Depth:**	161.4	**Depth Top of PFM:**	111.5
Depth Bottom of PFM:	132.25						

PFM Number	PFM Serial Number	Deployment Depth
1	61	132.25
2	62	127
3	63	121.75
4	64	116.5

Deployment Comments: N/A

Retrieval and Sampling

Retrieval Date:	9/6/2024	**Retrieval Time:**	14:33:00	**Retrieval Technician Name:**	Nicholas Icks	**Weather Condition:**	Sunny
Depth to Groundwater:	6.97	**Total Well Depth:**					

Sample Type	PFM Number Sampled	Sample ID	Sample Date	Sample Time	Sample Depth Interval	Analytical Methods	Container Type	Number of Containers	Preservative
PFM Resin	4	CACMW-008-160-116.5-090624-FM-R	9/6/2024	14:45:00	111.5-116.5 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	4	CACMW-008-160-116.5-090624-FM-G	9/6/2024	14:45:00	111.5-116.5 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	3	CACMW-008-160-121.75-090624-FM-R	9/6/2024	14:50:00	116.75-121.75 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	3	CACMW-008-160-121.75-090624-FM-G	9/6/2024	14:50:00	116.75-121.75 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	2	CACMW-008-160-127-090624-FM-R	9/6/2024	14:55:00	122-127 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	2	CACMW-008-160-127-090624-FM-G	9/6/2024	14:55:00	122-127 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None
PFM Resin	1	CACMW-008-160-132.25-090624-FM-R	9/6/2024	15:00:00	127.25-132.25 feet	USEPA Method 1633/ENV-WCOL-0158	3 oz/90 mL linerless polypropylene straight-sided jar	1	Cool to <6 degrees C
PFM GAC	1	CACMW-008-160-132.25-090624-FM-G	9/6/2024	15:00:00	127.25-132.25 feet	Alcohol Tracer by Mod 8015, Enviroflux SOP	125 x 4 oz glass jars	1	None

Retrieval Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Passive Flux Meter Sampling Log

Well Construction Details

Casing Material:	PVC	**Casing Diameter (in):**	2	**Well Finish:**	Stick-up	**Static Water Level (ft-bmp):**	
Total Well Depth (ft-bmp):	162.3	**Top of Screen:**	110	**Bottom of Screen:**	160		

Comments: N/A

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Appendix B

Geospatial Data

NORTHERN LAND USE RESEARCH ALASKA, LLC
Specialists in Cultural Resource Management
725 Christensen Drive, Suite 4, Anchorage, Alaska 99501
Phone: 907.345.2457 Fax: 907.339.2457 www.northernlanduse.com

August 13, 2024

William Rhodes
Senior Project Manager
Ahtna Solutions, LLC
714 4th Avenue, Suite 303
Fairbanks, AK
99701

RE: Ground-Penetrating Radar Analysis of Buried Utility Locates at the PFAS Data Gap Investigation & Groundwater Pilot Study Construction Project Location, Eielson AFB, Alaska

Mr. Rhodes,

In April of 2024, Ahtna Solutions, LLC contracted Northern Land Use Research Alaska, LLC (NLURA) to conduct a Ground-Penetrating Radar (GPR) survey in response to a request from the Air Force Civil Engineer Center (AFCEC) for environmental remediation services to conduct a data gap investigation (DGI) and groundwater pilot study construction (PSC) project in support of the groundwater response action for per- and polyfluoroalkyl substances (PFAS) treatment at Site FT009P (DGI-PSC Project) at Eielson Airforce Base (AFB). While the presence of utilities was not anticipated, the AFCEC requested a third-party utility location (GPR survey) as a precaution. NLURA deployed a field crew and collected GPR data in May 2024. This letter serves as the report of findings for the GPR survey completed at the DGI-PSC project location on Eielson AFB.

1. Project Location

The DGI-PSC Project is located on Eielson AFB, approximately 20 miles (mi.) (32.2 kilometers [km]) southeast of Fairbanks and partially connected to the eastern bank of the Tanana River (Table 1). The DGI-PSC Project Area is located off Transmitter Road within Eielson AFB, approximately 0.5 mi. (0.8 km) from the main gate (Figure 1). The Project Area contains 24 potential groundwater monitoring well locations organized into eight 10-by-10-foot (ft.) (3.05-by-3.05 meter [m]) proposed monitoring well cluster areas (CACMW-001 to 008) and an approximate east-west trending, 500-ft. long injection well transect (Transect) located amid the proposed monitoring well cluster areas.

2. GPR Methodology

NLURA GPR Specialists Rob Bowman and Amelia Jansen conducted GPR survey on May 25, 2024. Weather conditions were rainy during GPR survey for the Project. While in the field NLURA established eight survey grids and a single linear survey transect within the Project Area (Figure 2). The survey grids were established for the well cluster areas (CACMW-001 to 008) and straddled an unpaved access road. The single 500-ft. (152.4-m) linear survey for the Transect paralleled the unpaved access road.

The location of transect lines and central markers were collected using a Stone X receiver and Samsung tablet. GPR field data was collected using a Leica DS9000 GPR (Table 2).1 Table 3 displays the localized stratigraphic information used to calculate the area's Relative Dielectric Permittivity (RDP).

NLURA conducted GPR survey of the proposed well cluster areas, which consisted of three transects spaced at 1 m (3.28 ft.) within each cluster area. NLURA's GPR survey coverage of the Transect consisted of two transects spaced at 1-m (3.28-ft.). Transect deviations occurred when the ground was too uneven or disturbed (i.e., large holes) to collect data, and the survey was adjusted to accommodate those deviations without losing valuable information (see Figure 3). At the location of CACMW-001, a slight surface depression was recorded (Figure 2, Anomaly Line 1), surrounding the central marker was a rectangular-shaped disturbance, possibly from bulldozer activity (Figure 4). This disturbance did not require deviation from the transect but was noted in case it correlated with GPR anomalies.

3. GPR Data Analysis and Results

NLURA examined two-dimensional (2D) radiogram depth profiles of the GPR data to identify anomalies that could be associated with buried utilities or other buried detritus. Figure 5 illustrates how anomalies were noted within the data. Potential utility anomalies usually appear as hyperbolas or columns within the GPR data, buried pipe or conduit is often identified in cross-section, where hyperbolic anomalies are identified in linear orientation, in close proximity, and are mapped out spatially. The survey identified a total of 43 individual anomalies (four linear and 39-point locations) within the eight survey grids and single transect (see Table 4). The anomalies remained relatively shallow, most laying above 3.50 ft. (1.07 m).

Seventeen anomalies were identified in association with CACMW001-008. Two anomalies in these locations were identified as linear, while 15 were point anomaly locations. Twenty-six anomalies were identified in association with Transect. Two anomalies identified within the area of Transect were noted as being linear and the remaining 24 are singular points. All identified anomalies ranged from 0.44 to 14.76 ft. (0.13 to 4.50 m) in depth.

NLURA has provided GPS data as part of this letter report. The associated GPS data can be cross-referenced to locate the anomalies spatially, on the ground.

[1] Previous research conducted at both Alaskan archaeological sites and utility locates suggests that collecting radar pulse data using a distance-based data collection domain works best for acquiring this type of field data (Bowman et al. 2013; Bowman and Combs 2015; Bowman 2013; Urban et al. 2016). Accordingly, the device selected was designed with distance-based GPR data.

4. Summary and Conclusions

NLURA conducted GPR survey of the DGI-PSC Project Area, which included eight proposed monitoring well cluster areas and a single survey transect that parallels the access road to. In total, 43 anomalies were detected. Based on the signature and depth of the anomalies, the four linear anomalies appear to be discontinuous, which may suggest association with fragments of abandoned utilities, such as pipes or conduit. The 39-point anomalies (especially the shallower ones) most likely represent buried metallic debris, drums, or other refuse, as evidenced by the surrounding surface and partially buried items around the survey area. Based on the data collected, it is NLURA's professional opinion that none of the anomalies identified represent active utilities.

5. Limitations

This Project was carried out, and this report was prepared, following generally accepted professional practices for the nature and conditions of the work completed in the same or similar localities, when the work was performed. It is intended for the exclusive use of Ahtna Solutions, LLC and their associated clients. This report is not meant to represent a legal opinion.

We do not warrant that we have identified all utilities, present at the referenced properties, as these may be hidden so that only extensive excavations (not included in our scope of work) will reveal them. No other warranty, expressed or implied, is made.

The use of GPR technology is not error-free and there are limitations on the use of GPR to locate buried or embedded objects in the ground or in structures which may make GPR data difficult or impossible to interpret. This GPR report is based upon interpretation of the data collected and is provided solely for illustration and informational purposes. NLURA is not responsible for any loss or damage caused, arising from the use of or reliance on the data collected or the report generated.

Any questions regarding our work and this letter report are welcome and should be referred to NLURA GPR Specialist Robert Bowman at (907) 328-0999 or NLURA General Manager Lindsay Simmons at (907) 345-2457.

Sincerely,

Robert C. Bowman, MA, RPA

Senior Project Archaeologist / GPR Specialist

References Cited

Bowman, Robert C.
2013 *City of Nome Cemetery (NOM-00176) Ground-Penetrating Radar Analysis*. Prepared for City of Nome by Northern Land Use Research Alaska, LLC, Fairbanks, Alaska.

Bowman, Robert, Peter Bowers, and Josh Reuther
2013 *Old Chena Townsite (FAI-00011): Ground Penetrating Radar Analysis*. Prepared for: Alaska Office of History and Archaeology, Fairbanks, Alaska.

Bowman, Robert and Evelynn Combs
2015 *Community Prospection: Archaeological Ground-Penetrating Radar Analyses Performed for and by the Healy Lake Village Community, Interior Alaska*. Archaeologica Polana 53. Institute of Archaeology and Ethnology, Polish Academy of Sciences, Warsaw, Poland.

Urban, Thomas M., Jeffrey T. Rasic, Claire Alix, Douglas D. Anderson, Sturt W. Manning, Owen K. Mason, Andrew H. Tremayne and Christopher B. Wolff
2016 Frozen: The Potential and Pitfalls of Ground-Penetrating Radar for Archaeology in the Alaskan Arctic. *Remote Sensing* 8(1007):1-23.

Tables

Table 1. Project location.

Meridian	Township	Range	Section	Latitude	Longitude	Landowner
Fairbanks	2S	3E	34	64.701265	-147.134731	Department of Defense

Table Notes:
The project is located in USGS Quadrangle (1:63,360) map Fairbanks D-2.

Table 2. GPR settings used for the project.

Data Collection Domain	Line Interval		RDP	Scan/Unit	Field Processing Settings	Description
	m	ft.				
Distance	1.0	3.2	2.85	32	None	Line data collected within the project area was organized into individual data grids

Table Notes:
ft. – foot/feet
m – meter(s)
RDP – Relative Dielectric Permittivity

Table 3. Sediments on site that were used to calculate RDP.

Depth		Thickness		Soil/Sediment Type	Soil Horizon
cm	in.	cm	in.		
0-1	0-0.39	1	0.39	Slightly decomposed forest litter	Oi
1-3	0.39-1.18	2	0.79	Partially decomposed organic materials; many fine and coarse roots; mycelia	Oe
3-6	1.18-2.36	3	1.18	Weak fine granular structure; many fine, medium, and coarse roots	A
6-9	2.36-3.54	3	1.18	Moderate very thin platy structure; very friable; many fine roots; common fine pores	E
9-18	3.54-7.09	9	3.54	Moderate very thin platy structure; very friable; many fine roots; common fine pores	Bw
18-29	7.09-11.42	11	4.33	Moderate very thin platy structure; very friable; common fine roots; common fine pores	BC
29-43	11.42-16.93	14	5.51	Moderate very thin platy structure; very friable; few fine roots; common fine pores	C1
43-60	16.93-23.62	17	6.69	Weak medium platy structure; very friable; few fine roots; common fine pores	C2

Table Notes:
cm – centimeter(s)
in. – inch(es)

Table 4. Recorded anomalies and associated depths.

Anomaly Number	Transect	Location (UTM Zone 6N)		Minimum Depth		Maximum Depth		Medium Depth		Description
		X (m)	Y (m)	m	ft.	m	ft.	m	ft.	
1	CACMW-004	493580.58 493582.88	7175161.94 7175163.23	1.12	3.69	1.26	4.14	1.19	3.92	Buried Anomaly (linear; potential debris or buried utility segment)
2	CACMW-004	493579.59	7175160.31	0.24	0.79	0.24	0.79	0.24	0.79	Buried Anomaly (point; potential debris or buried utility segment)
3	CACMW-006	493576.99	7175173.47	0.96	3.16	0.96	3.16	0.96	3.16	Buried Anomaly (point; potential debris or buried utility segment)
4	CACMW-006	493574.74	7175172.83	0.84	2.75	0.84	2.75	0.84	2.75	Buried Anomaly (point; potential debris or buried utility segment)
5	CACMW-006	493574.15	7175172.70	0.75	2.46	0.75	2.46	0.75	2.46	Buried Anomaly (point; potential debris or buried utility segment)
6	CACMW-008	493569.28	7175176.55	0.82	2.70	0.82	2.70	0.82	2.70	Buried Anomaly (point; potential debris or buried utility segment)
7	CACMW-005	493557.17	7175164.39	0.71	2.32	0.71	2.32	0.71	2.32	Buried Anomaly (point; potential debris or buried utility segment)
8	CACMW-005	493556.42	7175166.01	0.33	1.07	0.33	1.07	0.33	1.07	Buried Anomaly (point; potential debris or buried utility segment)
9	CACMW-005	493556.81	7175164.29	0.06	0.19	0.06	0.19	0.06	0.19	Buried Anomaly (point; potential debris or buried utility segment)
10	CACMW-004	493581.02	7175163.01	2.46	8.07	2.46	8.07	2.46	8.07	Buried Anomaly (linear; potential debris or buried utility segment)
11	CACMW-004	493580.00	7175162.58	0.67	2.21	0.67	2.21	0.67	2.21	Buried Anomaly (point; potential debris or buried utility segment)

Anomaly Number	Transect	Location (UTM Zone 6N)		Minimum Depth		Maximum Depth		Medium Depth		Description
		X (m)	Y (m)	m	ft.	m	ft.	m	ft.	
12	CACMW-006	493577.04	7175171.59	0.33	1.08	0.33	1.08	0.33	1.08	Buried Anomaly (point; potential debris or buried utility segment)
13	Transect	493628.32	7175178.27	0.26	0.84	0.26	0.84	0.26	0.84	Buried Anomaly (point; potential debris or buried utility segment)
14	Transect	493627.64 493625.39	7175178.06 7175177.12	0.44	1.43	0.48	1.58	0.46	1.50	Buried Anomaly (linear; potential debris or buried utility segment)
15	Transect	493614.48	7175170.07	0.64	2.10	0.64	2.10	0.64	2.10	Buried Anomaly (point; potential debris or buried utility segment)
16	Transect	493600.61 493593.46	7175166.73 7175161.77	1.13	3.70	1.31	4.29	1.22	3.99	Buried Anomaly (linear; potential debris or buried utility segment)
17	Transect	493602.54	7175167.30	1.23	4.05	1.23	4.05	1.23	4.05	Buried Anomaly (point; potential debris or buried utility segment)
18	Transect	493603.19	7175167.48	1.05	3.43	1.05	3.43	1.05	3.43	Buried Anomaly (point; potential debris or buried utility segment)
19	Transect	493581.95	7175155.08	4.47	14.76	4.47	14.76	4.47	14.76	Buried Anomaly (point; potential debris or buried utility segment)
20	Transect	493561.31	7175141.36	0.46	1.50	0.46	1.50	0.46	1.50	Buried Anomaly (point; potential debris or buried utility segment)
21	Transect	493557.97	7175139.00	0.15	0.50	0.15	0.50	0.15	0.50	Buried Anomaly (point; potential debris or buried utility segment)
22	Transect	493550.97	7175134.26	0.39	1.28	0.39	1.28	0.39	1.28	Buried Anomaly (point; potential debris or buried utility segment)
23	Transect	493550.03	7175133.86	0.90	2.95	0.90	2.95	0.90	2.95	Buried Anomaly (point; potential debris or buried utility segment)

Anomaly Number	Transect	Location (UTM Zone 6N)		Minimum Depth		Maximum Depth		Medium Depth		Description
		X (m)	Y (m)	m	ft.	m	ft.	m	ft.	
24	Transect	493528.31	7175125.28	0.84	2.78	0.84	2.78	0.84	2.78	Buried Anomaly (point; potential debris or buried utility segment)
25	Transect	493521.29	7175123.74	1.02	3.34	1.02	3.34	1.02	3.34	Buried Anomaly (point; potential debris or buried utility segment)
26	Transect	493525.50	7175123.04	0.93	3.06	0.93	3.06	0.93	3.06	Buried Anomaly (point; potential debris or buried utility segment)
27	Transect	493532.50	7175124.33	0.75	2.45	0.75	2.45	0.75	2.45	Buried Anomaly (point; potential debris or buried utility segment)
28	Transect	493545.72	7175130.53	0.61	2.00	0.61	2.00	0.61	2.00	Buried Anomaly (point; potential debris or buried utility segment)
29	Transect	493550.08	7175132.94	0.74	2.44	0.74	2.44	0.74	2.44	Buried Anomaly (point; potential debris or buried utility segment)
30	Transect	493562.10	7175140.09	1.44	4.73	1.44	4.73	1.44	4.73	Buried Anomaly (point; potential debris or buried utility segment)
31	Transect	493574.38	7175145.60	0.34	1.13	0.34	1.13	0.34	1.13	Buried Anomaly (point; potential debris or buried utility segment)
32	Transect	493580.55 493574.96	7175149.56 7175145.55	0.52	1.70	1.12	3.67	0.82	2.69	Buried Anomaly (linear; potential debris or buried utility segment)
33	Transect	493583.37	7175150.29	1.16	3.80	1.16	3.80	1.16	3.80	Buried Anomaly (point; potential debris or buried utility segment)
34	Transect	493587.07	7175152.03	0.20	0.66	0.20	0.66	0.20	0.66	Buried Anomaly (point; potential debris or buried utility segment)
35	Transect	493610.78	7175166.94	0.45	1.48	0.45	1.48	0.45	1.48	Buried Anomaly (point; potential debris or buried utility segment)

Anomaly Number	Transect	Location (UTM Zone 6N)		Minimum Depth		Maximum Depth		Medium Depth		Description
		X (m)	Y (m)	m	ft.	m	ft.	m	ft.	
36	Transect	493613.47	7175168.28	1.23	4.05	1.23	4.05	1.23	4.05	Buried Anomaly (point; potential debris or buried utility segment)
37	Transect	493590.56	7175153.53	0.13	0.44	0.13	0.44	0.13	0.44	Buried Anomaly (point; potential debris or buried utility segment)
38	Transect	493592.24	7175154.71	0.20	0.65	0.20	0.65	0.20	0.65	Buried Anomaly (point; potential debris or buried utility segment)
39	Transect	493606.71	7175162.59	0.24	0.79	0.24	0.79	0.24	0.79	Buried Anomaly (point; potential debris or buried utility segment)
40	CACMW-001	493594.99	7175137.42	1.38	4.53	1.38	4.53	1.38	4.53	Buried Anomaly (point; potential debris or buried utility segment)
41	CACMW-001	493594.58	7175137.64	1.20	3.94	1.20	3.94	1.20	3.94	Buried Anomaly (point; potential debris or buried utility segment)
42	CACMW-001	493596.54	7175137.86	0.14	0.45	0.81	2.67	0.48	1.56	Buried Anomaly (linear; potential debris or buried utility segment)
		493601.04	7175139.84							
43	CACMW-001	493599.63	7175139.60	0.81	2.66	0.81	2.66	0.81	2.66	Buried Anomaly (point; potential debris or buried utility segment)

Table Notes:
ft. – foot/feet
m – meter(s)
Locations for linear anomalies represent begin and end points.

Figures

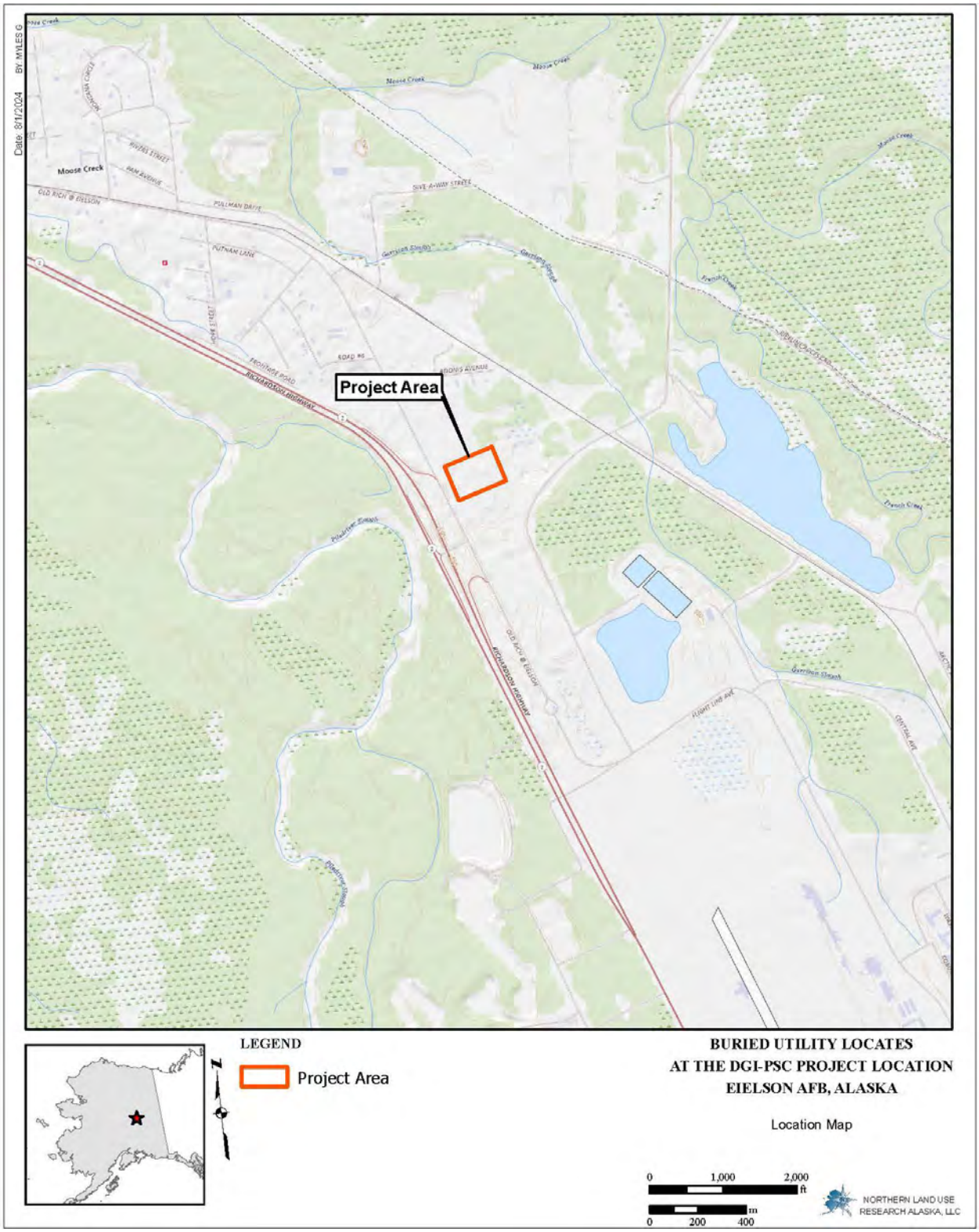

Figure 1. Project Location

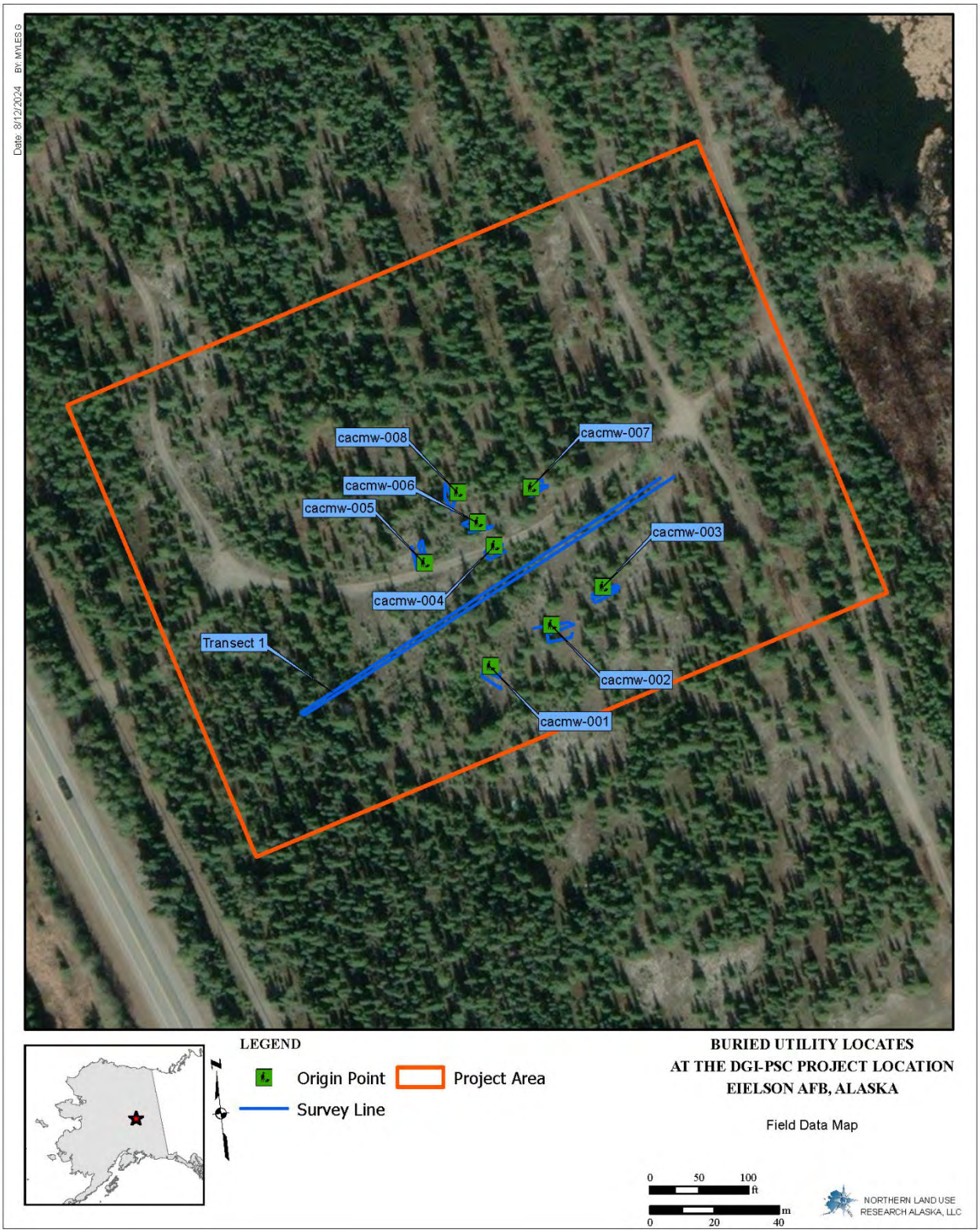

Figure 2. GPR survey transects.

Figure 3. Uneven ground at CACMW-007.

Figure 4. Rectangular disturbance at CACMW-001.

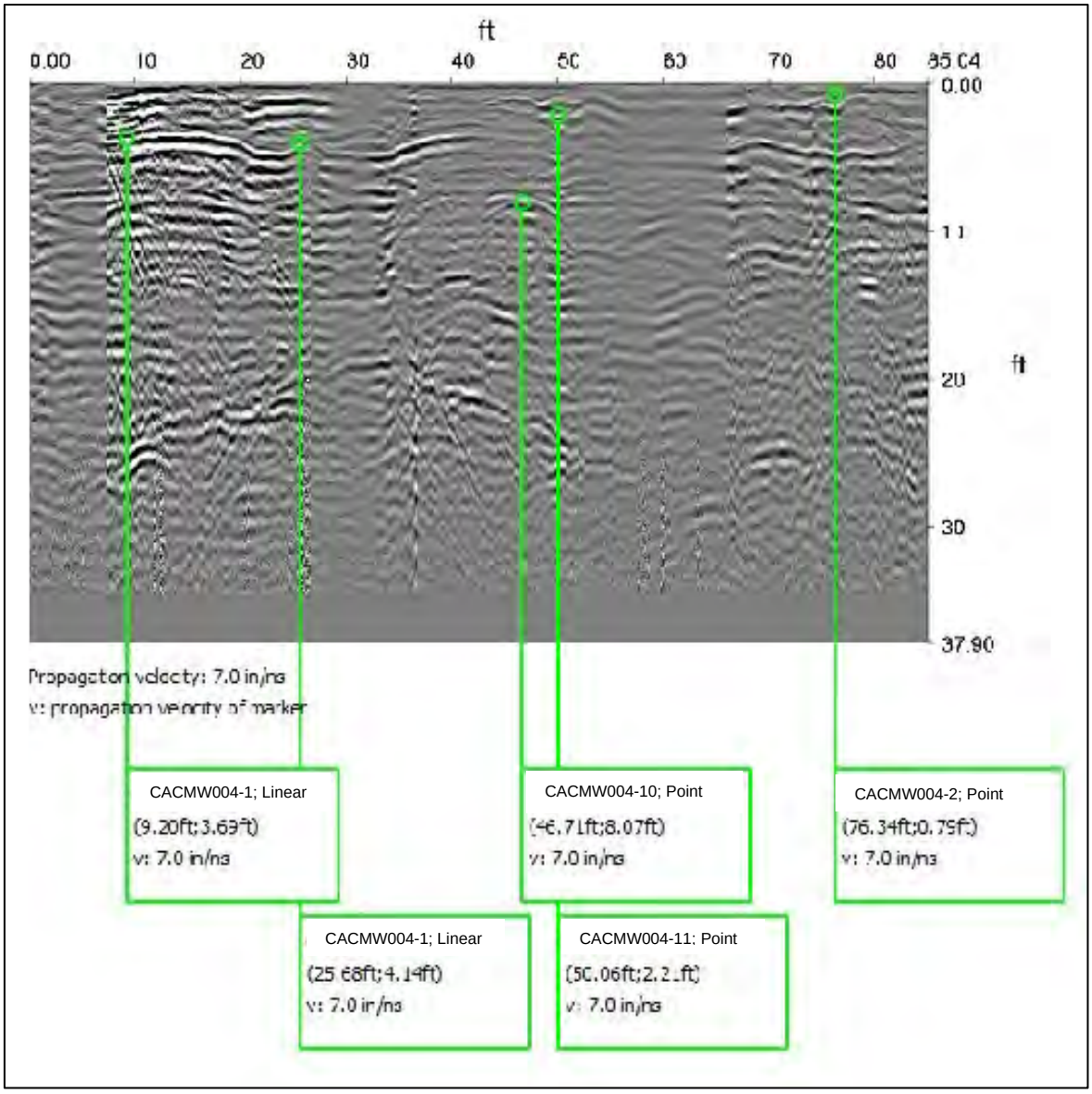

Figure 5. Example of anomalies detected within the transects of CACMW-004.

SURVEY REPORT

SCOPE OF WORK

Survey the locations of 24 performance monitoring wells.

DATE OF WORK

Survey field work was performed July 25, 2024.

EQUIPMENT USED

Leica GS16 dual frequency GPS receivers with fixed height rods for base station and rover. Elevations were established on monitor wells with a Leica NA2 automatic level.

SURVEY CONTROL

The basis for horizontal and vertical survey control is a recovered primary aluminum monument in PVC casing named "GATE". Coordinates and elevations were obtained from a 3.5 hour static GPS session processed by the NGS OPUS utility. Overall RMS on the position: 0.019(m). An additional recovered brass cap in concrete utilidor named "EF 16A RESET" was utilized as a check point for this survey.

A temporary benchmark was established by RTK GPS at the project site consisting of a 6" spike in a spruce tree. Multiple GPS observations were made to obtain an average elevation for the benchmark.

Coordinates are Alaska State Plane, Zone 3, NAD83, US feet. Elevations are NAVD88 vertical datum, feet.

SURVEY PROCEDURE

Coordinates for the monitor wells were measured with RTK GPS from the base station at "GATE". Elevations were measured from the temporary benchmark with differential leveling techniques to the nearest 0.01 feet.

DELIVERABLES

Tabulated results of the survey in Excel format; raw GPS data files of the survey; processing results of the survey data; OPUS processing report of the survey control base station; and image documentation for PDOP and number of satellites acquired for each monitor well surveyed.

MONITOR WELL SURVEY

Performance Monitoring Wells

Site FT009P
Eielson Air Force Base, AK

Prepared For
Ahtna Solutions, LLC

Surveyed July 25, 2024

Design Alaska

WELL ID	ALASKA STATE PLANE NAD83, ZONE 3, US FT NORTHING	EASTING	NAVD '88 ELEVATION PIPE	GROUND	DATE
CACMW-001-060	3912189.1	1462844.1	530.62	529.9	25-Jul-24
CACMW-001-110	3912191.4	1462848.4	530.52	529.7	25-Jul-24
CACMW-001-160	3912195.3	1462856.2	530.14	529.6	25-Jul-24
CACMW-002-060	3912230.1	1462919.9	529.69	529.1	25-Jul-24
CACMW-002-110	3912235.6	1462928.3	529.88	529.1	25-Jul-24
CACMW-002-160	3912233.0	1462924.1	529.63	529.1	25-Jul-24
CACMW-003-060	3912262.5	1462976.9	528.93	528.3	25-Jul-24
CACMW-003-110	3912265.9	1462986.6	528.85	528.2	25-Jul-24
CACMW-003-160	3912264.5	1462982.4	528.90	528.0	25-Jul-24
CACMW-004-060	3912314.2	1462870.9	529.95	529.2	25-Jul-24
CACMW-004-110	3912315.2	1462880.9	529.77	529.1	25-Jul-24
CACMW-004-160	3912314.7	1462876.2	529.74	529.1	25-Jul-24
CACMW-005-060	3912315.3	1462793.4	529.97	529.5	25-Jul-24
CACMW-005-110	3912319.4	1462802.1	529.96	529.3	25-Jul-24
CACMW-005-160	3912317.0	1462797.7	530.04	529.6	25-Jul-24
CACMW-006-060	3912342.7	1462859.0	530.17	529.4	25-Jul-24
CACMW-006-110	3912346.6	1462869.2	530.39	529.3	25-Jul-24
CACMW-006-160	3912344.4	1462864.0	530.12	529.6	25-Jul-24
CACMW-007-060	3912369.3	1462917.2	529.67	529.0	25-Jul-24
CACMW-007-110	3912374.4	1462926.3	529.86	529.2	25-Jul-24
CACMW-007-160	3912371.8	1462921.5	529.70	529.1	25-Jul-24
CACMW-008-060	3912374.9	1462840.5	529.88	529.1	25-Jul-24
CACMW-008-110	3912381.2	1462848.9	529.86	529.0	25-Jul-24
CACMW-008-160	3912377.9	1462844.8	529.94	529.3	25-Jul-24

Appendix C

Investigation-Derived Waste Documentation

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites and Prevention Preparedness and Response Programs

Contaminated Media Transport and Treatment or Disposal Approval Form

HAZARD ID # or SPILL ID #	NAME OF CONTAMINATED SITE OR SPILL	
26773 / 26997	Eielson AFB Basewide (AKA Sitewide) PFAS / Eielson AFB AFFF Area #4 Fire Training Area (FT009)	
CONTAMINATED SITE OR SPILL LOCATION – ADDRESS OR OTHER APPROPRIATE DESCRIPTION		
64.70116427370006, -147.1350420121095		
CURRENT PHYSICAL LOCATION OF MEDIA	**SOURCE OF THE CONTAMINATION (DAY TANK, FIRE TRAINING PIT, LUST, ETC.)**	
Eielson AFB, LF003 Holding Cell #1	Eielson PFAS Plume	
CONTAMINANTS OF CONCERN	**ESTIMATED VOLUME**	**DATE(S) GENERATED**
PFAS	~17 tons	6/12/2024 - 6/25/2024
POST TREATMENT ANALYSIS REQUIRED *(such as GRO, DRO, RRO, VOCs, metals, PFAS, and/or Chlorinated Solvents)*		
The waste will be landfilled according to Roosevelt Regional Landfill's permit and it will not be tested after disposal.		
COMMENTS OR OTHER IMPORTANT INFORMATION		
The soil was generated during drilling activities for Eielson's Data Gap Investigation and Pilot Study Construction Project for treating PFAS contaminated groundwater near the northern border of the base. Waste characterization analyses, attached, included PFAS, TCLP VOCs , TCLP RCRA Metals, Ignitability, Corrosivity-pH, Reactivity Cyanide, and Reactivity Sulfide.		

TREATMENT FACILITY, LANDFILL, AND/OR FINAL DESTINATION OF MEDIA	PHYSICAL ADDRESS/PHONE NUMBER
Republic Services Roosevelt Landfill	500 Roosevelt Grade Rd, Roosevelt, WA 99358 / 206-391-1389
PARTY CONDUCTING CLEANUP	**ADDRESS/PHONE NUMBER**
Ahtna-Arcadis 8(a) Joint Venture	Will Rhodes / 907-771-4403
WASTE MANAGEMENT COMPANY	**ADDRESS/PHONE NUMBER**
Republic Services	1315 Queens Way, Fairbanks, AK 99701 / 907-328-7025

***Note, disposal of polluted soil in a landfill requires prior approval from the landfill operator and ADEC Solid Waste Program.**

Will Rhodes
Name of the Person Requesting Approval (printed)

Project Manager / Ahtna-Arcadis 8(a) JV
Title/Association

Digitally signed by William Rhodes
Date: 2024.09.17 10:57:15 -08'00'

Signature

9/17/2024
Date

907-771-4403
Phone Number

----------DEC USE ONLY----------

Based on the information provided, ADEC approves transport of the above mentioned material. The party conducting the cleanup or their consultant must submit to the DEC Project Manager a copy of weight receipts of the loads transported and a post treatment analytical report, if disposed of at an approved treatment facility. The contaminated soil shall be transported as a covered load in compliance with 18 AAC 60.015.

Axl LeVan
DEC Project Manager Name (printed)

Remedial Project Manager
Project Manager Title

Digitally signed by Axl
Date: 2024.09.17 11:50:17 -08'00'

Signature

9/17/2024
Date

907-451-2156
Phone Number

Instructions to Complete
Contaminated Media Transport and Treatment or Disposal Approval Form

The Alaska Department of Environmental Conservation (DEC) must approve the movement or disposal of contaminated soil and water from a site in accordance with 18 Alaska Administrative Code (AAC) 75.325(i), 18 AAC 75.370(b), and 18 AAC 78.274(b). The *Contaminated Media Transport and Treatment or Disposal Approval Form* should be used to document this approval. Soil treatment facilities regulated under 18 AAC 75.365 are required by their Operations Plans to only accept contaminated soil for which an approval form has been signed by a DEC project manager.

Site information can be found on the Contaminated Site Database (www.alaska.gov/Applications/SPAR/PublicMVC/CSP/Search/) or the Spills Database (http://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillSearch).

Instructions to Complete:

1. **Hazard ID or Spill ID #:** For a contaminated site, the Hazard ID can be found on the Contaminated Sites Database. For a spill, the Spill ID can be found in the subject line of letters from DEC or the Spills Database. If the waste originates from multiple sites, all Hazard IDs or Spill IDs must be listed.

2. **Name of Contaminated Site or Spill:** For a contaminated site, the official site name can be found on the Contaminated Sites Database. For a spill, the official name of the spill is found in the subject line of letters from DEC or the Spills Database.

3. **Contaminated Site or Spill Location – Address or Other Appropriate Description:** This address or description captures the origin of the contaminated media or the location of the spill. For a contaminated site, the address or other appropriate description can be found on the Contaminated Sites Database. For a spill, this can be found on the Spill Report or the Spills Database.

4. **Current Physical Location of the Media:** Provide the physical location where the contaminated media (soil, water, etc.) is currently stored. This location may be the same as location provided in the "Contaminated Site or Spill Location", or it could be a hazardous waste facility or other location/staging area agreed upon in the DEC-approved work plan.

5. **Source of Contamination (Day Tank, Fire Training Pit, LUST, etc.):** List all sources which contributed to the contamination in the media being transported. Sources can include previous releases that have comingled. If the source is unknown, state "Unknown".

6. **Contaminants of Concern (CoCs):** List all contaminants detected above the most stringent Method 2 Tables B1 and B2 soil cleanup levels in 18 AAC 75.341(c) and (d), the Table C groundwater cleanup levels in 18 AAC 75.345, and other applicable action levels (e.g., TCLP results). Attach the laboratory data package for the contaminated media that is being disposed of and, if applicable, a data summary table or narrative to this form. Data gathered during site characterization activities may be sufficient to determine the CoCs. There are situations in which generator knowledge of the contaminant source may be accepted by a treatment or disposal facility in lieu of analytical sample results, such as, diesel-impacted media from a heating oil tank. If you are using generator knowledge in lieu of analytical sample results, include a statement which documents this knowledge in the Comments section.

7. **Estimated Volume:** Include the total volume of contaminated media to be transported; for instance, “Nine 55-gallon drums” or “”25 cubic yards of soil.”

8. **Date(s) Generated:** Provide the date the media was generated (e.g., excavated, pumped out of the ground, etc.). If the media was generated over multiple days, list the range of dates.

9. **Post Treatment Analysis Required (such as GRO, DRO, RRO, VOCs, PAHs, metals, PFAS, chlorinated solvents, etc.):** Provide the list of all contaminants that exceed the most stringent Method 2 cleanup levels. For DEC-approved soil treatment facilities in Alaska, specific post treatment analyses will be determined by the facility based upon the contaminants and requirements of their Operations Plan. If the media are being transported to a landfill or permitted liquid waste facility without off-site treatment, include “Not Applicable”.

10. **Comments or Other Important Information:** Provide any other information which needs to be conveyed.
    a. If generator knowledge of the CoCs is being used in lieu of sample analytical results, an explanation needs to be provided in this field.
    b. If the material is going to be placed in a landfill in Alaska, include a statement that the landfill has agreed to accept the material and provide the contact information for the landfill point of contact. If the material is going to be placed in a Class 2 or 3 landfill, attach the DEC Solid Waste Program’s approval letter to this form.
    c. If the media is going to an intermediate location or facility prior to its final destination, describe the complete transportation route with intermediate locations in this field.

11. **Treatment Facility, Landfill, and/or Final Destination of Media:** Include the name of the facility, landfill, or the final destination of the media. A list of DEC-approved Alaskan soil treatment facilities is available at www.dec.alaska.gov/spar/csp/offsite-remediation/. If multiple treatment facilities will be used, use separate forms to document what media will go to which facility. For material that will go to a waste transfer facility prior to disposal at another facility, the final destination should be listed.
    a. **Physical Address/Phone Number:** Provide the physical location and telephone number of the facility, landfill, or the final destination of the media.

12. **Party Conducting Cleanup:** Provide the name of the entity overseeing the project, typically this is the party responsible for the spill or could be a party which has received grant funding to conduct cleanup.
    a. **Address/Phone Number:** Provide the contact information for the party conducting the cleanup.

13. **Waste Management Company:** Provide the name of company or person shipping and/or organizing the shipment of the media.
    a. **Address/Phone Number:** Provide the mailing address and telephone number of the waste management company or organizer.

Submit this completed form along with all necessary attachments to the assigned DEC project manager for approval, or contact the Contaminated Sites Program at (907) 269-7558 or the Prevention, Preparedness and Response Program at (907) 269-7557.

Report of Analysis

Arcadis U.S., Inc.
630 Plaza Drive
Suite 600
Highlands Ranch, CO 80129
Attention: Tim Bellis

Project Name: Eielson AFB

Project Number: 30167435.05

Lot Number:**ZG18021**

Date Completed:08/29/2024

Kathy Smith

08/29/2024 4:59 PM
Approved and released by:
Project Manager II: **Kathy E. Smith**

The electronic signature above is the equivalent of a handwritten signature.
This report shall not be reproduced, except in its entirety, without the written approval of Pace Analytical Services, LLC.

Case Narrative
Arcadis U.S., Inc.
Lot Number: ZG18021

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.
Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Additionally, the DoD QSM version 5.4 has been followed for these samples, and specifically Table B-24 was followed for all PFAS samples. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs, the DoD QSM, or policies are qualified on the results page or discussed below.

All QC associated with these samples were compliant with DOD QSM 5.4 table B-24 and our PFAS SOP. Correction factors (CF) are used to calculate the original sample concentration. The CF is the inverse of the concentration factor (sample volume / extract final volume) times the dilution factor (DF). The CF is calculated as follows:

For solid samples:
CF = DF * FV / Ws/S/1000
FV is volume of extract (mL)
Ws is initial sample weight (gram)
S is %Solids
DF is dilution factor. For undiluted analysis, DF = 1.

Concentration (ug/kg) = Cs*CF,

$$C_s = \frac{\left(\frac{(A_s x C_{is})}{A_{is}}\right) - B}{M1}$$

Where

C_s is on column concentration of target analyte in the sample (ng/L)
C_{is} is concentration of internal standard in the sample (ng/L)
A_s is peak response of target analyte in the sample
A_{is} is peak response of internal standard in the sample
M1 is the average RF from ICAL or the slope from linear regression ICAL
B is the y-intercept from the ICAL

Pace is a DoD/DOE accredited laboratory; however, the following analyses are currently not listed on our DoD/DOE scope of accreditation: Drinking Water: pH EPA 150.1, Turbidity EPA 180.1, Metals EPA 200.7 & 200.8, Mercury EPA 245.1, Anions EPA 300.0, Cyanide EPA 335.4, Nitrates EPA 353.2, Orthophosphate & Phosphorus EPA 365.1, EDB/DBCP EPA 504.1, HPC SIMPLATE, Color SM 2120 B-2011, Alkalinity SM 2320 B-2011, Specific Conductance SM 2510 B-2011, Residue-filterable (TDS) SM 2540 C, Calcium Hardness (CaCO2) SM 3500-Ca B-2011, TRC SM 4500 Cl G-2011, pH SM 4500 H=B-2011, E.Coli, Total Coliform. Non-Potable Water: Metals EPA 200.7, Strontium EPA 200.8, Chlorate EPA

300.0, Cyanide EPA 335.4, Phenolics EPA 420.4, 2-Methyl-4,6-Dinitrophenol EPA 625.1, Propane RSK-175, Specific Conductance SM 2510 B-2011, Salinity SM2520 B, Residue- total SM 2540 B, Sulfite SM 4500 SO32- B-2011, Amenable Cyanide SM 4500-CN- G-2011, BOD & CBOD SM 5210 B, MBAS SM 5540 C-2011, Boron & Titanium SW-846 6010D, Boron, Molybdenum, & Titanium SW-846 6020B, Alcohols & Glycols SW-846 8015C, Pentachlorophenol SW-846 8151A, Ethyl Acetate, Hexane, & n-Hexane SW-846 8260D, SVOC 1,4-Dioxane, 4-Dimethyl aminoazobenzene, 1,4-Naphthoquinone, 3,5-Dinitroaniline, PETN SW-846 8270E, Amenable Cyanide SW-846 9012B. Solid and Chemical Materials: Boron & Titanium SW-846 6010D, Molybdenum SW-846 6020B, Ethylene Glycol SW-846 8015B, Pentachlorophenol SW-846 8151A, Chloroprene SW-846 8260B, SVOC 1,4-Dioxane, 1,3,5-Trinitrobenzene, 1,4- Naphthoquinone, 1,4-Phenylenediamine, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Dimethyl aminoazobenzene, 4-Nitroquinoline-1-oxide, 7,12-Dimethylbenzo(a)anthracene, Chlorobenzilate, Diallate, Ethyl methanesulfonate, Isodrin, Isosafrole, Methyl methanesulfonate, n-Nitrosomethylethylamine, n-Nitrosomorpholine, n-Nitrosopiperidine, Piperonyl butoxide, Pronamide, Safrole, 3,5- Dinitroaniline, PETN SW-846 8270E, Oil & Grease SW-846 9071B.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation: E. coli and Total coliforms SM 9223 B-2004, Solid Chemical Material: TOC Walkley-Black, Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Fecal Coliform Colilert-18. Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

Manual integration summaries are provided at the end of this report when applicable.

PFAS
The method blank associated with batch 16170 had PFOS detected at a concentration that was above the MDL but below ½ the PQL. All samples associated with this method blank that have detections for PFOS have been flagged with a "B".

Sample Summary
Arcadis U.S., Inc.
Lot Number: ZG18021
Project Name: Eielson AFB
Project Number: 30167435.05

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SIDW-001-071524	Solid	07/15/2024 0800	07/18/2024

(1 sample)

Detection Summary

Arcadis U.S., Inc.

Lot Number: ZG18021

Project Name: Eielson AFB

Project Number: 30167435.05

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SIDW-001-071524	Solid	% Solids	%Solids SOP-	88.1		%	5
001	SIDW-001-071524	Solid	PFHxS	1633	0.053	J	ng/g	6
001	SIDW-001-071524	Solid	PFOS	1633	0.36	BM-03	ng/g	6

(3 detections)

Inorganic non-metals

Client: **Arcadis U.S., Inc.**
Description: **SIDW-001-071524**
Date Sampled: **07/15/2024 0800**
Date Received: **07/18/2024**
Project Name: **Eielson AFB**
Project Number: **30167435.05**
Laboratory ID: **ZG18021-001**
Matrix: **Solid**
% Solids: **88.1** **07/19/2024 1703**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(% Solids)	%Solids SOP-1633	1	08/13/2024 1131	WINR		16185

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
% Solids		**%Solids SOP-16**	**88.1**					**%**	**1**

LOQ = Limit of Quantitation
U = Not detected at or above the LOD
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS

Client: **Arcadis U.S., Inc.** Laboratory ID: **ZG18021-001**

Description: **SIDW-001-071524** Matrix: **Solid**

Date Sampled: **07/15/2024 0800** Project Name: **Eielson AFB** % Solids: **88.1** **07/19/2024 1703**

Date Received: **07/18/2024** Project Number: **30167435.05**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	08/20/2024 1949	ARC2	08/15/2024 0910	16170
2	1633	1633	1	08/27/2024 1809	ARC2	08/23/2024 1010	16789

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	1633	0.75	U	0.79	0.75	0.23	ng/g	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	1633	0.74	U	0.99	0.74	0.33	ng/g	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	1633	0.75	U	0.79	0.75	0.25	ng/g	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1633	0.30	U	0.79	0.30	0.081	ng/g	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1633	0.30	U	0.79	0.30	0.097	ng/g	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1633	0.60	U	0.79	0.60	0.17	ng/g	1
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1633	4.0	U	5.0	4.0	1.4	ng/g	1
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	1633	0.79	U	0.99	0.79	0.32	ng/g	1
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	4151-50-2	1633	0.080	U	0.20	0.080	0.034	ng/g	1
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1633	0.16	U	0.20	0.16	0.044	ng/g	1
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1633	0.80	U	2.0	0.80	0.29	ng/g	1
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1633	0.040	U	0.20	0.040	0.015	ng/g	1
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	1633	0.080	U	0.20	0.080	0.040	ng/g	1
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1633	0.80	U	2.0	0.80	0.21	ng/g	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	1633	0.79	U	0.99	0.79	0.35	ng/g	1
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	1633	0.28	U	0.40	0.28	0.12	ng/g	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1633	0.32	U	0.40	0.32	0.12	ng/g	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1633	0.32	U	0.40	0.32	0.11	ng/g	1
Perfluorobutanesulfonic acid (PFBS)	375-73-5	1633	0.071	U	0.20	0.071	0.021	ng/g	1
Perfluorobutanoic acid (PFBA)	375-22-4	1633	0.32	U	0.79	0.32	0.099	ng/g	1
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1633	0.077	U	0.20	0.077	0.030	ng/g	1
Perfluorodecanoic acid (PFDA)	335-76-2	1633	0.080	U	0.20	0.080	0.029	ng/g	1
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	1633	0.078	U	0.20	0.078	0.024	ng/g	1
Perfluorododecanoic acid (PFDoA)	307-55-1	1633	0.080	U	0.20	0.080	0.032	ng/g	1
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1633	0.076	U	0.20	0.076	0.033	ng/g	1
Perfluoroheptanoic acid (PFHpA)	375-85-9	1633	0.080	U	0.20	0.080	0.025	ng/g	1
3-Perfluoroheptyl propanoic acid (7:3FTCA)	812-70-4	1633	3.9	U	4.9	3.9	1.7	ng/g	2
Perfluorohexanesulfonic acid (PFHxS)	**355-46-4**	**1633**	**0.053**	**J**	**0.20**	**0.073**	**0.020**	**ng/g**	**1**
Perfluorohexanoic acid (PFHxA)	307-24-4	1633	0.080	U	0.20	0.080	0.025	ng/g	1
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1633	0.077	U	0.20	0.077	0.025	ng/g	1
Perfluorononanoic acid (PFNA)	375-95-1	1633	0.080	U	0.20	0.080	0.026	ng/g	1
Perfluorooctanesulfonamide (PFOSA)	754-91-6	1633	0.040	U	0.20	0.040	0.014	ng/g	1
Perfluorooctanesulfonic acid (PFOS)	**1763-23-1**	**1633**	**0.36**	**BM-03**	**0.20**	**0.074**	**0.020**	**ng/g**	**1**
Perfluorooctanoic acid (PFOA)	335-67-1	1633	0.080	U	0.20	0.080	0.029	ng/g	1
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	1633	0.075	U	0.20	0.075	0.022	ng/g	1
Perfluoropentanoic acid (PFPeA)	2706-90-3	1633	0.16	U	0.40	0.16	0.041	ng/g	1
3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	1633	0.79	U	0.99	0.79	0.21	ng/g	1
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1633	0.080	U	0.20	0.080	0.029	ng/g	1
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	1633	0.080	U	0.20	0.080	0.040	ng/g	1
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1633	0.080	U	0.20	0.080	0.028	ng/g	1

LOQ = Limit of Quantitation
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
DL = Detection Limit
Q = Surrogate failure
U = Not detected at or above the LOD
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
L = LCS/LCSD failure
H = Out of holding time
W = Reported on wet weight basis
LOD = Limit of Detection
S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS

Client: **Arcadis U.S., Inc.**		Laboratory ID: **ZG18021-001**
Description: **SIDW-001-071524**		Matrix: **Solid**
Date Sampled: **07/15/2024 0800**	Project Name: **Eielson AFB**	% Solids: **88.1** **07/19/2024 1703**
Date Received: **07/18/2024**	Project Number: **30167435.05**	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
13C2-4:2FTS		81	40-165		85	40-165
13C2-6:2FTS		98	40-215		82	40-215
13C2-8:2FTS		76	40-275		79	40-275
13C2-PFDoA		79	40-130		86	40-130
13C2-PFTeDA		67	20-130		91	20-130
13C3-HFPO-DA		86	40-130		86	40-130
13C3-PFBS		80	40-135		87	40-135
13C3-PFHxS		85	40-130		91	40-130
13C4-PFBA		85	8.0-130		89	8.0-130
13C4-PFHpA		80	40-130		89	40-130
13C5-PFHxA		85	40-130		88	40-130
13C5-PFPeA		87	35-130		89	35-130
13C6-PFDA		84	40-130		92	40-130
13C7-PFUnA		79	40-130		82	40-130
13C8-PFOA		76	40-130		85	40-130
13C8-PFOS		83	40-130		84	40-130
13C8-PFOSA		70	40-130		75	40-130
13C9-PFNA		81	40-130		90	40-130
D3-NMeFOSA		33	10-130		55	10-130
D3-NMeFOSAA		77	40-135		79	40-135
D5-NEtFOSA		29	10-130		54	10-130
D5-NEtFOSAA		66	40-150		83	40-150
D7-NMeFOSE		50	20-130		68	20-130
D9-NEtFOSE		46	15-130		68	15-130

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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QC Summary

PFAS by LC/MS/MS - MB

Sample ID: ZQ16170-001
Batch: 16170
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 08/15/2024 0910

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
11Cl-PF3OUdS	0.76	U	1	0.80	0.76	0.23	ng/g	08/20/2024 1922
9Cl-PF3ONS	0.75	U	1	1.0	0.75	0.33	ng/g	08/20/2024 1922
ADONA	0.76	U	1	0.80	0.76	0.25	ng/g	08/20/2024 1922
8:2FTS	0.31	U	1	0.80	0.31	0.082	ng/g	08/20/2024 1922
4:2FTS	0.30	U	1	0.80	0.30	0.098	ng/g	08/20/2024 1922
6:2FTS	0.61	U	1	0.80	0.61	0.17	ng/g	08/20/2024 1922
5:3FTCA	4.0	U	1	5.0	4.0	1.4	ng/g	08/20/2024 1922
HFPO-DA	0.80	U	1	1.0	0.80	0.32	ng/g	08/20/2024 1922
NEtFOSA	0.080	U	1	0.20	0.080	0.034	ng/g	08/20/2024 1922
NEtFOSAA	0.16	U	1	0.20	0.16	0.044	ng/g	08/20/2024 1922
NEtFOSE	0.80	U	1	2.0	0.80	0.29	ng/g	08/20/2024 1922
NMeFOSA	0.040	U	1	0.20	0.040	0.015	ng/g	08/20/2024 1922
NMeFOSAA	0.080	U	1	0.20	0.080	0.040	ng/g	08/20/2024 1922
NMeFOSE	0.80	U	1	2.0	0.80	0.21	ng/g	08/20/2024 1922
NFDHA	0.80	U	1	1.0	0.80	0.35	ng/g	08/20/2024 1922
2-ethoxyethane)sulfonic acid (PFEESA	0.28	U	1	0.40	0.28	0.12	ng/g	08/20/2024 1922
PFMPA	0.32	U	1	0.40	0.32	0.12	ng/g	08/20/2024 1922
PFMBA	0.32	U	1	0.40	0.32	0.11	ng/g	08/20/2024 1922
PFBS	0.071	U	1	0.20	0.071	0.021	ng/g	08/20/2024 1922
PFBA	0.32	U	1	0.80	0.32	0.10	ng/g	08/20/2024 1922
PFDS	0.077	U	1	0.20	0.077	0.030	ng/g	08/20/2024 1922
PFDA	0.080	U	1	0.20	0.080	0.029	ng/g	08/20/2024 1922
PFDoS	0.078	U	1	0.20	0.078	0.024	ng/g	08/20/2024 1922
PFDoA	0.080	U	1	0.20	0.080	0.032	ng/g	08/20/2024 1922
PFHpS	0.076	U	1	0.20	0.076	0.033	ng/g	08/20/2024 1922
PFHpA	0.080	U	1	0.20	0.080	0.025	ng/g	08/20/2024 1922
PFHxS	0.073	UM-03	1	0.20	0.073	0.020	ng/g	08/20/2024 1922
PFHxA	0.080	U	1	0.20	0.080	0.025	ng/g	08/20/2024 1922
PFNS	0.077	U	1	0.20	0.077	0.025	ng/g	08/20/2024 1922
PFNA	0.080	U	1	0.20	0.080	0.026	ng/g	08/20/2024 1922
PFOSA	0.040	U	1	0.20	0.040	0.014	ng/g	08/20/2024 1922
PFOS	**0.021**	**J**	**1**	**0.20**	**0.074**	**0.020**	**ng/g**	**08/20/2024 1922**
PFOA	0.080	U	1	0.20	0.080	0.029	ng/g	08/20/2024 1922
PFPeS	0.075	U	1	0.20	0.075	0.022	ng/g	08/20/2024 1922
PFPeA	0.16	U	1	0.40	0.16	0.041	ng/g	08/20/2024 1922
3:3FTCA	0.80	U	1	1.0	0.80	0.21	ng/g	08/20/2024 1922
PFTeDA	0.080	U	1	0.20	0.080	0.029	ng/g	08/20/2024 1922
PFTrDA	0.080	U	1	0.20	0.080	0.040	ng/g	08/20/2024 1922
PFUnA	0.080	U	1	0.20	0.080	0.028	ng/g	08/20/2024 1922

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	95	40-165
13C2-6:2FTS		94	40-215
13C2-8:2FTS		88	40-275

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: ZQ16170-001
Batch: 16170
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 08/15/2024 0910

Surrogate	Q	% Rec	Acceptance Limit
13C2-PFDoA		76	40-130
13C2-PFTeDA		75	20-130
13C3-HFPO-DA		91	40-130
13C3-PFBS		94	40-135
13C3-PFHxS		101	40-130
13C4-PFBA		94	8-130
13C4-PFHpA		87	40-130
13C5-PFHxA		90	40-130
13C5-PFPeA		92	35-130
13C6-PFDA		88	40-130
13C7-PFUnA		85	40-130
13C8-PFOA		89	40-130
13C8-PFOS		93	40-130
13C8-PFOSA		67	40-130
13C9-PFNA		95	40-130
D3-NMeFOSA		36	10-130
D3-NMeFOSAA		94	40-135
D5-NEtFOSA		35	10-130
D5-NEtFOSAA		77	40-150
D7-NMeFOSE		51	20-130
D9-NEtFOSE		50	15-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: ZQ16170-002
Batch: 16170
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 08/15/2024 0910

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
11Cl-PF3OUdS	9.1	8.2		1	90	45-160	08/20/2024 1931
9Cl-PF3ONS	9.0	8.6		1	96	70-150	08/20/2024 1931
ADONA	9.1	9.4		1	103	70-160	08/20/2024 1931
8:2FTS	9.2	7.4		1	81	70-150	08/20/2024 1931
4:2FTS	9.0	9.1		1	101	60-150	08/20/2024 1931
6:2FTS	9.1	8.9		1	98	55-200	08/20/2024 1931
5:3FTCA	60	47		1	78	60-130	08/20/2024 1931
HFPO-DA	9.6	9.0		1	94	70-145	08/20/2024 1931
NEtFOSA	2.4	2.5		1	105	70-140	08/20/2024 1931
NEtFOSAA	2.4	2.4		1	98	65-165	08/20/2024 1931
NEtFOSE	24	24		1	102	70-135	08/20/2024 1931
NMeFOSA	2.4	2.5		1	106	70-155	08/20/2024 1931
NMeFOSAA	2.4	2.4	M-03	1	99	65-155	08/20/2024 1931
NMeFOSE	24	24		1	99	70-140	08/20/2024 1931
NFDHA	4.8	4.1		1	86	60-155	08/20/2024 1931
2-ethoxyethane)sulfonic acid (PFEESA	4.3	3.8		1	89	70-140	08/20/2024 1931
PFMPA	4.8	4.3		1	90	30-140	08/20/2024 1931
PFMBA	4.8	4.1		1	86	60-150	08/20/2024 1931
PFBS	2.1	2.1		1	99	65-145	08/20/2024 1931
PFBA	9.6	9.7		1	101	70-140	08/20/2024 1931
PFDS	2.3	2.2		1	94	40-155	08/20/2024 1931
PFDA	2.4	2.3		1	96	70-155	08/20/2024 1931
PFDoS	2.3	2.1		1	90	25-160	08/20/2024 1931
PFDoA	2.4	2.3		1	94	70-150	08/20/2024 1931
PFHpS	2.3	2.3		1	100	65-155	08/20/2024 1931
PFHpA	2.4	2.4		1	102	65-145	08/20/2024 1931
PFHxS	2.2	2.1		1	96	60-150	08/20/2024 1931
PFHxA	2.4	2.4		1	101	65-140	08/20/2024 1931
PFNS	2.3	2.2		1	98	55-140	08/20/2024 1931
PFNA	2.4	2.3		1	96	70-155	08/20/2024 1931
PFOSA	2.4	2.5		1	102	70-140	08/20/2024 1931
PFOS	2.2	2.1	M-03	1	96	65-160	08/20/2024 1931
PFOA	2.4	2.6		1	108	70-150	08/20/2024 1931
PFPeS	2.3	2.2		1	99	55-160	08/20/2024 1931
PFPeA	4.8	4.6		1	96	60-150	08/20/2024 1931
3:3FTCA	12	9.7		1	80	45-130	08/20/2024 1931
PFTeDA	2.4	2.5		1	105	65-150	08/20/2024 1931
PFTrDA	2.4	2.6		1	106	65-150	08/20/2024 1931
PFUnA	2.4	2.4		1	98	70-155	08/20/2024 1931

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		88	40-165
13C2-6:2FTS		92	40-215
13C2-8:2FTS		88	40-275

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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PFAS by LC/MS/MS - LCS

Sample ID: ZQ16170-002
Batch: 16170
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 08/15/2024 0910

Surrogate	Q	% Rec	Acceptance Limit
13C2-PFDoA		87	40-130
13C2-PFTeDA		80	20-130
13C3-HFPO-DA		90	40-130
13C3-PFBS		90	40-135
13C3-PFHxS		91	40-130
13C4-PFBA		95	8-130
13C4-PFHpA		88	40-130
13C5-PFHxA		90	40-130
13C5-PFPeA		95	35-130
13C6-PFDA		89	40-130
13C7-PFUnA		92	40-130
13C8-PFOA		84	40-130
13C8-PFOS		85	40-130
13C8-PFOSA		69	40-130
13C9-PFNA		90	40-130
D3-NMeFOSA		39	10-130
D3-NMeFOSAA		78	40-135
D5-NEtFOSA		36	10-130
D5-NEtFOSAA		71	40-150
D7-NMeFOSE		48	20-130
D9-NEtFOSE		47	15-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: ZQ16170-102
Batch: 16170
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 08/15/2024 0910

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
11Cl-PF3OUdS	0.75	0.66		1	87	45-160	08/20/2024 1940
9Cl-PF3ONS	0.74	0.71		1	95	70-150	08/20/2024 1940
ADONA	0.75	0.77		1	103	70-160	08/20/2024 1940
8:2FTS	0.76	0.67		1	88	70-150	08/20/2024 1940
4:2FTS	0.75	0.66		1	88	60-150	08/20/2024 1940
6:2FTS	0.76	0.63		1	83	55-200	08/20/2024 1940
5:3FTCA	5.0	4.4		1	88	60-130	08/20/2024 1940
HFPO-DA	0.80	0.95	M-03	1	119	70-145	08/20/2024 1940
NEtFOSA	0.20	0.22	M-03	1	112	70-140	08/20/2024 1940
NEtFOSAA	0.20	0.20	M-03	1	102	65-165	08/20/2024 1940
NEtFOSE	2.0	2.0		1	98	70-135	08/20/2024 1940
NMeFOSA	0.20	0.19		1	96	70-155	08/20/2024 1940
NMeFOSAA	0.20	0.18	M-03	1	90	65-155	08/20/2024 1940
NMeFOSE	2.0	1.9		1	97	70-140	08/20/2024 1940
NFDHA	0.40	0.38		1	96	60-155	08/20/2024 1940
2-ethoxyethane)sulfonic acid (PFEESA	0.35	0.35		1	100	70-140	08/20/2024 1940
PFMPA	0.40	0.39	M-03	1	98	30-140	08/20/2024 1940
PFMBA	0.40	0.40	M-03	1	99	60-150	08/20/2024 1940
PFBS	0.17	0.17		1	99	65-145	08/20/2024 1940
PFBA	0.80	0.73		1	92	70-140	08/20/2024 1940
PFDS	0.19	0.19	M-03	1	102	40-155	08/20/2024 1940
PFDA	0.20	0.19		1	96	70-155	08/20/2024 1940
PFDoS	0.19	0.17		1	88	25-160	08/20/2024 1940
PFDoA	0.20	0.21	M-03	1	103	70-150	08/20/2024 1940
PFHpS	0.19	0.18		1	96	65-155	08/20/2024 1940
PFHpA	0.20	0.21		1	106	65-145	08/20/2024 1940
PFHxS	0.18	0.15		1	86	60-150	08/20/2024 1940
PFHxA	0.20	0.21		1	106	65-140	08/20/2024 1940
PFNS	0.19	0.19		1	102	55-140	08/20/2024 1940
PFNA	0.20	0.22	M-03	1	111	70-155	08/20/2024 1940
PFOSA	0.20	0.23		1	115	70-140	08/20/2024 1940
PFOS	0.18	0.19	M-03	1	108	65-160	08/20/2024 1940
PFOA	0.20	0.20	M-03	1	102	70-150	08/20/2024 1940
PFPeS	0.18	0.17		1	97	55-160	08/20/2024 1940
PFPeA	0.40	0.37	M-03	1	94	60-150	08/20/2024 1940
3:3FTCA	1.0	0.86	M-03	1	86	45-130	08/20/2024 1940
PFTeDA	0.20	0.20		1	100	65-150	08/20/2024 1940
PFTrDA	0.20	0.22		1	111	65-150	08/20/2024 1940
PFUnA	0.20	0.20	M-03	1	98	70-155	08/20/2024 1940

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		98	40-165
13C2-6:2FTS		103	40-215
13C2-8:2FTS		97	40-275

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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PFAS by LC/MS/MS - LCS

Sample ID: ZQ16170-102
Batch: 16170
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 08/15/2024 0910

Surrogate	Q	% Rec	Acceptance Limit
13C2-PFDoA		81	40-130
13C2-PFTeDA		79	20-130
13C3-HFPO-DA		92	40-130
13C3-PFBS		95	40-135
13C3-PFHxS		100	40-130
13C4-PFBA		94	8-130
13C4-PFHpA		90	40-130
13C5-PFHxA		90	40-130
13C5-PFPeA		94	35-130
13C6-PFDA		91	40-130
13C7-PFUnA		91	40-130
13C8-PFOA		90	40-130
13C8-PFOS		86	40-130
13C8-PFOSA		73	40-130
13C9-PFNA		83	40-130
D3-NMeFOSA		38	10-130
D3-NMeFOSAA		93	40-135
D5-NEtFOSA		37	10-130
D5-NEtFOSAA		77	40-150
D7-NMeFOSE		52	20-130
D9-NEtFOSE		51	15-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: ZQ16789-001
Batch: 16789
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 08/23/2024 1010

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
7:3FTCA	4.0	U	1	5.0	4.0	1.7	ng/g	08/27/2024 1437

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		84	40-165
13C2-6:2FTS		77	40-215
13C2-8:2FTS		76	40-275
13C2-PFDoA		84	40-130
13C2-PFTeDA		81	20-130
13C3-HFPO-DA		89	40-130
13C3-PFBS		83	40-135
13C3-PFHxS		83	40-130
13C4-PFBA		91	8-130
13C4-PFHpA		90	40-130
13C5-PFHxA		95	40-130
13C5-PFPeA		91	35-130
13C6-PFDA		94	40-130
13C7-PFUnA		89	40-130
13C8-PFOA		102	40-130
13C8-PFOS		89	40-130
13C8-PFOSA		67	40-130
13C9-PFNA		88	40-130
D3-NMeFOSA		41	10-130
D3-NMeFOSAA		87	40-135
D5-NEtFOSA		41	10-130
D5-NEtFOSAA		80	40-150
D7-NMeFOSE		51	20-130
D9-NEtFOSE		52	15-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: ZQ16789-002
Batch: 16789
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 08/23/2024 1010

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
7:3FTCA	60	49		1	81	60-150	08/27/2024 1447

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		88	40-165
13C2-6:2FTS	M-03	87	40-215
13C2-8:2FTS		82	40-275
13C2-PFDoA		85	40-130
13C2-PFTeDA		78	20-130
13C3-HFPO-DA		91	40-130
13C3-PFBS		98	40-135
13C3-PFHxS		97	40-130
13C4-PFBA		93	8-130
13C4-PFHpA		91	40-130
13C5-PFHxA		93	40-130
13C5-PFPeA		94	35-130
13C6-PFDA		86	40-130
13C7-PFUnA		85	40-130
13C8-PFOA		96	40-130
13C8-PFOS		89	40-130
13C8-PFOSA		69	40-130
13C9-PFNA		92	40-130
D3-NMeFOSA		41	10-130
D3-NMeFOSAA		85	40-135
D5-NEtFOSA		40	10-130
D5-NEtFOSAA		80	40-150
D7-NMeFOSE		48	20-130
D9-NEtFOSE		48	15-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: ZQ16789-102
Batch: 16789
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 08/23/2024 1010

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
7:3FTCA	5.0	4.0		1	80	60-150	08/27/2024 1456

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		89	40-165
13C2-6:2FTS		85	40-215
13C2-8:2FTS		81	40-275
13C2-PFDoA		86	40-130
13C2-PFTeDA		85	20-130
13C3-HFPO-DA		89	40-130
13C3-PFBS		87	40-135
13C3-PFHxS		76	40-130
13C4-PFBA		95	8-130
13C4-PFHpA		89	40-130
13C5-PFHxA		86	40-130
13C5-PFPeA		89	35-130
13C6-PFDA		88	40-130
13C7-PFUnA		91	40-130
13C8-PFOA		90	40-130
13C8-PFOS		89	40-130
13C8-PFOSA		74	40-130
13C9-PFNA		85	40-130
D3-NMeFOSA		44	10-130
D3-NMeFOSAA		93	40-135
D5-NEtFOSA		45	10-130
D5-NEtFOSAA		73	40-150
D7-NMeFOSE		54	20-130
D9-NEtFOSE		53	15-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Manual Integration Summary

Arcadis U.S., Inc.

Lot Number: ZG18021

Project Name: Eielson AFB

Project Number: 30167435.05

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	ZG18021-001	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	ZQ16170-102	1	Hexafluoropropylene oxide dimer acid	M-03
1633	ZQ16170-102	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	ZQ16170-102	1	N-ethyl	M-03
1633	ZQ16170-002	1	N-methyl	M-03
1633	ZQ16170-102	1	N-methyl	M-03
1633	ZQ16170-102	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	ZQ16170-102	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	ZQ16170-102	1	Perfluorodecanesulfonic acid (PFDS)	M-03
1633	ZQ16170-102	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	ZQ16170-001	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	ZQ16170-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	ZQ16170-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	ZQ16170-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	ZQ16170-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	ZQ16170-102	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	ZQ16170-102	1	3-Perfluoropropyl propanoic acid	M-03
1633	ZQ16170-102	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	ZQ16170-001	1	13C2-4:2FTS	M-03
1633	ZQ16789-002	1	13C2-6:2FTS	M-03

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

Chain of Custody
and
Miscellaneous Documents

ARCADIS

Updated at: 7/16/2024 5:35:53 PM

ELECTRONIC CHAIN OF CUSTODY

Page 1 of 1

ZG18021

Send Results To:

Invoice Information:

Discovery Order CDC number: 238632254600

Contact Name: Jill Matthews | Company Name: | Analytic | Invoice Contact Name: Ali Nicholson | Invoice Company Name: AECOM

Email Address: Analytic.matthews@arcadis.com | Telephone: 206-419-6730 | Invoice Contact Email: nicholson.ali@gmail.com | Profile number: [illegible] | Record ID: 91435309-0000-4612-a4cc-d8f3f0f9f441

Project Name/Location (City, State): Eielson AFB Bldg 750 PFAS | Project #: [illegible] - ARCADIS Quality Control Sample - Eielson AFB PFAS

Parameter Analysis & Method

Note: All the sections/fields that are with an asterisk (*) are mandatory and must be completed. Incomplete information may result in delay in sample analysis.

Sampler's Printed Name: Nelson-Rigg | Sampler Signature:

Sample ID	Collection Date	Collection Time	Type ✓ Composite	Type ✓ Grab	Matrix	Number of containers submitted									R
SIDAV-007-4071524	7/15/2024	8:00	☒	☐	Soil	1									

Special Instructions for Lab Use:

☐ Special SMOC Instructions*:

Customer Remarks/Special Conditions/Possible Hazards:

Laboratory Information and Receipt

Lab Name/Pace Lab Sample (PLS):

☒ Cooler present/intact (Y):

Sample Receipt:

Custody Tamper:

Shipping Tracking #:

Relinquished By: [illegible] | Printed Name: Nelson Rigg | Signature: [illegible] | Firm: AECOM | Date/Time: 7-12-24 @ 1200

Received By: [illegible] | Printed Name: Courtney Rankin | Signature: [illegible] | Firm: [illegible] | Date/Time: 7/16/24 0945

Distribution: WHITE – Laboratory returns with results | YELLOW – Laboratory | PINK – Retained by Arcadis

2072020 Collection Form (SOP 2016)

ZG18021

DCff_Title: ENV-FRM-WCOL-0286 v02_Samples Receipt Checklist (SRC)
Effective Date: 8/2/2022

Sample Receipt Checklist (SRC)

Client: Arcadis Cooler Inspected by/date: CDR / 7/18/24 Lot #:

Means of receipt: ☐ Pace ☐ Client ☐ UPS ☑ FedEx ☐ Other: _____

☑ Yes	☐ No		1. Were custody seals present on the cooler?
☑ Yes	☐ No	☐ NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 24-0165

4.7 / 4.7 °C NA / NA °C NA / NA °C NA / NA °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: _____ IR Gun Correction Factor: _____ °C

Method of coolant: ☒ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☑ Yes	☐ No	☐ NA	3. Were all coolers received at or below 6.0°C? If no, was Project Manager notified? PM was Notified by: phone / email / face-to-face (circle one).
☑ Yes	☐ No	☐ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC and all sample containers?
☑ Yes	☐ No		7. Was collection date & time listed on the COC and all sample containers?
☑ Yes	☐ No		8. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		9. Were tests to be performed listed on the COC?
☑ Yes	☐ No		10. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? _____
☑ Yes	☐ No		11. Was adequate sample volume available?
☑ Yes	☐ No		12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☑ Yes	☐ No		13. Were all samples containers accounted for? (No missing/excess)
☐ Yes	☐ No	☒ NA	14. Were VOA, 8015C and RSK-175 samples free of bubbles >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☒ NA	15. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☒ NA	16. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☒ NA	17. Were all applicable NH_3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
☒ Yes	☐ No	☐ NA	18. Was the quote number listed on the container label? If yes, Quote # NA 25048

CDR 7/18/24

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA. Time of preservation NA. If more than one preservative is needed, please note in the comments below.

Sample(s) NA were received with bubbles >6 mm in diameter.

Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Unique ID: NA.

Comments:

ANALYTICAL REPORT

August 08, 2024

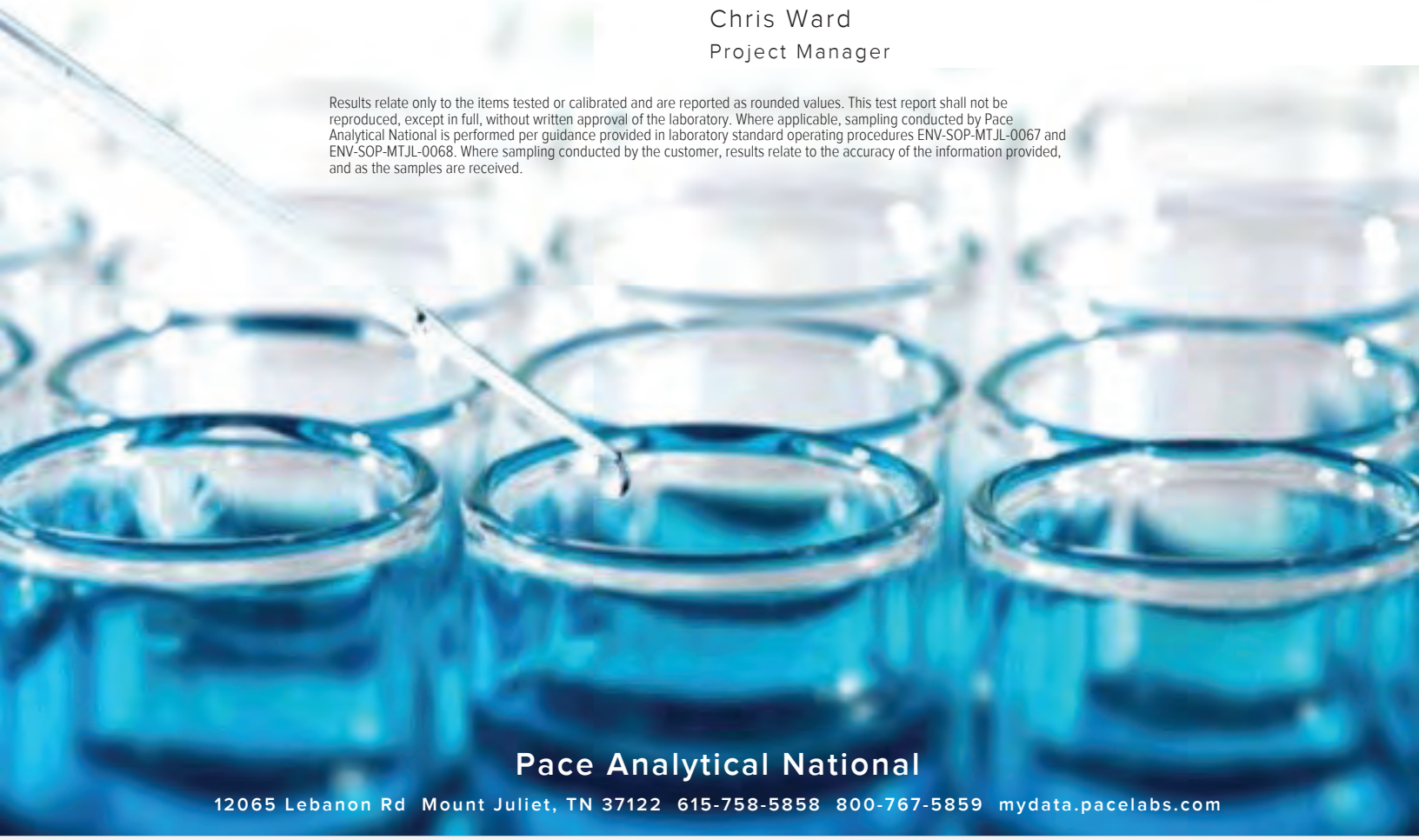
ARCADIS US - Highlands Ranch, CO

Sample Delivery Group:	L1758077
Samples Received:	07/18/2024
Project Number:	30167435
Description:	AFCEC/USACE Alaska Eielson AFB PFAS
Site:	EIELSON AFB DGI-PSC
Report To:	Ali Marchioni 630 Plaza Drive Suite 100 Highlands Ranch, CO 80129-2379

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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SAMPLE SUMMARY

SIDW-001-071524 L1758077-01 Waste

Collected by: Nathan Hager
Collected date/time: 07/15/24 08:00
Received date/time: 07/18/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG2328065	1	07/23/24 11:10	07/23/24 11:10	BTP	Mt. Juliet, TN
Preparation by Method 1311	WG2328066	1	07/23/24 15:22	07/23/24 15:22	JWS	Mt. Juliet, TN
Wet Chemistry by Method 9012 B	WG2327311	1	07/21/24 16:17	07/22/24 20:51	AEC	Mt. Juliet, TN
Wet Chemistry by Method 9034-9030B	WG2327354	1	07/19/24 23:26	07/21/24 13:00	SJA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2326453	1	07/19/24 16:24	07/20/24 09:11	KA	Mt. Juliet, TN
Wet Chemistry by Method D93/1010A	WG2327347	1	07/23/24 12:57	07/23/24 12:57	CAH	Mt. Juliet, TN
Mercury by Method 7470A	WG2329247	1	07/24/24 13:01	07/24/24 20:40	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2329333	1	07/25/24 02:17	08/06/24 17:15	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2329149	1	07/25/24 06:02	07/25/24 06:02	GMV	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris Ward
Project Manager

Project Narrative

All Reactive Cyanide results reported in the attached report were determined as totals using method 9012 B.
All Reactive Sulfide results reported in the attached report were determined as totals using method 9034-9030B.

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		7/23/2024 3:22:36 PM	WG2328066
TCLP ZHE Extraction	-		7/23/2024 11:10:29 AM	WG2328065
Initial pH	8.99		7/23/2024 3:22:36 PM	WG2328066
Final pH	4.84		7/23/2024 3:22:36 PM	WG2328066

Wet Chemistry by Method 9012 B

Analyte	Result mg/kg	Qualifier	LOQ mg/kg	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND		0.300	1	07/22/2024 20:51	WG2327311

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/kg	Qualifier	LOQ mg/kg	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		75.0	1	07/21/2024 13:00	WG2327354

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.73	T8	1	07/20/2024 09:11	WG2326453

Sample Narrative:

L1758077-01 WG2326453: 7.73 at 21.1C

Wet Chemistry by Method D93/1010A

Analyte	Result Deg. F	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170		1	07/23/2024 12:57	WG2327347

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	07/24/2024 20:40	WG2329247

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.0200		1	08/06/2024 17:15	WG2329333
Barium	0.346		0.0500		1	08/06/2024 17:15	WG2329333
Cadmium	ND		0.0100		1	08/06/2024 17:15	WG2329333
Chromium	ND		0.0300		1	08/06/2024 17:15	WG2329333
Lead	ND		0.0200		1	08/06/2024 17:15	WG2329333
Selenium	ND		0.0200		1	08/06/2024 17:15	WG2329333
Silver	ND		0.0200		1	08/06/2024 17:15	WG2329333

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.0500	0.50	1	07/25/2024 06:02	WG2329149
Carbon tetrachloride	ND		0.0500	0.50	1	07/25/2024 06:02	WG2329149
Chlorobenzene	ND		0.0500	100	1	07/25/2024 06:02	WG2329149
Chloroform	ND		0.250	6	1	07/25/2024 06:02	WG2329149
1,2-Dichloroethane	ND		0.0500	0.50	1	07/25/2024 06:02	WG2329149

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.0500	0.70	1	07/25/2024 06:02	WG2329149
2-Butanone (MEK)	ND		0.500	200	1	07/25/2024 06:02	WG2329149
Tetrachloroethene	ND		0.0500	0.70	1	07/25/2024 06:02	WG2329149
Trichloroethene	ND		0.0500	0.50	1	07/25/2024 06:02	WG2329149
Vinyl chloride	ND		0.0500	0.20	1	07/25/2024 06:02	WG2329149
(S) Toluene-d8	*112*		*89.0-112*			*07/25/2024 06:02*	WG2329149
(S) 4-Bromofluorobenzene	*117*	J1	*85.0-114*			*07/25/2024 06:02*	WG2329149
(S) 1,2-Dichloroethane-d4	*110*		*81.0-118*			*07/25/2024 06:02*	WG2329149

Method Blank (MB)

(MB) R4097001-1 07/22/24 20:11

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
Reactive Cyanide	0.150	U	0.0733	0.150	0.300

L1757916-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1757916-06 07/22/24 20:24 • (DUP) R4097001-3 07/22/24 20:28

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Reactive Cyanide	ND	ND	1	0.000		20

L1758031-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1758031-01 07/22/24 20:40 • (DUP) R4097001-6 07/22/24 20:41

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Reactive Cyanide	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4097001-2 07/22/24 20:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Reactive Cyanide	2.50	2.64	106	76.0-120	

L1757916-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1757916-10 07/22/24 20:34 • (MS) R4097001-4 07/22/24 20:35 • (MSD) R4097001-5 07/22/24 20:37

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Reactive Cyanide	1.67	ND	1.71	1.66	103	99.7	1	76.0-120			2.96	20

Method Blank (MB)

(MB) R4096522-1 07/21/24 13:00

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
Reactive Sulfide	37.5	U	30.0	37.5	75.0

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4096522-2 07/21/24 13:00 • (LCSD) R4096522-3 07/21/24 13:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Reactive Sulfide	100	59.9	55.8	59.9	55.8	53.8-124			7.00	20

L1758069-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1758069-02 07/20/24 09:11 • (DUP) R4096296-2 07/20/24 09:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	10.3	10.2	1	0.488		1

Sample Narrative:

OS: 10.27 at 22.3C

DUP: 10.22 at 21.6C

L1758072-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1758072-05 07/20/24 09:11 • (DUP) R4096296-3 07/20/24 09:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	6.81	6.84	1	0.440		1

Sample Narrative:

OS: 6.81 at 21.3C

DUP: 6.84 at 21C

Laboratory Control Sample (LCS)

(LCS) R4096296-1 07/20/24 09:11

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10 at 21.7C

L1758061-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1758061-01 07/23/24 12:57 • (DUP) R4097253-3 07/23/24 12:57

Analyte	Original Result Deg. F	DUP Result Deg. F	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ignitability	76.6	78.6	1	2.58		10

L1758061-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1758061-03 07/23/24 12:57 • (DUP) R4097253-4 07/23/24 12:57

Analyte	Original Result Deg. F	DUP Result Deg. F	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ignitability	98.6	94.6	1	4.14		10

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4097253-1 07/23/24 12:57 • (LCSD) R4097253-2 07/23/24 12:57

Analyte	Spike Amount Deg. F	LCS Result Deg. F	LCSD Result Deg. F	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ignitability	126	127	125	100	98.9	96.0-104			1.59	10

QUALITY CONTROL SUMMARY

L1758077-01

Method Blank (MB)

(MB) R4098112-1 07/24/24 19:54

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Mercury	0.00500	U	0.00333	0.00500	0.0100

Laboratory Control Sample (LCS)

(LCS) R4098112-2 07/24/24 20:02

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.0300	0.0270	89.9	82.0-119	

L1758058-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1758058-02 07/24/24 20:05 • (MS) R4098112-4 07/24/24 20:10 • (MSD) R4098112-5 07/24/24 20:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0257	0.0289	85.6	96.4	1	82.0-119			11.9	20

Method Blank (MB)

(MB) R4103381-1 08/06/24 17:08

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Arsenic	0.0100	U	0.00250	0.0100	0.0200
Barium	0.0250	U	0.00360	0.0250	0.0500
Cadmium	0.00500	U	0.00160	0.00500	0.0100
Chromium	0.0150	U	0.00540	0.0150	0.0300
Lead	0.0100	U	0.00240	0.0100	0.0200
Selenium	0.0100	U	0.00380	0.0100	0.0200
Silver	0.0100	U	0.00310	0.0100	0.0200

Laboratory Control Sample (LCS)

(LCS) R4103381-2 08/06/24 17:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	0.500	0.541	108	80.0-120	
Barium	0.500	0.518	104	80.0-120	
Cadmium	0.500	0.548	110	80.0-120	
Chromium	0.500	0.540	108	80.0-120	
Lead	0.500	0.504	101	80.0-120	
Selenium	0.500	0.495	99.1	80.0-120	
Silver	0.500	0.506	101	80.0-120	

L1758077-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1758077-01 08/06/24 17:15 • (MS) R4103381-4 08/06/24 17:22 • (MSD) R4103381-5 08/06/24 17:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.500	ND	0.533	0.529	106	105	1	75.0-125			0.794	20
Barium	0.500	0.346	0.737	0.844	78.2	99.6	1	75.0-125			13.5	20
Cadmium	0.500	ND	0.540	0.535	108	107	1	75.0-125			0.940	20
Chromium	0.500	ND	0.542	0.532	108	106	1	75.0-125			1.89	20
Lead	0.500	ND	0.504	0.509	100	101	1	75.0-125			0.944	20
Selenium	0.500	ND	0.510	0.527	102	105	1	75.0-125			3.23	20
Silver	0.500	ND	0.498	0.497	99.6	99.5	1	75.0-125			0.163	20

Method Blank (MB)

(MB) R4098312-3 07/24/24 23:30

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Benzene	0.0250	U	0.0167	0.0250	0.0500
Carbon tetrachloride	0.0250	U	0.0167	0.0250	0.0500
Chlorobenzene	0.0250	U	0.0167	0.0250	0.0500
Chloroform	0.125	U	0.0833	0.125	0.250
1,2-Dichloroethane	0.0250	U	0.0167	0.0250	0.0500
1,1-Dichloroethene	0.0250	U	0.0167	0.0250	0.0500
2-Butanone (MEK)	0.250	U	0.167	0.250	0.500
Tetrachloroethene	0.0250	U	0.0167	0.0250	0.0500
Trichloroethene	0.0250	U	0.0167	0.0250	0.0500
Vinyl chloride	0.0250	U	0.0167	0.0250	0.0500
(S) Toluene-d8	*111*				*89.0-112*
(S) 4-Bromofluorobenzene	*119*	J1			*85.0-114*
(S) 1,2-Dichloroethane-d4	*103*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4098312-1 07/24/24 21:54 • (LCSD) R4098312-2 07/24/24 22:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.250	0.254	0.245	102	98.0	79.0-120			3.61	20
Carbon tetrachloride	0.250	0.255	0.240	102	96.0	72.0-136			6.06	20
Chlorobenzene	0.250	0.240	0.233	96.0	93.2	82.0-118			2.96	20
Chloroform	0.250	0.257	0.251	103	100	79.0-124			2.36	20
1,2-Dichloroethane	0.250	0.278	0.272	111	109	73.0-128			2.18	20
1,1-Dichloroethene	0.250	0.247	0.236	98.8	94.4	71.0-131			4.55	20
2-Butanone (MEK)	1.25	1.39	1.37	111	110	56.0-143			1.45	20
Tetrachloroethene	0.250	0.266	0.246	106	98.4	74.0-129			7.81	20
Trichloroethene	0.250	0.272	0.259	109	104	79.0-123			4.90	20
Vinyl chloride	0.250	0.244	0.249	97.6	99.6	58.0-137			2.03	20
(S) Toluene-d8				*104*	*103*	*89.0-112*				
(S) 4-Bromofluorobenzene				*113*	*115*	*85.0-114*		J1		
(S) 1,2-Dichloroethane-d4				*106*	*106*	*81.0-118*				

L1757931-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1757931-02 07/25/24 02:24 • (MS) R4098312-4 07/25/24 07:29 • (MSD) R4098312-5 07/25/24 07:51

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.250	ND	0.236	0.282	94.4	113	1	79.0-120			17.8	20
Carbon tetrachloride	0.250	ND	0.244	0.290	97.6	116	1	72.0-136			17.2	20
Chlorobenzene	0.250	ND	0.244	0.288	97.6	115	1	82.0-118			16.5	20
Chloroform	0.250	ND	ND	0.289	96.0	116	1	79.0-124			18.5	20
1,2-Dichloroethane	0.250	ND	0.258	0.307	103	123	1	73.0-128			17.3	20
1,1-Dichloroethene	0.250	ND	0.239	0.281	95.6	112	1	71.0-131			16.2	20
2-Butanone (MEK)	1.25	ND	1.31	1.55	105	124	1	56.0-143			16.8	20
Tetrachloroethene	0.250	ND	0.269	0.323	108	129	1	74.0-129			18.2	20
Trichloroethene	0.250	ND	0.250	0.301	100	120	1	79.0-123			18.5	20
Vinyl chloride	0.250	ND	0.240	0.290	96.0	116	1	58.0-137			18.9	20
(S) Toluene-d8					*109*	*107*		*89.0-112*				
(S) 4-Bromofluorobenzene					*113*	*111*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*103*	*106*		*81.0-118*				

L1758104-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1758104-02 07/25/24 02:02 • (MS) R4098312-6 07/25/24 08:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Benzene	0.250	1.59	1.89	120	1	79.0-120	
Carbon tetrachloride	0.250	ND	0.290	116	1	72.0-136	
Chlorobenzene	0.250	ND	0.288	115	1	82.0-118	
Chloroform	0.250	ND	0.280	112	1	79.0-124	
1,2-Dichloroethane	0.250	ND	0.300	120	1	73.0-128	
1,1-Dichloroethene	0.250	ND	0.300	120	1	71.0-131	
2-Butanone (MEK)	1.25	ND	1.61	129	1	56.0-143	
Tetrachloroethene	0.250	ND	0.324	130	1	74.0-129	J5
Trichloroethene	0.250	ND	0.556	222	1	79.0-123	J5
Vinyl chloride	0.250	ND	0.291	116	1	58.0-137	
(S) Toluene-d8				*109*		*89.0-112*	
(S) 4-Bromofluorobenzene				*115*		*85.0-114*	J1
(S) 1,2-Dichloroethane-d4				*104*		*81.0-118*	

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

DL	Detection Limit.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
ND	Not detected at the Reporting Limit (or DL where applicable).
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
T8	Sample(s) received past/too close to holding time expiration.
U	Below Detectable Limits: Indicates that the analyte was not detected.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

ELECTRONIC CHAIN OF CUSTODY

ARCADIS

Updated at: 7/12/2024 5:36:21 PM

Send Results To:		Invoice Information		Document Online COC number: 1720627861584
Contact Name: Ali Marchioni	**Company Name:** Arcadis	**Invoice Contact Name:** Ali Marchioni	**Invoice Company Name:** Arcadis	
Email Address: Alondra.marchioni@arcadis.com	**Telephone:** 206-413-6480	**Invoice Contact Email:** Invoices_us@arcadis.com	**Profile number:** PO#US3460011745	**Record ID:** 069d1182-0f2c-45ca-a399-6f0c9dec3075
Project Name/Location (City, State): Eielson AFB DGI-PSC	**Project #:** 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS	**Parameter Analysis & Method** Note: All the constituents that are Filtered are designated with a (✓) in the sample and constituent inform		A016
Sampler's Printed Name: Nathan Hager	**Sampler Signature:**			

Sample ID	Collection		Type ✓		Matrix	Ignitability (USEPA 1010), Corrosivity-pH (USEPA 9045), Reactivity, cyanide.	TCLP VOCs 1311/8260 and RCRA8 6020 1L Glass Jar								L1758077 Remarks
	Date	Time	Composite	Grab											
SIDW-001-071524	7/15/2024	8:00	☑	☐	Soil	1	1								-01

7411 4526 3464

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres. Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RA Screen <0.5 mR/hr:	Y N		

GOA9 .67.3.9

Special Instructions for Lab: None ☐ **Special QA/QC Instructions(✓):**

Customer Remarks/Special Conditions/Possible Hazards:

Laboratory Information and Receipt					
Lab Name:Pace Analytical Services (Non-PFAS)	Cooler Custody Seal (✓)				
☑ Cooler packed with ice (✓)	☐ Intact	☐ Not Intact			
Specify Turnaround Requirements: 10	Sample Receipt:				
Shipping Tracking #:	Condition/Cooler Temp:				
Relinquished By NATHAN HAGER	**Printed Name:** Nathan Hager	**Signature:**	**Firm:** A-A 8(a) JV	**Date/Time:** ~~7-16-24 1200~~	7-17-24 1200
Received By	**Printed Name:**	**Signature:**	**Firm:** PACE	**Date/Time:** 7-18-24 9:06	

20730826 CofC AR Form 08.27.2015 **Distribution:** WHITE – Laboratory returns with results YELLOW – Lab copy Pink - Retained by Arcadis

RBKU 200072

NON-HAZARDOUS WASTE MANIFEST

192962-KC

PO#192962-6-3404-KC

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE

GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: AK1570028646

Manifest Document No.: 192962A

2. Page 1 of 3

3. Generator's Name and Mailing Address:
US AIR FORCE, 354TH CES/CEIEC
2310 CENTRAL AVE, SUITE 100
EIELSON AFB, AK 99702-2299

US AIR FORCE, 354TH CES/CEIEC
2310 CENTRAL AVE, SUITE 100
EIELSON AFB, AK 99702-2299

4. Generator's Phone: (907) 377-4342

IN CASE OF EMERGENCY CALL
800-899-4672

5. Transporter 1 Company Name: US ECOLOGY

6. US EPA ID Number: MIK593743838

A. State Transporter's ID

B. Transporter 1 Phone: 734-521-8104

7. Transporter 2 Company Name: ALASKA RAILROAD CORPORATION

8. US EPA ID Number: AKD981767403

C. State Transporter's ID

D. Transporter 2 Phone: (907) 265-2300

9. Designated Facility Name and Site Address:
REGIONAL DISPOSAL COMPANY
500 ROOSEVELT GRADE RD
ROOSEVELT, WA 99356

10. US EPA ID Number: WAD988515771

E. State Facility's ID

F. Facility's Phone: (206) 391-1389

11. WASTE DESCRIPTION	HM	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Material Not Regulated by DOT		1	CM	40000	P
b.					
c.					
d.					

G. Additional Descriptions for Materials Listed Above
1) 41782413845 PFAS CONTAMINATED SOIL
RBKU 200072

H. Handling Codes for Wastes Listed Above
D58044

15. Special Handling Instructions and Additional Information
Shipper's Certification: This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
Enzo Focheso Otto		10 03 24

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Colin Sailor		10 07 24

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Michael White		10 10 24

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
DAVID W NIEMEYER		10 25 24

CF14 © 2002 LABELMASTER® (800) 621-5808 www.labelmaster.com

690552 TICKET 5339127 DN 10/18/24

NON-HAZARDOUS WASTE MANIFEST (Continuation Sheet)

19. Generator ID Number: AK1570028646

20. Page 2 of 3

21. Waste Tracking Number: 192962A

22. Generator's Name: US AIR FORCE 354TH CES/CEIEC
2310 CENTRAL AVE. SUITE 100
EIELSON AFB, AK 99702-2299
(907) 377-4342

23. Transporter 3 Company Name: WEAVER BROTHERS — U.S. EPA ID Number: AKD002848372

24. Transporter 4 Company Name: TOTE MARITIME ALASKA, LLC. — U.S. EPA ID Number: WAD070397955

	25. Waste Shipping Name and Description	26. Containers No.	26. Containers Type	27. Total Quantity	28. Unit Wt./Vol.	

29. Special Handling Instructions and Additional Information

GENERATOR

TRANSPORTER

30. Transporter 3 Acknowledgment of Receipt of Materials

Printed/Typed Name: [illegible] — Signature: [signature] — Month: 10 Day: 11 Year: 24

31. Transporter 4 Acknowledgment of Receipt of Materials

Printed/Typed Name: Caitlin Self — Signature: [signature] — Month: 10 Day: 11 Year: 24

DESIGNATED FACILITY

32. Discrepancy

170-BLC-O 5 11978 (Rev. 8/06) DESIGNATED FACILITY TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST (Continuation Sheet)	19. Generator ID Number AK1570028646	20. Page 3 of 3	21. Waste Tracking Number 192962A

22. Generator's Name: US AIR FORCE 354TH CES/CEIEC
2310 CENTRAL AVE. SUITE 100
EIELSON AFB, AK 99702-2299
(907) 377-4342

23. Transporter 5 Company Name: ~~US ECOLOGY~~ Brantner — U.S. EPA ID Number: ~~NKS99743838~~ WAH000160105

24. Transporter 6 Company Name: BURLINGTON NORTHERN — U.S. EPA ID Number: MND048341788

	25. Waste Shipping Name and Description	26. Containers No.	26. Containers Type	27. Total Quantity	28. Unit Wt./Vol.	

29. Special Handling Instructions and Additional Information

GENERATOR

TRANSPORTER

30. Transporter ____ Acknowledgment of Receipt of Materials
Printed/Typed Name: ~~[illegible]~~ Don Mangus — Signature: [signature] — Month 10 Day 18 Year 24

31. Transporter ____ Acknowledgment of Receipt of Materials
Printed/Typed Name: — Signature: [signature] — Month 10 Day 18 Year 24

DESIGNATED FACILITY

32. Discrepancy

CERTIFICATE OF WEIGHT

US Ecology Alaska, LLC.
A Republic Services Company
4822 Give-A-Way St
North Pole, AK 99705
(907) 488-4899

12:49 PM 10/03/24

#39625

Vendor:
Transporter:
Truck: 176US ECOLOGY
Trailer: TR#1 TR#2
Manifest/BOL #
Project:
Waste Type:

Origin

Destination

Driver ON __ OFF __

Driver's Signature

GROSS WT	58,960 lb	MAN WT	
TARE WT	36,700 lb	IN/OUT MAN WT	
NET WT	22,260 lb	11.13 Tons	

Public Scale Certified and Inspected by State of Alaska DOT & PF,MS/CVE

CERTIFICATE OF DESTRUCTION

I, Jeff Sichmeller, of Republic Services (RSI Facility), hereby certify that the entire product described in Section A has
been properly and legally disposed of in Roosevelt Regional MSW Landfill on 10/25/2024 (attach any appropriate documentation).

I understand that due to potential concerns related to such things as health, quality, and loss of goodwill, US Ecology-NRC Environmental does not want this product to be distributed to consumers, even through so called "distressed merchandise" channels of trade, and I further certify that these items were destroyed in such a manner that it cannot be sold, and that the company has taken every reasonable step to prevent resale of said items.

Name (print): Jeff Sichmeller

Signature: _____

Title: BU Finance Mgr Post Collection

Date: 12/02/2024

Section A- Products Destroyed (attached additional sheets if needed):

Waste Profile Number (if applicable): 41782413845 Job TB-13845

Description of Product	*Quantity or Weight*
Contaminated Soil	11.96/TN

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites and Prevention Preparedness and Response Programs

Contaminated Media Transport and Treatment or Disposal Approval Form

HAZARD ID # or SPILL ID #	NAME OF CONTAMINATED SITE OR SPILL	
26773 / 26997	Eielson AFB Basewide (AKA Sitewide) PFAS / Eielson AFB AFFF Area #4 Fire Training Area (FT009)	
CONTAMINATED SITE OR SPILL LOCATION – ADDRESS OR OTHER APPROPRIATE DESCRIPTION		
64.70116427370006, -147.1350420121095		
CURRENT PHYSICAL LOCATION OF MEDIA	**SOURCE OF THE CONTAMINATION (DAY TANK, FIRE TRAINING PIT, LUST, ETC.)**	
Eielson AFB, LF003 Holding Cell #1	Eielson PFAS Plume	
CONTAMINANTS OF CONCERN	**ESTIMATED VOLUME**	**DATE(S) GENERATED**
PFAS	two 55-gallon drums	8/14/2024 - 9/6/2024
POST TREATMENT ANALYSIS REQUIRED *(such as GRO, DRO, RRO, VOCs, metals, PFAS, and/or Chlorinated Solvents)*		
The waste will be landfilled according to the Grand View Facility permit and it will not be tested after disposal.		
COMMENTS OR OTHER IMPORTANT INFORMATION		
The passive flux meter (PFM) media consisted of GAC and resin beads. The PFM media was deployed in site monitoring wells and adsorbed PFAS and other dissolved contaminants from groundwater for flux assessment. The task was performed for Eielson's Data Gap Investigation and Pilot Study Construction Project for treating PFAS contaminated groundwater near the northern border of the base. Waste characterization analyses, attached, included PFAS, TCLP VOCs , TCLP RCRA Metals, Ignitability, Corrosivity-pH, Reactivity Cyanide, and Reactivity Sulfide.		

TREATMENT FACILITY, LANDFILL, AND/OR FINAL DESTINATION OF MEDIA	PHYSICAL ADDRESS/PHONE NUMBER
Republic Services Grand View Facility	20400 Lemley Rd, Grand View, ID 83624 / 800-274-1516
PARTY CONDUCTING CLEANUP	**ADDRESS/PHONE NUMBER**
Ahtna-Arcadis 8(a) Joint Venture	Will Rhodes / 907-771-4403
WASTE MANAGEMENT COMPANY	**ADDRESS/PHONE NUMBER**
Republic Services	1315 Queens Way, Fairbanks, AK 99701 / 907-328-7025

***Note, disposal of polluted soil in a landfill requires prior approval from the landfill operator and ADEC Solid Waste Program.**

Will Rhodes
Name of the Person Requesting Approval (printed)

Project Manager / Ahtna-Arcadis 8(a) JV
Title/Association

Digitally signed by William Rhodes
Date: 2024.10.25 13:35:59 -08'00'
Signature

10/25/2024
Date

907-771-4403
Phone Number

----------DEC USE ONLY----------

Based on the information provided, ADEC approves transport of the above mentioned material. The party conducting the cleanup or their consultant must submit to the DEC Project Manager a copy of weight receipts of the loads transported and a post treatment analytical report, if disposed of at an approved treatment facility. The contaminated soil shall be transported as a covered load in compliance with 18 AAC 60.015.

Axl LeVan
DEC Project Manager Name (printed)

Project Manager
Project Manager Title

Signature

Date

Phone Number

Instructions to Complete
Contaminated Media Transport and Treatment or Disposal Approval Form

The Alaska Department of Environmental Conservation (DEC) must approve the movement or disposal of contaminated soil and water from a site in accordance with 18 Alaska Administrative Code (AAC) 75.325(i), 18 AAC 75.370(b), and 18 AAC 78.274(b). The *Contaminated Media Transport and Treatment or Disposal Approval Form* should be used to document this approval. Soil treatment facilities regulated under 18 AAC 75.365 are required by their Operations Plans to only accept contaminated soil for which an approval form has been signed by a DEC project manager.

Site information can be found on the Contaminated Site Database (www.alaska.gov/Applications/SPAR/PublicMVC/CSP/Search/) or the Spills Database (http://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillSearch).

Instructions to Complete:

1. **Hazard ID or Spill ID #:** For a contaminated site, the Hazard ID can be found on the Contaminated Sites Database. For a spill, the Spill ID can be found in the subject line of letters from DEC or the Spills Database. If the waste originates from multiple sites, all Hazard IDs or Spill IDs must be listed.

2. **Name of Contaminated Site or Spill:** For a contaminated site, the official site name can be found on the Contaminated Sites Database. For a spill, the official name of the spill is found in the subject line of letters from DEC or the Spills Database.

3. **Contaminated Site or Spill Location – Address or Other Appropriate Description:** This address or description captures the origin of the contaminated media or the location of the spill. For a contaminated site, the address or other appropriate description can be found on the Contaminated Sites Database. For a spill, this can be found on the Spill Report or the Spills Database.

4. **Current Physical Location of the Media:** Provide the physical location where the contaminated media (soil, water, etc.) is currently stored. This location may be the same as location provided in the "Contaminated Site or Spill Location", or it could be a hazardous waste facility or other location/staging area agreed upon in the DEC-approved work plan.

5. **Source of Contamination (Day Tank, Fire Training Pit, LUST, etc.):** List all sources which contributed to the contamination in the media being transported. Sources can include previous releases that have comingled. If the source is unknown, state "Unknown".

6. **Contaminants of Concern (CoCs):** List all contaminants detected above the most stringent Method 2 Tables B1 and B2 soil cleanup levels in 18 AAC 75.341(c) and (d), the Table C groundwater cleanup levels in 18 AAC 75.345, and other applicable action levels (e.g., TCLP results). Attach the laboratory data package for the contaminated media that is being disposed of and, if applicable, a data summary table or narrative to this form. Data gathered during site characterization activities may be sufficient to determine the CoCs. There are situations in which generator knowledge of the contaminant source may be accepted by a treatment or disposal facility in lieu of analytical sample results, such as, diesel-impacted media from a heating oil tank. If you are using generator knowledge in lieu of analytical sample results, include a statement which documents this knowledge in the Comments section.

7. **Estimated Volume:** Include the total volume of contaminated media to be transported; for instance, “Nine 55-gallon drums” or “”25 cubic yards of soil.”

8. **Date(s) Generated:** Provide the date the media was generated (e.g., excavated, pumped out of the ground, etc.). If the media was generated over multiple days, list the range of dates.

9. **Post Treatment Analysis Required (such as GRO, DRO, RRO, VOCs, PAHs, metals, PFAS, chlorinated solvents, etc.):** Provide the list of all contaminants that exceed the most stringent Method 2 cleanup levels. For DEC-approved soil treatment facilities in Alaska, specific post treatment analyses will be determined by the facility based upon the contaminants and requirements of their Operations Plan. If the media are being transported to a landfill or permitted liquid waste facility without off-site treatment, include “Not Applicable”.

10. **Comments or Other Important Information:** Provide any other information which needs to be conveyed.
    a. If generator knowledge of the CoCs is being used in lieu of sample analytical results, an explanation needs to be provided in this field.
    b. If the material is going to be placed in a landfill in Alaska, include a statement that the landfill has agreed to accept the material and provide the contact information for the landfill point of contact. If the material is going to be placed in a Class 2 or 3 landfill, attach the DEC Solid Waste Program’s approval letter to this form.
    c. If the media is going to an intermediate location or facility prior to its final destination, describe the complete transportation route with intermediate locations in this field.

11. **Treatment Facility, Landfill, and/or Final Destination of Media:** Include the name of the facility, landfill, or the final destination of the media. A list of DEC-approved Alaskan soil treatment facilities is available at www.dec.alaska.gov/spar/csp/offsite-remediation/. If multiple treatment facilities will be used, use separate forms to document what media will go to which facility. For material that will go to a waste transfer facility prior to disposal at another facility, the final destination should be listed.
    a. **Physical Address/Phone Number:** Provide the physical location and telephone number of the facility, landfill, or the final destination of the media.

12. **Party Conducting Cleanup:** Provide the name of the entity overseeing the project, typically this is the party responsible for the spill or could be a party which has received grant funding to conduct cleanup.
    a. **Address/Phone Number:** Provide the contact information for the party conducting the cleanup.

13. **Waste Management Company:** Provide the name of company or person shipping and/or organizing the shipment of the media.
    a. **Address/Phone Number:** Provide the mailing address and telephone number of the waste management company or organizer.

Submit this completed form along with all necessary attachments to the assigned DEC project manager for approval, or contact the Contaminated Sites Program at (907) 269-7558 or the Prevention, Preparedness and Response Program at (907) 269-7557.

Report of Analysis

Arcadis U.S., Inc.
630 Plaza Drive
Suite 600
Highlands Ranch, CO 80129
Attention: Tim Bellis

Project Name: Eielson AFB

Project Number: 30167435.05

Lot Number:**ZI12018**

Date Completed:10/16/2024

Kathy Smith

10/17/2024 6:05 PM
Approved and released by:
Project Manager II: **Kathy E. Smith**

The electronic signature above is the equivalent of a handwritten signature.
This report shall not be reproduced, except in its entirety, without the written approval of Pace Analytical Services, LLC.

Pace Analytical Services, LLC (*formerly Shealy Environmental Services, Inc.*)
106 Vantage Point Drive West Columbia, SC 29172
Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

Case Narrative
Arcadis U.S., Inc.
Lot Number: ZI12018

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.
Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Additionally, the DoD QSM version 5.4 has been followed for these samples, and specifically Table B-24 was followed for all PFAS samples. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs, the DoD QSM, or policies are qualified on the results page or discussed below.

All QC associated with these samples were compliant with DOD QSM 5.4 table B-24 and our PFAS SOP. Correction factors (CF) are used to calculate the original sample concentration. The CF is the inverse of the concentration factor (sample volume / extract final volume) times the dilution factor (DF). The CF is calculated as follows:

For solid samples:
CF = DF * FV / Ws/S/1000
FV is volume of extract (mL)
Ws is initial sample weight (gram)
S is %Solids
DF is dilution factor. For undiluted analysis, DF = 1.

Concentration (ug/kg) = Cs*CF,

$$C_s = \frac{\left(\frac{(A_s x C_{is})}{A_{is}}\right) - B}{M1}$$

Where

C_s is on column concentration of target analyte in the sample (ng/L)
C_{is} is concentration of internal standard in the sample (ng/L)
A_s is peak response of target analyte in the sample
A_{is} is peak response of internal standard in the sample
M1 is the average RF from ICAL or the slope from linear regression ICAL
B is the y-intercept from the ICAL

Pace is a DoD/DOE accredited laboratory; however, the following analyses are currently not listed on our DoD/DOE scope of accreditation: Drinking Water: pH EPA 150.1, Turbidity EPA 180.1, Metals EPA 200.7 & 200.8, Mercury EPA 245.1, Anions EPA 300.0, Cyanide EPA 335.4, Nitrates EPA 353.2, Orthophosphate & Phosphorus EPA 365.1, EDB/DBCP EPA 504.1, HPC SIMPLATE, Color SM 2120 B-2011, Alkalinity SM 2320 B-2011, Specific Conductance SM 2510 B-2011, Residue-filterable (TDS) SM 2540 C, Calcium Hardness (CaCO2) SM 3500-Ca B-2011, TRC SM 4500 Cl G-2011, pH SM 4500 H=B-2011, E.Coli, Total Coliform. Non-Potable Water: Metals EPA 200.7, Strontium EPA 200.8, Chlorate EPA

300.0, Cyanide EPA 335.4, Phenolics EPA 420.4, 2-Methyl-4,6-Dinitrophenol EPA 625.1, Propane RSK-175, Specific Conductance SM 2510 B-2011, Salinity SM2520 B, Residue- total SM 2540 B, Sulfite SM 4500 SO32- B-2011, Amenable Cyanide SM 4500-CN- G-2011, BOD & CBOD SM 5210 B, MBAS SM 5540 C-2011, Boron & Titanium SW-846 6010D, Boron, Molybdenum, & Titanium SW-846 6020B, Alcohols & Glycols SW-846 8015C, Pentachlorophenol SW-846 8151A, Ethyl Acetate, Hexane, & n-Hexane SW-846 8260D, SVOC 1,4-Dioxane, 4-Dimethyl aminoazobenzene, 1,4-Naphthoquinone, 3,5-Dinitroaniline, PETN SW-846 8270E, Amenable Cyanide SW-846 9012B. Solid and Chemical Materials: Boron & Titanium SW-846 6010D, Molybdenum SW-846 6020B, Ethylene Glycol SW-846 8015B, Pentachlorophenol SW-846 8151A, Chloroprene SW-846 8260B, SVOC 1,4-Dioxane, 1,3,5-Trinitrobenzene, 1,4- Naphthoquinone, 1,4-Phenylenediamine, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Dimethyl aminoazobenzene, 4-Nitroquinoline-1-oxide, 7,12-Dimethylbenzo(a)anthracene, Chlorobenzilate, Diallate, Ethyl methanesulfonate, Isodrin, Isosafrole, Methyl methanesulfonate, n-Nitrosomethylethylamine, n-Nitrosomorpholine, n-Nitrosopiperidine, Piperonyl butoxide, Pronamide, Safrole, 3,5- Dinitroaniline, PETN SW-846 8270E, Oil & Grease SW-846 9071B.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation: E. coli and Total coliforms SM 9223 B-2004, Solid Chemical Material: TOC Walkley-Black, Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Fecal Coliform Colilert-18. Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

Manual integration summaries are provided at the end of this report when applicable.

PFAS
The method blank associated with batch 18915 had PFOSA detected at a concentration that was above the MDL but below the PQL. All samples associated with this method blank that have detections for PFOSA have been flagged with a "B".

Sample Summary
Arcadis U.S., Inc.
Lot Number: ZI12018
Project Name: Eielson AFB
Project Number: 30167435.05

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	FMIDW-001-090624	Solid	09/06/2024 1700	09/11/2024

(1 sample)

Detection Summary

Arcadis U.S., Inc.

Lot Number: ZI12018

Project Name: Eielson AFB

Project Number: 30167435.05

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	FMIDW-001-090624	Solid	% Solids	%Solids SOP-	53.7		%	6
001	FMIDW-001-090624	Solid	8:2FTS	1633	2.4	JM-03	ng/g	7
001	FMIDW-001-090624	Solid	6:2FTS	1633	27		ng/g	7
001	FMIDW-001-090624	Solid	NEtFOSAA	1633	1.1	JM-03	ng/g	7
001	FMIDW-001-090624	Solid	NMeFOSAA	1633	1.0	JM-03	ng/g	7
001	FMIDW-001-090624	Solid	PFBS	1633	1.3	JM-03	ng/g	7
001	FMIDW-001-090624	Solid	PFHpS	1633	1.5	J	ng/g	7
001	FMIDW-001-090624	Solid	PFHpA	1633	3.1		ng/g	7
001	FMIDW-001-090624	Solid	PFHxS	1633	23	M-03	ng/g	7
001	FMIDW-001-090624	Solid	PFHxA	1633	7.8		ng/g	7
001	FMIDW-001-090624	Solid	PFNA	1633	1.3	JM-03	ng/g	7
001	FMIDW-001-090624	Solid	PFOSA	1633	0.68	BJM-03	ng/g	7
001	FMIDW-001-090624	Solid	PFOS	1633	120	M-03	ng/g	7
001	FMIDW-001-090624	Solid	PFOA	1633	8.5		ng/g	7
001	FMIDW-001-090624	Solid	PFPeS	1633	2.0	M-03	ng/g	7
001	FMIDW-001-090624	Solid	PFPeA	1633	4.1	M-03	ng/g	7
001	FMIDW-001-090624	Solid	PFTrDA	1633	0.79	JM-03	ng/g	7
001	FMIDW-001-090624	Solid	PFUnA	1633	1.0	JM-03	ng/g	7

(18 detections)

Inorganic non-metals

Client: **Arcadis U.S., Inc.**		Laboratory ID: **ZI12018-001**
Description: **FMIDW-001-090624**		Matrix: **Solid**
Date Sampled: **09/06/2024 1700**	Project Name: **Eielson AFB**	% Solids: **53.7** **09/12/2024 2209**
Date Received: **09/11/2024**	Project Number: **30167435.05**	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(% Solids)	%Solids SOP-1633	1	09/30/2024 1538	SWB		18533

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
% Solids		**%Solids SOP-16**	**53.7**					**%**	**1**

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS

Client: **Arcadis U.S., Inc.** Laboratory ID: **ZI12018-001**

Description: **FMIDW-001-090624** Matrix: **Solid**

Date Sampled: **09/06/2024 1700** Project Name: **Eielson AFB** % Solids: **53.7** **09/12/2024 2209**

Date Received: **09/11/2024** Project Number: **30167435.05**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	10/12/2024 1340	BWS	10/09/2024 0845	18915

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	1633	7.6	U	8.0	7.6	2.3	ng/g	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	1633	7.5	U	10	7.5	3.3	ng/g	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	1633	7.6	U	8.0	7.6	2.5	ng/g	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	**39108-34-4**	**1633**	**2.4**	**JM-03**	**8.0**	**3.1**	**0.82**	**ng/g**	**1**
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1633	3.0	U	8.0	3.0	0.98	ng/g	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	**27619-97-2**	**1633**	**27**		**8.0**	**6.1**	**1.7**	**ng/g**	**1**
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1633	40	U	50	40	14	ng/g	1
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	1633	8.0	U	10	8.0	3.2	ng/g	1
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	4151-50-2	1633	0.80	U	2.0	0.80	0.34	ng/g	1
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	**2991-50-6**	**1633**	**1.1**	**JM-03**	**2.0**	**1.6**	**0.44**	**ng/g**	**1**
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1633	8.0	U	20	8.0	2.9	ng/g	1
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1633	0.40	U	2.0	0.40	0.15	ng/g	1
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	**2355-31-9**	**1633**	**1.0**	**JM-03**	**2.0**	**0.80**	**0.40**	**ng/g**	**1**
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1633	8.0	U	20	8.0	2.1	ng/g	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	1633	8.0	U	10	8.0	3.5	ng/g	1
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	1633	2.8	U	4.0	2.8	1.2	ng/g	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1633	3.2	U	4.0	3.2	1.2	ng/g	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1633	3.2	U	4.0	3.2	1.1	ng/g	1
Perfluorobutanesulfonic acid (PFBS)	**375-73-5**	**1633**	**1.3**	**JM-03**	**2.0**	**0.71**	**0.21**	**ng/g**	**1**
Perfluorobutanoic acid (PFBA)	375-22-4	1633	3.2	U	8.0	3.2	1.0	ng/g	1
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1633	0.77	U	2.0	0.77	0.30	ng/g	1
Perfluorodecanoic acid (PFDA)	335-76-2	1633	0.80	U	2.0	0.80	0.29	ng/g	1
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	1633	0.78	U	2.0	0.78	0.24	ng/g	1
Perfluorododecanoic acid (PFDoA)	307-55-1	1633	0.80	U	2.0	0.80	0.32	ng/g	1
Perfluoroheptanesulfonic acid (PFHpS)	**375-92-8**	**1633**	**1.5**	**J**	**2.0**	**0.76**	**0.33**	**ng/g**	**1**
Perfluoroheptanoic acid (PFHpA)	**375-85-9**	**1633**	**3.1**		**2.0**	**0.80**	**0.25**	**ng/g**	**1**
3-Perfluoroheptyl propanoic acid (7:3FTCA)	812-70-4	1633	40	U	50	40	17	ng/g	1
Perfluorohexanesulfonic acid (PFHxS)	**355-46-4**	**1633**	**23**	**M-03**	**2.0**	**0.73**	**0.20**	**ng/g**	**1**
Perfluorohexanoic acid (PFHxA)	**307-24-4**	**1633**	**7.8**		**2.0**	**0.80**	**0.25**	**ng/g**	**1**
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1633	0.77	U	2.0	0.77	0.25	ng/g	1
Perfluorononanoic acid (PFNA)	**375-95-1**	**1633**	**1.3**	**JM-03**	**2.0**	**0.80**	**0.26**	**ng/g**	**1**
Perfluorooctanesulfonamide (PFOSA)	**754-91-6**	**1633**	**0.68**	**BJM-03**	**2.0**	**0.40**	**0.14**	**ng/g**	**1**
Perfluorooctanesulfonic acid (PFOS)	**1763-23-1**	**1633**	**120**	**M-03**	**2.0**	**0.74**	**0.20**	**ng/g**	**1**
Perfluorooctanoic acid (PFOA)	**335-67-1**	**1633**	**8.5**		**2.0**	**0.80**	**0.29**	**ng/g**	**1**
Perfluoropentanesulfonic acid (PFPeS)	**2706-91-4**	**1633**	**2.0**	**M-03**	**2.0**	**0.75**	**0.22**	**ng/g**	**1**
Perfluoropentanoic acid (PFPeA)	**2706-90-3**	**1633**	**4.1**	**M-03**	**4.0**	**1.6**	**0.41**	**ng/g**	**1**
3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	1633	8.0	U	10	8.0	2.1	ng/g	1
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1633	0.80	U	2.0	0.80	0.29	ng/g	1
Perfluorotridecanoic acid (PFTrDA)	**72629-94-8**	**1633**	**0.79**	**JM-03**	**2.0**	**0.80**	**0.40**	**ng/g**	**1**
Perfluoroundecanoic acid (PFUnA)	**2058-94-8**	**1633**	**1.0**	**JM-03**	**2.0**	**0.80**	**0.28**	**ng/g**	**1**

LOQ = Limit of Quantitation
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
DL = Detection Limit
Q = Surrogate failure
U = Not detected at or above the LOD
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
L = LCS/LCSD failure
H = Out of holding time
W = Reported on wet weight basis
LOD = Limit of Detection
S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS

Client: **Arcadis U.S., Inc.**		Laboratory ID: **ZI12018-001**
Description: **FMIDW-001-090624**		Matrix: **Solid**
Date Sampled: **09/06/2024 1700**	Project Name: **Eielson AFB**	% Solids: **53.7** **09/12/2024 2209**
Date Received: **09/11/2024**	Project Number: **30167435.05**	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	10/12/2024 1340	BWS	10/09/2024 0845	18915

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C2-4:2FTS		79	40-165
13C2-6:2FTS		67	40-215
13C2-8:2FTS		78	40-275
13C2-PFDoA		71	40-130
13C2-PFTeDA		67	20-130
13C3-HFPO-DA		86	40-130
13C3-PFBS		83	40-135
13C3-PFHxS		82	40-130
13C4-PFBA		82	8.0-130
13C4-PFHpA		87	40-130
13C5-PFHxA		83	40-130
13C5-PFPeA		79	35-130
13C6-PFDA		80	40-130
13C7-PFUnA		74	40-130
13C8-PFOA		87	40-130
13C8-PFOS		77	40-130
13C8-PFOSA		70	40-130
13C9-PFNA		79	40-130
D3-NMeFOSA		33	10-130
D3-NMeFOSAA		72	40-135
D5-NEtFOSA		31	10-130
D5-NEtFOSAA		70	40-150
D7-NMeFOSE		48	20-130
D9-NEtFOSE		44	15-130

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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QC Summary

PFAS by LC/MS/MS - MB

Sample ID: ZQ18915-001
Batch: 18915
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 10/09/2024 0845

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
11Cl-PF3OUdS	0.76	U	1	0.80	0.76	0.23	ng/g	10/12/2024 1129
9Cl-PF3ONS	0.75	U	1	1.0	0.75	0.33	ng/g	10/12/2024 1129
ADONA	0.76	U	1	0.80	0.76	0.25	ng/g	10/12/2024 1129
8:2FTS	0.31	U	1	0.80	0.31	0.082	ng/g	10/12/2024 1129
4:2FTS	0.30	U	1	0.80	0.30	0.098	ng/g	10/12/2024 1129
6:2FTS	0.61	U	1	0.80	0.61	0.17	ng/g	10/12/2024 1129
5:3FTCA	4.0	U	1	5.0	4.0	1.4	ng/g	10/12/2024 1129
HFPO-DA	0.80	U	1	1.0	0.80	0.32	ng/g	10/12/2024 1129
NEtFOSA	0.080	U	1	0.20	0.080	0.034	ng/g	10/12/2024 1129
NEtFOSAA	0.16	U	1	0.20	0.16	0.044	ng/g	10/12/2024 1129
NEtFOSE	0.80	U	1	2.0	0.80	0.29	ng/g	10/12/2024 1129
NMeFOSA	0.040	U	1	0.20	0.040	0.015	ng/g	10/12/2024 1129
NMeFOSAA	0.080	U	1	0.20	0.080	0.040	ng/g	10/12/2024 1129
NMeFOSE	0.80	U	1	2.0	0.80	0.21	ng/g	10/12/2024 1129
NFDHA	0.80	U	1	1.0	0.80	0.35	ng/g	10/12/2024 1129
2-ethoxyethane)sulfonic acid (PFEESA	0.28	U	1	0.40	0.28	0.12	ng/g	10/12/2024 1129
PFMPA	0.32	U	1	0.40	0.32	0.12	ng/g	10/12/2024 1129
PFMBA	0.32	U	1	0.40	0.32	0.11	ng/g	10/12/2024 1129
PFBS	0.071	U	1	0.20	0.071	0.021	ng/g	10/12/2024 1129
PFBA	0.32	U	1	0.80	0.32	0.10	ng/g	10/12/2024 1129
PFDS	0.077	U	1	0.20	0.077	0.030	ng/g	10/12/2024 1129
PFDA	0.080	U	1	0.20	0.080	0.029	ng/g	10/12/2024 1129
PFDoS	0.078	U	1	0.20	0.078	0.024	ng/g	10/12/2024 1129
PFDoA	0.080	U	1	0.20	0.080	0.032	ng/g	10/12/2024 1129
PFHpS	0.076	U	1	0.20	0.076	0.033	ng/g	10/12/2024 1129
PFHpA	0.080	U	1	0.20	0.080	0.025	ng/g	10/12/2024 1129
7:3FTCA	4.0	U	1	5.0	4.0	1.7	ng/g	10/12/2024 1129
PFHxS	0.073	U	1	0.20	0.073	0.020	ng/g	10/12/2024 1129
PFHxA	0.080	U	1	0.20	0.080	0.025	ng/g	10/12/2024 1129
PFNS	0.077	U	1	0.20	0.077	0.025	ng/g	10/12/2024 1129
PFNA	0.080	U	1	0.20	0.080	0.026	ng/g	10/12/2024 1129
PFOSA	**0.047**	**J**	**1**	**0.20**	**0.040**	**0.014**	**ng/g**	**10/12/2024 1129**
PFOS	0.074	U	1	0.20	0.074	0.020	ng/g	10/12/2024 1129
PFOA	0.080	U	1	0.20	0.080	0.029	ng/g	10/12/2024 1129
PFPeS	0.075	U	1	0.20	0.075	0.022	ng/g	10/12/2024 1129
PFPeA	0.16	U	1	0.40	0.16	0.041	ng/g	10/12/2024 1129
3:3FTCA	0.80	U	1	1.0	0.80	0.21	ng/g	10/12/2024 1129
PFTeDA	0.080	U	1	0.20	0.080	0.029	ng/g	10/12/2024 1129
PFTrDA	0.080	U	1	0.20	0.080	0.040	ng/g	10/12/2024 1129
PFUnA	0.080	U	1	0.20	0.080	0.028	ng/g	10/12/2024 1129

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		83	40-165
13C2-6:2FTS		69	40-215

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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PFAS by LC/MS/MS - MB

Sample ID: ZQ18915-001
Batch: 18915
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 10/09/2024 0845

Surrogate	Q	% Rec	Acceptance Limit
13C2-8:2FTS		71	40-275
13C2-PFDoA		70	40-130
13C2-PFTeDA		73	20-130
13C3-HFPO-DA		85	40-130
13C3-PFBS		81	40-135
13C3-PFHxS		77	40-130
13C4-PFBA		84	8-130
13C4-PFHpA		86	40-130
13C5-PFHxA		90	40-130
13C5-PFPeA		86	35-130
13C6-PFDA		75	40-130
13C7-PFUnA		73	40-130
13C8-PFOA		75	40-130
13C8-PFOS		87	40-130
13C8-PFOSA		61	40-130
13C9-PFNA		75	40-130
D3-NMeFOSA		41	10-130
D3-NMeFOSAA		67	40-135
D5-NEtFOSA		40	10-130
D5-NEtFOSAA		75	40-150
D7-NMeFOSE		57	20-130
D9-NEtFOSE		55	15-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: ZQ18915-002
Batch: 18915
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 10/09/2024 0845

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
11Cl-PF3OUdS	9.1	7.6		1	84	45-160	10/12/2024 1138
9Cl-PF3ONS	9.0	8.1		1	90	70-150	10/12/2024 1138
ADONA	9.1	8.4		1	93	70-160	10/12/2024 1138
8:2FTS	9.2	8.4		1	91	70-150	10/12/2024 1138
4:2FTS	9.0	7.9		1	88	60-150	10/12/2024 1138
6:2FTS	9.1	9.6		1	105	55-200	10/12/2024 1138
5:3FTCA	60	42		1	70	60-130	10/12/2024 1138
HFPO-DA	9.6	9.0		1	93	70-145	10/12/2024 1138
NEtFOSA	2.4	2.3		1	95	70-140	10/12/2024 1138
NEtFOSAA	2.4	2.2	M-03	1	93	65-165	10/12/2024 1138
NEtFOSE	24	22		1	90	70-135	10/12/2024 1138
NMeFOSA	2.4	2.2		1	92	70-155	10/12/2024 1138
NMeFOSAA	2.4	2.3	M-03	1	95	65-155	10/12/2024 1138
NMeFOSE	24	21		1	89	70-140	10/12/2024 1138
NFDHA	4.8	4.2		1	88	60-155	10/12/2024 1138
2-ethoxyethane)sulfonic acid (PFEESA	4.3	3.9		1	92	70-140	10/12/2024 1138
PFMPA	4.8	4.6		1	96	30-140	10/12/2024 1138
PFMBA	4.8	4.4		1	93	60-150	10/12/2024 1138
PFBS	2.1	2.0		1	93	65-145	10/12/2024 1138
PFBA	9.6	8.4		1	88	70-140	10/12/2024 1138
PFDS	2.3	2.2		1	96	40-155	10/12/2024 1138
PFDA	2.4	2.2		1	90	70-155	10/12/2024 1138
PFDoS	2.3	2.0		1	84	25-160	10/12/2024 1138
PFDoA	2.4	2.2		1	92	70-150	10/12/2024 1138
PFHpS	2.3	2.3		1	102	65-155	10/12/2024 1138
PFHpA	2.4	2.0		1	84	65-145	10/12/2024 1138
7:3FTCA	60	36		1	61	60-150	10/12/2024 1138
PFHxS	2.2	1.9		1	85	60-150	10/12/2024 1138
PFHxA	2.4	2.1		1	87	65-140	10/12/2024 1138
PFNS	2.3	2.1		1	90	55-140	10/12/2024 1138
PFNA	2.4	2.0		1	84	70-155	10/12/2024 1138
PFOSA	2.4	2.4		1	100	70-140	10/12/2024 1138
PFOS	2.2	2.0	M-03	1	92	65-160	10/12/2024 1138
PFOA	2.4	2.2		1	93	70-150	10/12/2024 1138
PFPeS	2.3	2.3		1	100	55-160	10/12/2024 1138
PFPeA	4.8	4.2		1	87	60-150	10/12/2024 1138
3:3FTCA	12	11		1	92	45-130	10/12/2024 1138
PFTeDA	2.4	2.1		1	88	65-150	10/12/2024 1138
PFTrDA	2.4	2.1		1	86	65-150	10/12/2024 1138
PFUnA	2.4	2.0		1	81	70-155	10/12/2024 1138

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		87	40-165
13C2-6:2FTS		76	40-215

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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PFAS by LC/MS/MS - LCS

Sample ID: ZQ18915-002
Batch: 18915
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 10/09/2024 0845

Surrogate	Q	% Rec	Acceptance Limit
13C2-8:2FTS		74	40-275
13C2-PFDoA		75	40-130
13C2-PFTeDA		75	20-130
13C3-HFPO-DA		90	40-130
13C3-PFBS		85	40-135
13C3-PFHxS		82	40-130
13C4-PFBA		90	8-130
13C4-PFHpA		89	40-130
13C5-PFHxA		93	40-130
13C5-PFPeA		89	35-130
13C6-PFDA		81	40-130
13C7-PFUnA		81	40-130
13C8-PFOA		82	40-130
13C8-PFOS		79	40-130
13C8-PFOSA		66	40-130
13C9-PFNA		85	40-130
D3-NMeFOSA		42	10-130
D3-NMeFOSAA		71	40-135
D5-NEtFOSA		39	10-130
D5-NEtFOSAA		69	40-150
D7-NMeFOSE		56	20-130
D9-NEtFOSE		56	15-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: ZQ18915-102
Batch: 18915
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 10/09/2024 0845

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
11Cl-PF3OUdS	0.75	0.64		1	85	45-160	10/12/2024 1148
9Cl-PF3ONS	0.74	0.74	M-03	1	100	70-150	10/12/2024 1148
ADONA	0.75	0.76		1	101	70-160	10/12/2024 1148
8:2FTS	0.76	0.72		1	94	70-150	10/12/2024 1148
4:2FTS	0.75	0.72		1	96	60-150	10/12/2024 1148
6:2FTS	0.76	0.84	M-03	1	110	55-200	10/12/2024 1148
5:3FTCA	5.0	4.2		1	84	60-130	10/12/2024 1148
HFPO-DA	0.80	0.82		1	102	70-145	10/12/2024 1148
NEtFOSA	0.20	0.20		1	98	70-140	10/12/2024 1148
NEtFOSAA	0.20	0.18	M-03	1	90	65-165	10/12/2024 1148
NEtFOSE	2.0	2.0		1	98	70-135	10/12/2024 1148
NMeFOSA	0.20	0.22	M-03	1	111	70-155	10/12/2024 1148
NMeFOSAA	0.20	0.19	M-03	1	94	65-155	10/12/2024 1148
NMeFOSE	2.0	1.9		1	93	70-140	10/12/2024 1148
NFDHA	0.40	0.38		1	95	60-155	10/12/2024 1148
2-ethoxyethane)sulfonic acid (PFEESA	0.35	0.33		1	95	70-140	10/12/2024 1148
PFMPA	0.40	0.39		1	98	30-140	10/12/2024 1148
PFMBA	0.40	0.38	M-03	1	96	60-150	10/12/2024 1148
PFBS	0.17	0.17	M-03	1	97	65-145	10/12/2024 1148
PFBA	0.80	0.74		1	93	70-140	10/12/2024 1148
PFDS	0.19	0.18		1	93	40-155	10/12/2024 1148
PFDA	0.20	0.19		1	97	70-155	10/12/2024 1148
PFDoS	0.19	0.17		1	92	25-160	10/12/2024 1148
PFDoA	0.20	0.17	M-03	1	87	70-150	10/12/2024 1148
PFHpS	0.19	0.20	M-03	1	106	65-155	10/12/2024 1148
PFHpA	0.20	0.20		1	98	65-145	10/12/2024 1148
7:3FTCA	5.0	3.9		1	78	60-150	10/12/2024 1148
PFHxS	0.18	0.20	M-03	1	108	60-150	10/12/2024 1148
PFHxA	0.20	0.18		1	92	65-140	10/12/2024 1148
PFNS	0.19	0.18	M-03	1	96	55-140	10/12/2024 1148
PFNA	0.20	0.18	M-03	1	89	70-155	10/12/2024 1148
PFOSA	0.20	0.25		1	124	70-140	10/12/2024 1148
PFOS	0.18	0.18	M-03	1	98	65-160	10/12/2024 1148
PFOA	0.20	0.26	M-03	1	128	70-150	10/12/2024 1148
PFPeS	0.18	0.20		1	110	55-160	10/12/2024 1148
PFPeA	0.40	0.38		1	95	60-150	10/12/2024 1148
3:3FTCA	1.0	0.98		1	98	45-130	10/12/2024 1148
PFTeDA	0.20	0.20		1	101	65-150	10/12/2024 1148
PFTrDA	0.20	0.18		1	92	65-150	10/12/2024 1148
PFUnA	0.20	0.18	M-03	1	92	70-155	10/12/2024 1148

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	89	40-165
13C2-6:2FTS		79	40-215

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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PFAS by LC/MS/MS - LCS

Sample ID: ZQ18915-102
Batch: 18915
Analytical Method: 1633
Matrix: Solid
Prep Method: 1633
Prep Date: 10/09/2024 0845

Surrogate	Q	% Rec	Acceptance Limit
13C2-8:2FTS		76	40-275
13C2-PFDoA		68	40-130
13C2-PFTeDA		65	20-130
13C3-HFPO-DA		85	40-130
13C3-PFBS		93	40-135
13C3-PFHxS		80	40-130
13C4-PFBA		88	8-130
13C4-PFHpA		82	40-130
13C5-PFHxA		89	40-130
13C5-PFPeA		85	35-130
13C6-PFDA		81	40-130
13C7-PFUnA		71	40-130
13C8-PFOA		78	40-130
13C8-PFOS		85	40-130
13C8-PFOSA		69	40-130
13C9-PFNA		81	40-130
D3-NMeFOSA		41	10-130
D3-NMeFOSAA		73	40-135
D5-NEtFOSA		38	10-130
D5-NEtFOSAA		71	40-150
D7-NMeFOSE		56	20-130
D9-NEtFOSE		53	15-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Manual Integration Summary

Arcadis U.S., Inc.

Lot Number: ZI12018

Project Name: Eielson AFB

Project Number: 30167435.05

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	ZI12018-001	1	1H,1H,2H,2H-Perfluorodecane sulfonic	M-03
1633	ZI12018-001	1	N-ethyl	M-03
1633	ZI12018-001	1	N-methyl	M-03
1633	ZI12018-001	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	ZI12018-001	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	ZI12018-001	1	Perfluorononanoic acid (PFNA)	M-03
1633	ZI12018-001	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	ZI12018-001	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	ZI12018-001	1	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	ZI12018-001	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	ZI12018-001	1	Perfluorotridecanoic acid (PFTrDA)	M-03
1633	ZI12018-001	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	ZQ18915-102	1	9-Chlorohexadecafluoro-3-oxanonane-	M-03
1633	ZQ18915-102	1	1H,1H,2H,2H-Perfluorooctane sulfonic	M-03
1633	ZQ18915-002	1	N-ethyl	M-03
1633	ZQ18915-102	1	N-ethyl	M-03
1633	ZQ18915-102	1	N-methyl perfluorooctanesulfonamide	M-03
1633	ZQ18915-002	1	N-methyl	M-03
1633	ZQ18915-102	1	N-methyl	M-03
1633	ZQ18915-102	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	ZQ18915-102	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	ZQ18915-102	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	ZQ18915-102	1	Perfluoroheptanesulfonic acid (PFHpS)	M-03
1633	ZQ18915-102	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	ZQ18915-102	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	ZQ18915-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	ZQ18915-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	ZQ18915-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	ZQ18915-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	ZQ18915-102	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	ZQ18915-102	1	13C2-4:2FTS	M-03

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

Chain of Custody
and
Miscellaneous Documents

ELECTRONIC CHAIN OF CUSTODY

ARCADIS

Page 1 of 1

Sample ID	Collection Date	Collection Time	Type / Composite	Type / Grab	Matrix															Remarks
PW-DW-09-052823	8/5/2023	1720	X		SW	1														

Z112018

DC#_Title: ENV-FRM-WCOL-0286 v02_Samples Receipt Checklist (SRC)
Effective Date: 8/2/2022

Sample Receipt Checklist (SRC)

Client: Arcadis Cooler Inspected by/date: CDR / 9/12/24 Lot #: 21 12618

Means of receipt: ☐ Pace ☐ Client ☐ UPS ☑ FedEx ☐ Other: ____

☑ Yes	☐ No		1. Were custody seals present on the cooler?
☑ Yes	☐ No	☐ NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 254244

2.3 / 2.3 °C 2.1 / 2.1 °C NA / NA °C NA / NA °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 8 IR Gun Correction Factor: 0 °C

Method of coolant: ☐ Wet Ice ☑ Ice Packs ☐ Dry Ice ☐ None

☑ Yes	☐ No	☐ NA	3. Were all coolers received at or below 6.0°C? If no, was Project Manager notified? PM was Notified by: phone / email / face-to-face (circle one).
☑ Yes	☐ No	☐ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC and all sample containers?
☑ Yes	☐ No		7. Was collection date & time listed on the COC and all sample containers?
☑ Yes	☐ No		8. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		9. Were tests to be performed listed on the COC?
☑ Yes	☐ No		10. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? ____
☑ Yes	☐ No		11. Was adequate sample volume available?
☑ Yes	☐ No		12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☑ Yes	☐ No		13. Were all samples containers accounted for? (No missing/excess)
☐ Yes	☐ No	☑ NA	14. Were VOA, 8015C and RSK-175 samples free of bubbles >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	15. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	16. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	17. Were all applicable NH_3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
☑ Yes	☐ No	☐ NA	18. Was the quote number listed on the container label? If yes, Quote # 25048

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H_2SO_4, HNO_3, HCl, NaOH using SR # NA ☐

Time of preservation NA. If more than one preservative is needed, please note in the comments below.

Sample(s) NA were received with bubbles >6 mm in diameter.

Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Unique ID: NA.

Comments:

Qualtrax ID: 56360

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

ANALYTICAL REPORT

September 23, 2024

Arcadis U.S., Inc. - Highlands Ranch, CO

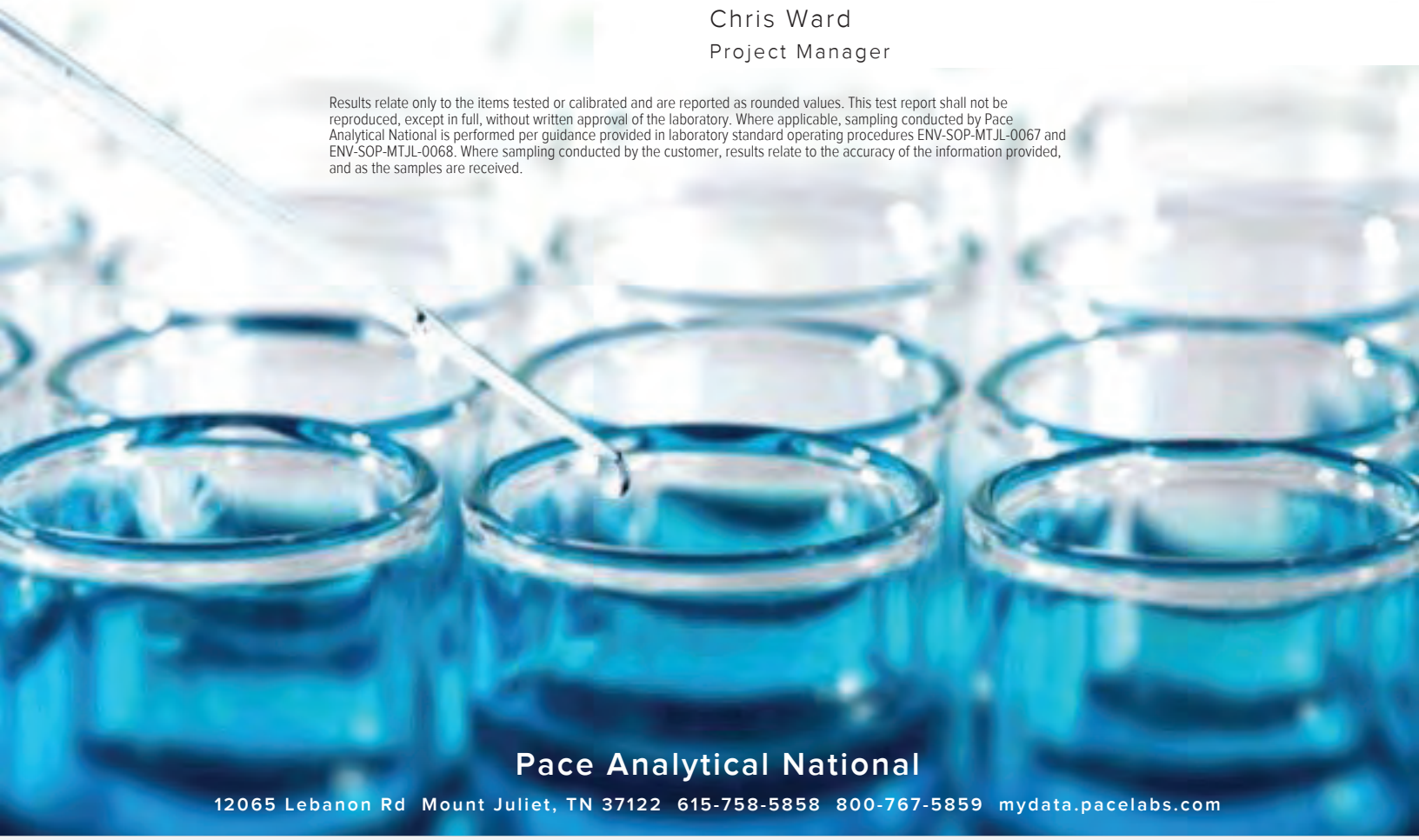
Sample Delivery Group:	L1776562
Samples Received:	09/11/2024
Project Number:	30167435.05
Description:	Eielson Air Force Base DGI-PSC

Report To: Ali Marchioni
630 Plaza Drive Suite 100
Highlands Ranch, CO 80129-2379

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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SAMPLE SUMMARY

FMIDW-001-090624 L1776562-01 Waste

Collected by	Collected date/time	Received date/time
	09/06/24 17:00	09/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG2360988	1	09/12/24 11:02	09/12/24 11:02	BTP	Mt. Juliet, TN
Preparation by Method 1311	WG2361003	1	09/12/24 16:15	09/12/24 16:15	PNK	Mt. Juliet, TN
Wet Chemistry by Method 9012 B	WG2360991	2	09/15/24 11:48	09/16/24 14:43	CAT	Mt. Juliet, TN
Wet Chemistry by Method 9034-9030B	WG2360705	1	09/11/24 19:09	09/13/24 22:41	SJA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2362795	1	09/14/24 19:07	09/14/24 21:45	KRB	Mt. Juliet, TN
Wet Chemistry by Method D93/1010A	WG2363313	1	09/16/24 18:25	09/16/24 18:25	CAH	Mt. Juliet, TN
Mercury by Method 7470A	WG2362837	1	09/14/24 23:12	09/16/24 19:05	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2362517	1	09/23/24 01:51	09/23/24 10:34	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2362027	1	09/14/24 02:17	09/14/24 02:17	ACG	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris Ward
Project Manager

Project Narrative

All Reactive Cyanide results reported in the attached report were determined as totals using method 9012 B.

All Reactive Sulfide results reported in the attached report were determined as totals using method 9034-9030B.

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		9/12/2024 4:15:38 PM	WG2361003
TCLP ZHE Extraction	-		9/12/2024 11:02:23 AM	WG2360988
Initial pH	6.55		9/12/2024 4:15:38 PM	WG2361003
Final pH	5.00		9/12/2024 4:15:38 PM	WG2361003

Wet Chemistry by Method 9012 B

Analyte	Result mg/kg	Qualifier	LOQ mg/kg	Dilution	Analysis date / time	Batch
Reactive Cyanide	5.71		0.600	2	09/16/2024 14:43	WG2360991

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/kg	Qualifier	LOQ mg/kg	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		75.0	1	09/13/2024 22:41	WG2360705

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.57	T8	1	09/14/2024 21:45	WG2362795

Sample Narrative:

L1776562-01 WG2362795: 7.57 at 22.5C

Wet Chemistry by Method D93/1010A

Analyte	Result Deg. F	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170		1	09/16/2024 18:25	WG2363313

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	09/16/2024 19:05	WG2362837

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0266		0.0200		1	09/23/2024 10:34	WG2362517
Barium	0.135		0.0500		1	09/23/2024 10:34	WG2362517
Cadmium	ND		0.0100		1	09/23/2024 10:34	WG2362517
Chromium	ND		0.0300		1	09/23/2024 10:34	WG2362517
Lead	ND		0.0200		1	09/23/2024 10:34	WG2362517
Selenium	ND		0.0200		1	09/23/2024 10:34	WG2362517
Silver	0.0657		0.0200		1	09/23/2024 10:34	WG2362517

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.0500	0.50	1	09/14/2024 02:17	WG2362027
Carbon tetrachloride	ND		0.0500	0.50	1	09/14/2024 02:17	WG2362027
Chlorobenzene	ND		0.0500	100	1	09/14/2024 02:17	WG2362027
Chloroform	ND		0.250	6	1	09/14/2024 02:17	WG2362027
1,2-Dichloroethane	ND		0.0500	0.50	1	09/14/2024 02:17	WG2362027

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.0500	0.70	1	09/14/2024 02:17	WG2362027
2-Butanone (MEK)	ND	C4	0.500	200	1	09/14/2024 02:17	WG2362027
Tetrachloroethene	ND		0.0500	0.70	1	09/14/2024 02:17	WG2362027
Trichloroethene	ND		0.0500	0.50	1	09/14/2024 02:17	WG2362027
Vinyl chloride	ND		0.0500	0.20	1	09/14/2024 02:17	WG2362027
(S) Toluene-d8	*109*		*89.0-112*			*09/14/2024 02:17*	WG2362027
(S) 4-Bromofluorobenzene	*98.5*		*85.0-114*			*09/14/2024 02:17*	WG2362027
(S) 1,2-Dichloroethane-d4	*109*		*81.0-118*			*09/14/2024 02:17*	WG2362027

Method Blank (MB)

(MB) R4120285-1 09/16/24 13:35

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
Reactive Cyanide	0.150	U	0.0733	0.150	0.300

L1776603-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1776603-02 09/16/24 14:44 • (DUP) R4120285-5 09/16/24 13:55

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Reactive Cyanide	ND	ND	1	0.000		20

L1776828-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1776828-25 09/16/24 14:00 • (DUP) R4120285-6 09/16/24 14:02

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Reactive Cyanide	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4120285-2 09/16/24 13:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Reactive Cyanide	2.50	2.57	103	76.0-120	

L1776426-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1776426-01 09/16/24 13:45 • (MS) R4120285-3 09/16/24 13:46 • (MSD) R4120285-4 09/16/24 13:48

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Reactive Cyanide	1.67	ND	ND	ND	10.9	10.8	1	76.0-120	J6	J6	0.922	20

Method Blank (MB)

(MB) R4119759-1 09/13/24 22:41

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
Reactive Sulfide	37.5	U	30.0	37.5	75.0

Laboratory Control Sample (LCS)

(LCS) R4119759-2 09/13/24 22:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Reactive Sulfide	100	79.9	79.9	53.8-124	

L1775742-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1775742-07 09/13/24 22:41 • (MS) R4119759-3 09/13/24 22:41 • (MSD) R4119759-4 09/13/24 22:41

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Reactive Sulfide	100	ND	ND	ND	30.3	32.7	1	10.0-136			0.000	20

L1776949-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1776949-01 09/14/24 21:45 • (DUP) R4119928-2 09/14/24 21:45

Analyte	Original Result su	DUP Result su	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
pH	8.60	8.60	1	0.000		1

Sample Narrative:

OS: 8.6 at 22C

DUP: 8.6 at 22C

L1777353-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1777353-01 09/14/24 21:45 • (DUP) R4119928-3 09/14/24 21:45

Analyte	Original Result su	DUP Result su	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
pH	8.69	8.71	1	0.230		1

Sample Narrative:

OS: 8.69 at 21.7C

DUP: 8.71 at 21.5C

Laboratory Control Sample (LCS)

(LCS) R4119928-1 09/14/24 21:45

Analyte	Spike Amount su	LCS Result su	LCS Rec. %	Rec. Limits %	LCS Qualifier
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10 at 21.6C

L1775908-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1775908-05 09/16/24 18:25 • (DUP) R4120437-3 09/16/24 18:25

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	Deg. F	Deg. F		%		%
Ignitability	DNI at 170	DNI at 170	1	0.000		10

L1777114-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1777114-01 09/16/24 18:25 • (DUP) R4120437-4 09/16/24 18:25

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	Deg. F	Deg. F		%		%
Ignitability	DNI at 170	DNI at 170	1	0.000		10

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4120437-1 09/16/24 18:25 • (LCSD) R4120437-2 09/16/24 18:25

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	Deg. F	Deg. F	Deg. F	%	%	%			%	%
Ignitability	126	127	131	101	104	96.0-104			3.11	10

Method Blank (MB)

(MB) R4120463-1 09/16/24 18:31

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Mercury	0.00500	U	0.00333	0.00500	0.0100

Laboratory Control Sample (LCS)

(LCS) R4120463-2 09/16/24 18:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.0300	0.0305	102	82.0-119	

L1776400-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1776400-01 09/16/24 18:36 • (MS) R4120463-4 09/16/24 18:40 • (MSD) R4120463-5 09/16/24 18:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0299	0.0306	99.8	102	1	82.0-119			2.31	20

L1776596-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1776596-01 09/16/24 18:45 • (MS) R4120463-6 09/16/24 18:53 • (MSD) R4120463-7 09/16/24 18:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0313	0.0321	91.1	93.9	1	82.0-119			2.62	20

Method Blank (MB)

(MB) R4122985-1 09/23/24 10:26

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Arsenic	0.0100	U	0.00250	0.0100	0.0200
Barium	0.0250	U	0.00360	0.0250	0.0500
Cadmium	0.00500	U	0.00160	0.00500	0.0100
Chromium	0.0150	U	0.00540	0.0150	0.0300
Lead	0.0100	U	0.00240	0.0100	0.0200
Selenium	0.0100	U	0.00380	0.0100	0.0200
Silver	0.0100	U	0.00310	0.0100	0.0200

Laboratory Control Sample (LCS)

(LCS) R4122985-2 09/23/24 10:29

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	0.500	0.501	100	80.0-120	
Barium	0.500	0.509	102	80.0-120	
Cadmium	0.500	0.495	98.9	80.0-120	
Chromium	0.500	0.509	102	80.0-120	
Lead	0.500	0.508	102	80.0-120	
Selenium	0.500	0.518	104	80.0-120	
Silver	0.500	0.499	99.7	80.0-120	

L1776562-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1776562-01 09/23/24 10:34 • (MS) R4122985-4 09/23/24 10:40 • (MSD) R4122985-5 09/23/24 10:44

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.500	0.0266	0.522	0.529	99.1	101	1	75.0-125			1.38	20
Barium	0.500	0.135	0.661	0.646	105	102	1	75.0-125			2.20	20
Cadmium	0.500	ND	0.492	0.504	98.3	101	1	75.0-125			2.43	20
Chromium	0.500	ND	0.506	0.520	101	104	1	75.0-125			2.66	20
Lead	0.500	ND	0.488	0.493	97.5	98.6	1	75.0-125			1.12	20
Selenium	0.500	ND	0.512	0.505	102	101	1	75.0-125			1.44	20
Silver	0.500	0.0657	0.557	0.557	98.2	98.3	1	75.0-125			0.0574	20

Method Blank (MB)

(MB) R4120103-3 09/13/24 21:42

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Benzene	0.0250	U	0.0167	0.0250	0.0500
Carbon tetrachloride	0.0250	U	0.0167	0.0250	0.0500
Chlorobenzene	0.0250	U	0.0167	0.0250	0.0500
Chloroform	0.125	U	0.0833	0.125	0.250
1,2-Dichloroethane	0.0250	U	0.0167	0.0250	0.0500
1,1-Dichloroethene	0.0250	U	0.0167	0.0250	0.0500
2-Butanone (MEK)	0.250	U	0.167	0.250	0.500
Tetrachloroethene	0.0250	U	0.0167	0.0250	0.0500
Trichloroethene	0.0250	U	0.0167	0.0250	0.0500
Vinyl chloride	0.0250	U	0.0167	0.0250	0.0500
(S) Toluene-d8	*108*				*89.0-112*
(S) 4-Bromofluorobenzene	*100*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*108*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4120103-1 09/13/24 19:45 • (LCSD) R4120103-2 09/13/24 20:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.250	0.219	0.228	87.6	91.2	79.0-120			4.03	20
Carbon tetrachloride	0.250	0.260	0.270	104	108	72.0-136			3.77	20
Chlorobenzene	0.250	0.211	0.220	84.4	88.0	82.0-118			4.18	20
Chloroform	0.250	0.244	0.245	97.6	98.0	79.0-124			0.409	20
1,2-Dichloroethane	0.250	0.251	0.251	100	100	73.0-128			0.000	20
1,1-Dichloroethene	0.250	0.208	0.209	83.2	83.6	71.0-131			0.480	20
2-Butanone (MEK)	1.25	0.988	0.940	79.0	75.2	56.0-143			4.98	20
Tetrachloroethene	0.250	0.241	0.236	96.4	94.4	74.0-129			2.10	20
Trichloroethene	0.250	0.249	0.223	99.6	89.2	79.0-123			11.0	20
Vinyl chloride	0.250	0.249	0.265	99.6	106	58.0-137			6.23	20
(S) Toluene-d8				*104*	*106*	*89.0-112*				
(S) 4-Bromofluorobenzene				*103*	*103*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*106*	*106*	*81.0-118*				

L1776645-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1776645-02 09/14/24 04:12 • (MS) R4120103-4 09/14/24 07:17 • (MSD) R4120103-5 09/14/24 07:40

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.250	ND	0.187	0.204	74.8	81.6	1	79.0-120	J6		8.70	20
Carbon tetrachloride	0.250	ND	0.236	0.266	94.4	106	1	72.0-136			12.0	20
Chlorobenzene	0.250	ND	0.190	0.216	76.0	86.4	1	82.0-118	J6		12.8	20
Chloroform	0.250	ND	ND	0.271	97.2	108	1	79.0-124			10.9	20
1,2-Dichloroethane	0.250	ND	0.231	0.231	92.4	92.4	1	73.0-128			0.000	20
1,1-Dichloroethene	0.250	ND	0.190	0.219	76.0	87.6	1	71.0-131			14.2	20
2-Butanone (MEK)	1.25	ND	0.800	0.870	64.0	69.6	1	56.0-143			8.38	20
Tetrachloroethene	0.250	ND	0.220	0.265	88.0	106	1	74.0-129			18.6	20
Trichloroethene	0.250	ND	0.187	0.215	74.8	86.0	1	79.0-123	J6		13.9	20
Vinyl chloride	0.250	ND	0.225	0.271	90.0	108	1	58.0-137			18.5	20
(S) Toluene-d8					*109*	*106*		*89.0-112*				
(S) 4-Bromofluorobenzene					*107*	*108*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*107*	*105*		*81.0-118*				

L1776082-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1776082-02 09/13/24 23:14 • (MS) R4120103-6 09/14/24 08:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Benzene	0.250	ND	0.182	72.8	1	79.0-120	J6
Carbon tetrachloride	0.250	ND	0.212	84.8	1	72.0-136	
Chlorobenzene	0.250	ND	0.197	78.8	1	82.0-118	J6
Chloroform	0.250	ND	ND	84.0	1	79.0-124	
1,2-Dichloroethane	0.250	ND	0.217	86.8	1	73.0-128	
1,1-Dichloroethene	0.250	ND	0.170	68.0	1	71.0-131	J6
2-Butanone (MEK)	1.25	ND	0.808	64.6	1	56.0-143	
Tetrachloroethene	0.250	ND	0.210	84.0	1	74.0-129	
Trichloroethene	0.250	ND	0.210	84.0	1	79.0-123	
Vinyl chloride	0.250	ND	0.208	83.2	1	58.0-137	
(S) Toluene-d8				*107*		*89.0-112*	
(S) 4-Bromofluorobenzene				*104*		*85.0-114*	
(S) 1,2-Dichloroethane-d4				*105*		*81.0-118*	

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

DL	Detection Limit.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
ND	Not detected at the Reporting Limit (or DL where applicable).
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
C4	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Data is likely to show a low bias concerning the result.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.
U	Below Detectable Limits: Indicates that the analyte was not detected.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

L1776562

ELECTRONIC CHAIN OF CUSTODY

Send Results To:		Invoice Information	
Contact Name: Ali Marchioni	**Company Name:** Arcadis	**Invoice Contact Name:** Ali Marchioni	**Invoice Company Name:** Arcadis
Email Address: Alondra.marchioni@arcadis.com	**Telephone:** 206-413-6480	**Invoice Contact Email:** Invoices_us@arcadis.com	**Profile number:** PO# US3406001
Project Name/Location (City, State): Eielson AFB DGI-PSC	**Project #:** 30167435 - AFCEC/USACE Alaska Eielson AFB PFAS		
Sampler's Printed Name: Caleb Renner	**Sampler Signature:**		

Sample ID	Collection		Type ✓		Matrix	Ignitability (USEPA 1010), Corrosivity-pH (USEPA 9045), Reactivity, cyanide	TCLP VOCs 1311/8260 and RCRA8 6020 1L Glass Jar				
	Date	Time	Composite	Grab							
FMIDW-001-090624	9/6/2024	17:00	☐		Soil	1	1				-01
			☐								
			☐								
			☐								

Special Instructions for Lab: None ☐ **Special QA/QC Instructions(✓):**

Customer Remarks/Special Conditions/Possible Hazards:

Laboratory Information and Receipt				
Lab Name:Pace Analytical Services (Non-PFAS)	Cooler Custody Seal (✓)			
☑ Cooler packed with ice (✓)	☐ Intact	☐ Not Intact		
Specify Turnaround Requirements: 3	Sample Receipt:			
Shipping Tracking #:	Condition/Cooler Temp:			
Relinquished By Will Rhodes	**Printed Name:**	**Signature:**	**Firm:** Arcadis	**Date/Time:** 9/10/24 / 1000
Received By (14)	**Printed Name:** Robert Rourke	**Signature:**	**Firm:** Pace	**Date/Time:** 9/11/24 0900

20730826 CofC/AR Form 08.27.2015 **Distribution:** WHITE – Laboratory returns with results YELLOW – Lab copy Pink - Retained by Arcadis

H133

ARCADIS

	Document Online COC number: 1721089734388
475/T253939/P1080011	Record ID: 1f8ec672-058c-4cd3-8248-908c086f2e9b

Parameter Analysis & Method

Note: All the constituents that are Filtered are designated with a (✓) in the sample and constituent information table

4776562

									Remarks
								-01	

2793 3941 6795

TA.9 1.0+0.3=1.3

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres. Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
PA Screen <0.5 mR/hr:	Y N		

NON-HAZARDOUS WASTE MANIFEST

WO# 60-108600
192962-KC

Please print or type (Form designed for use on elite (12 pitch) typewriter)

PO# 192962-5-3404-KC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: AK1570028646

Manifest Document No.: 192962B

2. Page 1 of 2

3. Generator's Name and Mailing Address
US AIR FORCE, 354TH CES/CEIEC
2310 CENTRAL AVE, SUITE 100
EIELSON AFB, AK 99702-2299

4. Generator's Phone: (907) 377-4342

US AIR FORCE, 354TH CES/CEIEC
2310 CENTRAL AVE, SUITE 100
EIELSON AFB, AK 99702-2299

IN CASE OF EMERGENCY CALL
800-899-4672

5. Transporter 1 Company Name: US ECOLOGY
6. US EPA ID Number: MIK593743838
A. State Transporter's ID
B. Transporter 1 Phone: 734-521-8104

7. Transporter 2 Company Name: WEAVER BROTHERS
8. US EPA ID Number: AKD002848372
C. State Transporter's ID
D. Transporter 2 Phone: 907-278-4526

9. Designated Facility Name and Site Address
US ECOLOGY IDAHO, INC.
20400 LEMLEY RD
GRAND VIEW, ID 83624

10. US EPA ID Number: IDD073114654
E. State Facility's ID
F. Facility's Phone: (208) 834-2275

	11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a.	Material Not Regulated by DOT	2	DM	500	P
b.					
c.					
d.					

G. Additional Descriptions for Materials Listed Above
1) 51235-0 PFAS CONTAMINATED GAC 55 DM

H. Handling Codes for Wastes Listed Above
D58658 H132

WO# 60-108600

15. Special Handling Instructions and Additional Information
Shipper's Certification: This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Joseph Galen Kotnowske
Signature:
Date: Month 11 Day 13 Year 24

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Kyle Magers
Signature:
Date: Month 11 Day 13 Year 24

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: Robert Moody
Signature: Moody
Date: Month 1 Day 24 Year 25

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Jesse Swift
Signature:
Date: Month 2 Day 18 Year 25

GENERATOR
TRANSPORTER
FACILITY
NON-HAZARDOUS WASTE

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PRINTED WITH SOY INK

NON-HAZARDOUS WASTE MANIFEST (Continuation Sheet)	19. Generator ID Number AK1570028646	20. Page 2 of 2	21. Waste Tracking Number 192962B

22. Generator's Name: US AIR FORCE, 354TH CES/CEIEC
2310 CENTRAL AVE. SUITE 100
EIELSON AFB, AK 99702-2299
(907) 377-4342

23. Transporter 3 Company Name: TOTE MARITIME ALASKA, LLC. U.S. EPA ID Number: WAD070397955

24. Transporter 4 Company Name: US ECOLOGY U.S. EPA ID Number: MK593743838

25. Waste Shipping Name and Description	26. Containers No.	26. Containers Type	27. Total Quantity	28. Unit Wt./Vol.	

GENERATOR

29. Special Handling Instructions and Additional Information

TRANSPORTER

30. Transporter 3 Acknowledgment of Receipt of Materials
Printed/Typed Name: Caitlin Sut Signature: [signature] Month 01 Day 24 Year 25

31. Transporter 4 Acknowledgment of Receipt of Materials
Printed/Typed Name: Jessi Soto Signature: Jessica Month 2 Day 7 Year 25

DESIGNATED FACILITY

32. Discrepancy

CERTIFICATE OF DISPOSAL

February 20, 2025

US AIR FORCE, 354TH CES/CEIEC
2310 CENTRAL AVE, SUITE 100
EIELSON AFB, AK 99702

This is to certify that waste as defined on Waste Manifest number **192962B** was received by U.S. Ecology, Inc., on **2/18/2025**. The waste(s) were subsequently treated, if required by CFR Part 268 and U.S. Ecology's permits, and disposed of on **02/18/2025** in accordance with permits and laws regulating this facility.

Reference Number: 25021800701-192962B-1-1
Material: 2 55 GALLON DRUM
Process: Direct Landfill
Management Code: H132 Landfill or surface impoundment that will be closed as landfill (to include prior treatment and/or stabilization)
Facility: US ECOLOGY IDAHO, INC.
20400 LEMLEY ROAD
GRAND VIEW, ID 83624
EPA ID: IDD073114654

Waste Stream #: 51235-0

Waste Type: NON-HAZARDOUS

Customer: US ECOLOGY ALASKA - DO NOT USE

Printed Name: BRENDA CORDOVA

Signature: Brenda Cordova

Title: CUSTOMER SUPPORT SPECIALIST LEAD

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation
DIVISION OF WATER
Wastewater Discharge Authorization Program

555 Cordova Street
Anchorage, Alaska 99501-2617
Main: 907.269.6285
Fax: 907.334.2415
www.dec.alaska.gov/wastewater

September 8, 2023

Ahtna Solutions, LLC
Attn: Andrew Weller
714 4th Avenue
Suite 303
Fairbanks AK 99701

Re: Permit Authorization: AKG003059 v1.0 - Eielson AFB PFAS Wastewater Treatment

The Alaska Department of Environmental Conservation (DEC) has completed its review of your AKG003000 Hydrostatic and Aquifer Pump Testing Notice of Intent (NOI) for the *Eielson AFB PFAS Wastewater Treatment* and is issuing the authorization number **AKG003059** for this project. The discharge from this project is authorized in accordance with the terms of the general permit and any site-specific requirements in this authorization. An electronic copy of the Hydrostatic and Aquifer Pump Testing general permit is available at http://dec.alaska.gov/water/wastewater/stormwater/dewater-hydrostatic/#hydrostatic.

Effective date is 09/08/2023.

Project Description: Operate an ion exchange resin-based wastewater treatment system to treat wastewater containing per- and polyfluoroalkyl substances (PFAS) at Eielson Air Force Base

Project Location: Hazardous Waste Facility, Flight Line Avenue, Eielson Air Force Base, AK 99702; Lat/Long: 64.652666, -147.07863

Discharge Location: Is the discharge solely to land: Yes

Estimated Project Dates: 9/5/2023 – 10/31/2025

The authorization to discharge expires upon submittal of a Notice of Termination, see Permit Part 7.

The authorized discharge location is to land as described in the NOI.

Note, as per Permit Part 2.5 the permittee is required to submit a modification NOI within 30 calendar days if any of the following change: Owner/Operator address and contact information, site information, estimated start or end dates.

The permittee is reminded of the following permit requirements:

- Compliance with Standards and Limits, see Permit Part 3.1 Requirements for all Projects.
- Control Measures, see Permit Parts 4.0 and 4.1 – Erosion and Sediment Control Measures.
- Limitations, Inspections, and Monitoring Requirements, see Permit Part 5.1 Land Disposal Discharges of Hydrostatic Testing, see Permit Part 5.2 Surface Water Discharges of Hydrostatic Testing, see Permit Part 5.3 Land Disposal Discharges of Aquifer Pump Testing,
- Reporting and Recordkeeping, see Permit Part 6.

Alaska DEC Watermark
AKG003059 v1.0
Approved
Issued On:09/08/2023
Expires On:09/30/2024

- Submitting a Notice of Termination (NOT), see Permit Part 7.
  Note: within 30 days upon completion of the dewatering activity you are required to submit a NOT to the DEC Permitting Program to terminate coverage. Include the Discharge Monitoring Report (DMR, https://dec.alaska.gov/media/16894/akg003000-dmr.pdf) with your submission of the NOT. The complete and accurate NOT and DMR is to be submitted electronically using the Environmental Data Management System (EDMS) which can be accessed at https://dec.alaska.gov/Applications/Water/EDMS/ncore/external/home.

A copy of the General Permit AKG003000 and this authorization must be kept at the project site. This authorization does not relieve the permittee from other local, state, or federal government permitting requirements.

If you have general questions regarding the storm water program or your responsibilities under the Hydrostatic and Aquifer Pump Testing general permit, please contact Sam Kito, sam.kito@alaska.gov (907) 269-7542.

Sincerely,

James Rypkema
Program Manager, Storm Water and Wetlands

Reference NOI: HPX-3B7Z-000VF, received: 8/24/2023

cc: DNR TWUA (DNR sponsored) dnr.twua@alaska.gov

Alaska DEC Watermark
AKG003059 v1.0
Approved
Issued On:09/08/2023
Expires On:09/30/2024

OPERATOR PLAN AUTHORIZATION/CERTIFICATION/DELEGATION

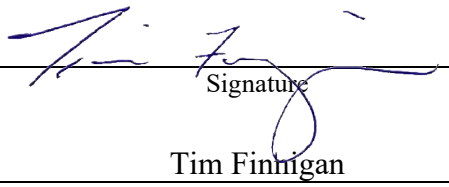
(To be signed by Responsible Corporate Officer)

I state that based on my review this Best Management Practices (BMP) Plan meets the minimum requirements of the 2014 Alaska General Permit for Hydrostatic and Aquifer Pump Testing (AKG003000) and that Ahtna Solutions, LLC (Ahtna) has day-to-day operational control of the project site. Ahtna is responsible for the maintenance and implementation of the plan including inspections, documentation, and implementation at the site. Ahtna will notify all subcontractors of the requirement of this BMP Plan. Ahtna has operational control over the project specifications, including the ability to make changes to the project specifications.

I hereby designate Andrew Weller, PE as my authorized representative. This designee is responsible for the overall operations of the site and will be responsible for the implementation of the BMP Plan, compliance with the General Permit, selecting and implementing additional control measures as conditions warrant, and signing all inspection reports required.

I certify under penalty of law that this document and all attachments were prepared under direction of Ahtna in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Ahtna Solutions, LLC

	23 August 2023
Signature	Date
Tim Finnigan	President
Printed Name	Title

1 GENERAL INFORMATION

1.1 OPERATOR(S)/CONTRACTOR(S)

Ahtna Solutions, LLC
Andrew Weller, PE
714 4th Avenue, Suite 303
Fairbanks, AK 99701
907-374-4750
wrhodes@ahtna.net

1.2 SUBCONTRACTORS, IF ANY

No subcontractors will be utilized.

1.3 EIELSON AFB CONTACT

US Air Force Point of Contact
Eielson AFB Restoration Team
Joseph Price
2310 Central Ave, Building 2258
Eielson AFB, Alaska 99702
907-377-3578
joseph.price@us.af.mil

2 PROJECT/SITE INFORMATION

2.1 Project Information

Project/Site Name:	Eielson AFB PFAS Wastewater Treatment
Estimated Project Start Date:	Tuesday, September 05, 2023
Estimated Project Completion Date:	Friday, October 31, 2025

Project Location:	Hazardous Waste Facility, Flight Line Ave., Eielson AFB, Alaska				
City:	Eielson AFB	State:	Alaska	Zip Code:	99702
Borough or Subdivision:	Fairbanks North Star Borough				

Latitude/Longitude		
Latitude:	Longitude:	Units
64 .652666 º N	-147 .07863 º W	(decimal, *5-6 place accuracy, preferred method)* *(format, example: 61.216906 º N , -149.878994 º W*)
Method for determining latitude/longitude:		
☐ USGS topographic map (specify scale: Click here to enter text.)	☐ EPA Web site	☐ GPS
☑ Other (please specify): ArcGIS, WGS 84		

2.2 Project Description

Eielson Air Force Base (AFB) has several sources of wastewater impacted by per-and polyfluoroalkyl substances (PFAS) that include perfluorooctane sulfonate, aka perfluorooctane sulfonic acid (PFOS), with Chemical Abstract System (CAS) # 1763-23-1, perfluorooctanoic acid (PFOA) with CAS # 335-67-1, GenX Chemicals (HFPO-DA) with CAS # 13252-13-6, and perfluorobutane sulfonic acid (PFBS) with CAS # 375-73-5. These sources include groundwater produced as investigation-derived waste (IDW), water from fire suppression systems, and groundwater that has entered basements during periods of high groundwater.

Ahtna Solutions, LLC (Ahtna) will operate the PFAS wastewater treatment system during summers of 2023, 2024, and 2025 on behalf of the US Air Force to treat potential wastewater listed in the previous paragraph. This wastewater treatment system consists of three 10,000-gallon uninsulated influent holding tanks, a pretreatment system, a treatment system, and a 14,000-gallon uninsulated effluent holding tank. The pretreatment system was fabricated by Lifewater Engineering and consists of an oil/water separator, an ozone generator and injector to disinfect and precipitate dissolved metals, a 3-cubic foot vessel containing adsorbent cellulose, a 3-cubic foot vessel containing filter sand, a 3-cubic ft vessel containing organoclay, and a 3-cubic foot vessel containing granulated activated carbon (GAC). The treatment system was designed by ECT2 and contains a bag filter, two 4.5-cubic foot vessels containing GAC, two 5-cubic foot vessels containing PT1 ion exchange resin primarily for metals removal, four cartridge filters, two 3-cubic foot vessels containing A3F ion exchange resin, and two 3-cubic foot vessels containing LC1 ion exchange polishing resin. Flow diagrams of the pretreatment and treatment modules are attached to this BMP Plan. The treatment system is designed so that spent ion exchange resin is exchanged with fresh resin, rather than regenerated onsite.

Various entities have operated the PFAS wastewater treatment system from summers of 2018 through 2022 for treating wastewaters described in the first paragraph. Treatability studies occurred during the first three summers of operation where detailed sampling occurred following each treatment stage to document the efficacy of the system in removing PFAS and other contaminants from wastewater. Details on the treatability studies and system

operating parameters can be found in the *Treatability Study Report, PFAS Impacted Wastewater, Eielson Air Force Base, Alaska* (US Air Force [USAF], 2019a), *Operations and Maintenance Manual, PFAS Wastewater Treatment System, Eielson Air Force Base, Alaska* (USAF, 2019b), and the *Treatability Study Report, PFAS-Impacted Wastewater Treatability Study Extension, Eielson Air Force Base, Alaska* (USAF, 2021).

The PFAS wastewater treatment system has proven its efficacy in treating various wastewaters to single digit parts per trillion (ppt) PFOS, PFOA, GenX Chemicals, and PFBS in the effluent (USAF, 2021). In 2021, influent concentrations of PFOS plus PFOA sums averaged 425 parts per billion (ppb), and total PFAS influent concentrations averaged 637 ppb. The highest influent concentrations were seen in a 1,700-gallon batch of fire suppression solutions with 1.2 parts per million (ppm) PFOS plus PFOA and 1.5 ppm total PFAS. Effluent concentrations in that batch were 2.82 ppt PFOS plus PFOA and 24.77 ppt total PFAS.

Breakthrough has not been observed in the PFAS wastewater treatment system effluent. There was not enough PFAS mass treated during the treatability studies to observe breakthrough. The system's capacity was too great. During the treatability study extension performed during summers of 2020 and 2021, a total of 19,493 milligrams (mg) PFOS plus PFOA and 30,117 mg PFAS were removed without replacing media. The removal occurred throughout the pretreatment and treatment systems. The removed amounts were obtained while bypassing the two GAC vessels in the treatment system during approximately half the study, in an attempt to observe breakthrough (USAF, 2021) It is unknown what the full removal capacity is for the PFAS wastewater treatment system, but it is greater than the amounts shown in this paragraph.

A pilot study was published in 2017 that determined the mg of PFAS removed per gram of A3F ion exchange resin. The A3F ion exchange resin is used as the middle ion exchange resin stage in the treatment system. The pilot study is cited as Woodard, S., Berry, J., & Newman, B., 2017. Ion exchange resin for PFAS removal and pilot test comparison to GAC. *Remediation.* https://doi.org/10.1002/rem.21515. The study determined the A3F resin removed 1.66 mg PFAS/gram A3F resin at an empty bed contact time (EBCT) of 5 minutes using an average of 94 ppb PFAS wastewater before breakthrough above the 2016 USEPA Lifetime Health Advisory (LHA) of 70 ppt PFOS plus PFOA. Applying the 1.66 mg PFAS/gram A3F resin to the Eielson AFB PFAS wastewater treatment system, where the Eielson AFB PFAS wastewater treatment system contains 6 cubic foot A3F resin with a specific gravity of 1.1, and a 5-minute EBCT for both A3F vessels combined, the treatment system could theoretically remove 310,241 mg PFAS prior to breakthrough above the 2016 LHA. The pilot study did not report the A3F resin's capacity for solely PFOS plus PFOA.

Operating conditions were different between Ahtna's treatability study and the referenced pilot study. The ion exchange resin's PFAS removal capacity is affected by variables including temperature, EBCT, definition of breakthrough, suite of PFAS included in laboratory analyses, co-contaminants, water quality parameters, etc. Therefore, a conservative value needs to be chosen for the PFAS removal capacity of the Eielson PFAS wastewater treatment system before breakthrough above the 2016 LHA is expected.

Ahtna will treat wastewater containing 50,000 mg of PFAS using the Eielson PFAS wastewater treatment system in accordance with the Operations and Maintenance Manual (USAF, 2019b) while discharging effluent to land. Ahtna and the US Air Force will verify PFAS influent concentrations and track the treated volume. After the 50,000 mg of PFAS threshold is reached, Ahtna will then sample each effluent batch prior to discharge for PFOA, PFOS, GenX Chemicals, and PFBS. Effluent results will be compared to current, final PFAS LHAs: the 2016 LHA of 70 ppt for the sum of PFOS and PFOA, the 2022 LHA of 10 ppt for GenX Chemicals, and the 2022 LHA of 2,000 ppt for PFBS and recorded on the attached effluent monitoring log. If effluent sample results exceed any of the LHA criteria, Ahtna will retreat and resample until sample results are below the LHA criteria prior to discharge. This strategy will allow treatment immediately before fall freeze-up. Turnaround times for PFAS results average four to six weeks, and it is unreasonable to store treated effluent in uninsulated tanks during freezing conditions while waiting for sample results.

50,000 mg of PFAS is an appropriate, conservative mass for the following reasons. 1) The 2020 and 2021 treatability study extension removed 30,117 mg PFAS with no breakthrough of PFOS and PFOA, even while bypassing 6 cubic ft of GAC within the treatment system for approximately half of the study. 2) The 6 cubic ft of A3F in the treatment system could theoretically remove 310,241 mg PFAS prior to breakthrough of PFOS plus PFOA above the 2016 LHA. The pretreatment and treatment systems also contain 3 cubic ft each of cellulose and organoclay, 9 cubic ft of GAC, 10 cubic ft of PT1 resin, and 6 cubic ft of LC1 resin. The 9 cubic ft of GAC has a removal capacity of 15,505 mg PFAS, based on a 2015 isotherm analysis performed by Calgon Carbon Corporation with a max PFAS loading rate of 0.117/gram F-400 GAC. That analysis is cited as *Isotherm: Removal of TOC and PFCs from Drinking Water using F-400 GAC.* Technical Service Report No. 20150420, prepared for Hoosick Falls, NY by Calgon Carbon Corporation. PFAS capacity for the other treatment media in the pretreatment and treatment systems have not been determined. 3) Discharge will be to land only. Operators will continuously monitor the northeast culvert of the northeast swale, seen in the attached figure, to ensure effluent infiltrates the ground surface prior to that monitoring location. Discharge will immediately cease if effluent reaches the culvert entrance.

2.3 Dewatering Plan (Methods, Equipment, Timing, Etc.)

Dewatering may occur in Eielson AFB houses. Groundwater containing PFAS infiltrates basements during some high groundwater periods. Groundwater removed from home basements may be brought to the PFAS treatment system for treatment.

3 DISCHARGE INFORMATION

3.1 Location of Discharge

Water would discharge to	☐ Water	☑ Land
Do you have excavation dewatering activities located within 1,500 feet of any DEC identified contaminated sites either in "Active" or "Cleanup Complete-Institutional Controls"?	☑ Yes	☐ No
Do you have excavation dewatering activities located within 1,500 feet of a DEC identified "contaminated groundwater plume" with discharges to land or waters of the U.S. or waters of the state?	☑ Yes	☐ No

3.2 Pollutants of Concern

PFOS, PFOA, GenX Chemicals, PFBS, and potentially trace hydrocarbons.

3.3 Receiving Water Bodies

Not applicable. Discharge is to land.

3.4 Discharge Flow Rates

Maximum anticipated discharge flow rate:	2400	gallons per day
Average anticipated discharge flow rate:	2100	gallons per day
Total anticipated discharge:	90,000 (30,000 gal/yr for 3 yrs at 5 gpm)	gallons
Discharge velocity at the end of pipe:	0.51 (5 gpm through 2" hose)	feet per second

3.5 Land Disposal Site Conditions, if applicable

Soil Type(s) and Slopes (describe soil type(s) and current slopes; note any changes due to grading or fill activities): Surface soil at the site and in the drainage swale consist of alluvial gravel, sand, and silt with a covering of vegetation.

Landscape Topography: Flat topography within the main Eielson AFB area.

Drainage patterns (describe current drainage patterns and note any changes due to grading or fill activities): Stormwater at this location drains to the northeast towards Garrison Slough through a 12-inch culvert located at the northeast end of the northeast swale adjacent to the treatment facility. Effluent discharge will not occur if there is potential for effluent to flow into Garrison Slough. Discharge will be to land only.

Depth to groundwater: 7 to 12 feet below ground surface, based on seasonal variation and ground elevation variation.

Type of Existing Vegetation: Grasses

4 BEST MANAGEMENT PRACTICES AND DETAILED SITE MAP

4.1 Best Management Practices (BMP)

BMP1: Operating staff will continuously monitor effluent discharge to ensure infiltration into the ground surface prior to reaching waters of the US. Discharge will only occur when there is no pre-existing standing water in the adjacent swales that would cause flow into the farthest northeast culvert. Discharge will immediately cease if discharged water has the potential to reach waters of the US. Effluent will be discharged into the swale closest to the treatment system, the southwest swale. That swale is connected to another swale, the northeast swale, via an approximately 50-ft long culvert. Both swales are approximately 5-ft deep and 16-ft wide. One swale is 115-ft long and the other is 16-ft long. The total capacity of both swales is approximately 82,000 gallons.

BMP2: A discharge reinforcement lining will be placed beneath the effluent discharge outlet pipe to prevent scour erosion.

BMP3: A check dam constructed of sandbags will be placed across the drainage swale on either side of the effluent discharge outlet to reduce water velocity within the drainage swales.

BMP4: Caps will be placed over culverts, if necessary to prevent effluent from entering culverts. One cap will be placed over the culvert at the northeast end of the northeast swale, and one cap will be placed over culvert at the southwest end of the southwest swale. Caps will be sealed with bentonite, hydrated to the consistency of putty. Caps and seals will be removed following each discharge.

BMP5: Treatment system operators will complete a Wastewater Profile, attached to this BMP Plan, for each type of wastewater to ensure treatment is in accordance with regulations and to monitor the mass of influent PFAS. Operators will sum and record the cumulative mass of influent PFAS so they can begin sampling effluent for PFOS, PFOA, GenX Chemicals, and PFBS after 50,000 mg PFAS has been treated. Operators will then store the effluent onsite and discharge it after confirming criteria shown in the Effluent Monitoring Log have been met.

4.2 Treatment Methodology

How will the contaminate be mitigated should it become entrained during the Excavation dewatering process?

The Eielson AFB PFAS wastewater treatment system will be operated in accordance with the Operations and Maintenance Manual (USAF, 2019b).

5 MONITORING

5.1 EFFLUENT MONITORING

5.1.1 Upland Discharge

Table 5-1: Effluent Monitoring Requirements for Upland Discharges

Effluent Parameter	Monitoring Location	Monitoring Frequency	Sample Type
Erosion	Point of Discharge	Daily	Visual
Sheen*	Effluent	Daily	Visual
Flow Rate	Effluent	Daily	24-hour Estimate or Measured
Discharge Only to Land	Northeast Culvert of Northeast Swale (ensure effluent infiltrates ground surface prior to this monitoring location)	Continuous	Visual
*Discharge shall be free of any visible sheen.			
Following treatment of 50,000 mg PFAS, effluent will be sampled for PFOS, PFOA, GenX Chemicals, and PFBS using USEPA Method 1633 and compared to criteria shown on the Effluent Monitoring Log in Appendix A prior to discharge to land.			

5.1.2 Water Discharge

Not applicable. Discharge is to land.

5.1.3 Special Monitoring Requirements

Treatment system operators will complete a Wastewater Profile, attached to this BMP Plan, for each type of wastewater to ensure treatment is in accordance with regulations and to monitor the mass of influent PFAS. Operators will sum and record the cumulative mass of influent PFAS.

6 REPORTING AND RECORDKEEPING

6.1 Recordkeeping

Ahtna will maintain laboratory sample results, field measurements, calibration and maintenance records, field logbooks, sample chains of custody, waste profiles, photographs, monitoring logs, and a copy of the Hydrostatic and Aquifer Pump Test General Permit for at least three years following treatment activities.

Records of monitoring information will include field measurements and laboratory analyses. Records will include dates, locations, times, names of people performing analyses or measurements, methods used, and results.

6.2 Reporting

Discharges will be to land, therefore; USEPA Discharge Monitoring Report forms, revised as of March 1999, will not be completed.

Ahtna will prepare annual Eielson AFB PFAS wastewater treatment system reports for the US Air Force and will provide copies to the Alaska DEC. Each report will cover treatment system operations from approximately May to September of 2023, 2024, and 2025.

Annual reports will be provided to:

State of Alaska Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street Anchorage, Alaska 99501
Telephone (907) 269-6285
Fax (907) 269-3487
Email: DEC.Water.WQPermit@alaska.gov
and
State of Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
Contaminated Sites Program
610 University Avenue
Fairbanks, Alaska 99709
Telephone (907) 451-2143
Fax (907) 269-7687

Any changes to the operation of the Eielson AFB PFAS wastewater treatment system, as described in Section 2.0 Special Reporting Obligations of the Hydrostatic and Aquifer Pump Test General Permit, will be communicated to the Department, as specified in that permit section.

Any documents relating to compliance are to be sent to the following address:

State of Alaska Department of Environmental Conservation
Division of Water
Compliance and Enforcement Program
555 Cordova Street Anchorage, Alaska 99501
Telephone Nationwide (877) 569-4114
Anchorage Area / International (907) 269-4114
Fax (907) 269-4604
Email: dec-wqreporting@alaska.gov

If it is necessary to submit a noncompliance notification to the Department, use this form https://dec.alaska.gov/water/compliance/permittee/

Operators shall report any noncompliance event that may endanger health, or the environment as follows:
3.4.1 A report must be made:

3.4.1.1 Orally within 24 hours after the permittee becomes aware of the circumstances, and
3.4.1.2 In writing within five days after the permittee becomes aware of the circumstances. The e-mail address to report noncompliance is: dec-wqreporting@alaska.gov.

Appendix A: Effluent Monitoring Log (Blue shaded parameters will be monitored after Treatment of 50,000 mg PFAS using the same media.)

DATE: _____ CUMULATIVE PFAS REMOVED WITH SAME MEDIA (mg) _____

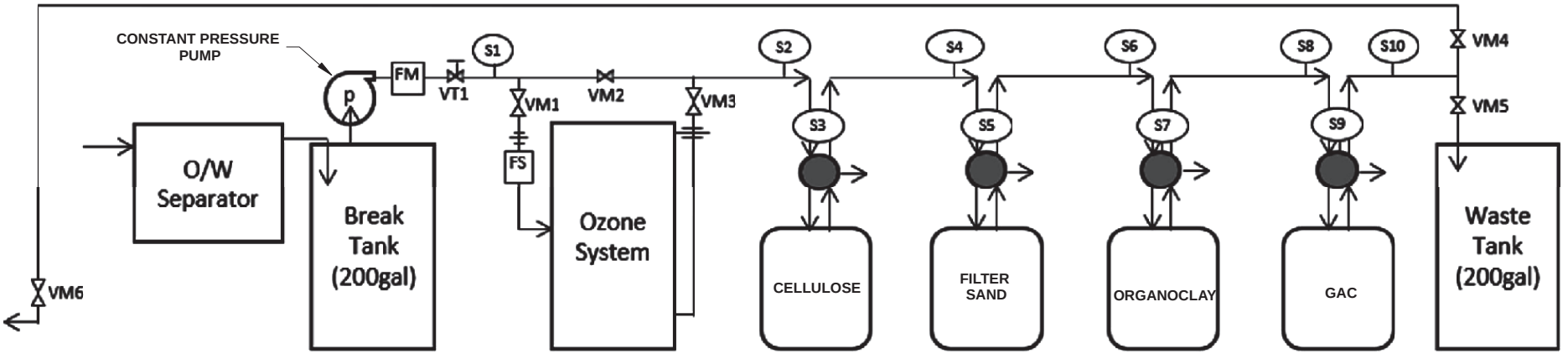
NAME or OBSERVER: _____

OBSERVATIONS: _____(cont'd on reverse)

Date:	Initials	PARAMETER	METHOD	Sample Type	Monitoring/Sample Location	LIMIT	Result (if applicable, ppt)	PASS/FAIL*	Frequency
		Erosion	Visual	NA	Point of Discharge	No Erosion	NA		Daily
		Sheen	Visual	NA	Effluent	No Sheen	NA		Daily
		Flow Rate	24-hour Estimate or Measured	NA	Effluent	NA		NA	Daily
		Discharge to Land Only	Visual	NA	Northeast Culvert of Northeast Swale	Ensure Effluent Infiltrates Ground Surface Prior to this Monitoring Location	NA		Continuous
		PFOS CAS # 1763-23-1	USEPA Method 1633	Grab	X4 (after 2nd LC1 resin vessel)	Sum of 70 ppt (Final 2016 LHA)			Prior to Discharge
		PFOA CAS # 335-67-1	USEPA Method 1633	Grab	X4 (after 2nd LC1 resin vessel)				
		GenX Chemicals CAS # 13252-143-6	USEPA Method 1633	Grab	X4 (after 2nd LC1 resin vessel)	10 ppt (Final 2022 LHA)			Prior to Discharge
		PFBS CAS # 375-73-5	USEPA Method 1633	Grab	X4 (after 2nd LC1 resin vessel)	2,000 ppt (Final 2022 LHA)			Prior to Discharge

* If effluent fails any parameter, discharge may not proceed, and corrective action and system revalidation must take place. The effluent will be retreated and resampled until all parameters are passed. The blue shaded parameters will be monitored after 50,000 mg PFAS have been treated with same media.

Observations (cont'd from reverse):



Key

- PG — Pressure gauge
- FM — Flow meter
- S — Sample port/air bleed/pressure gauge
- Flow throttling valve
- FS — Flow activated switch (built into ozone system)
- Manual valve (VM)
- Multi-port filter valve (MPV)

NOTES:
Adapted from Original Diagram by Lifewater Engineering

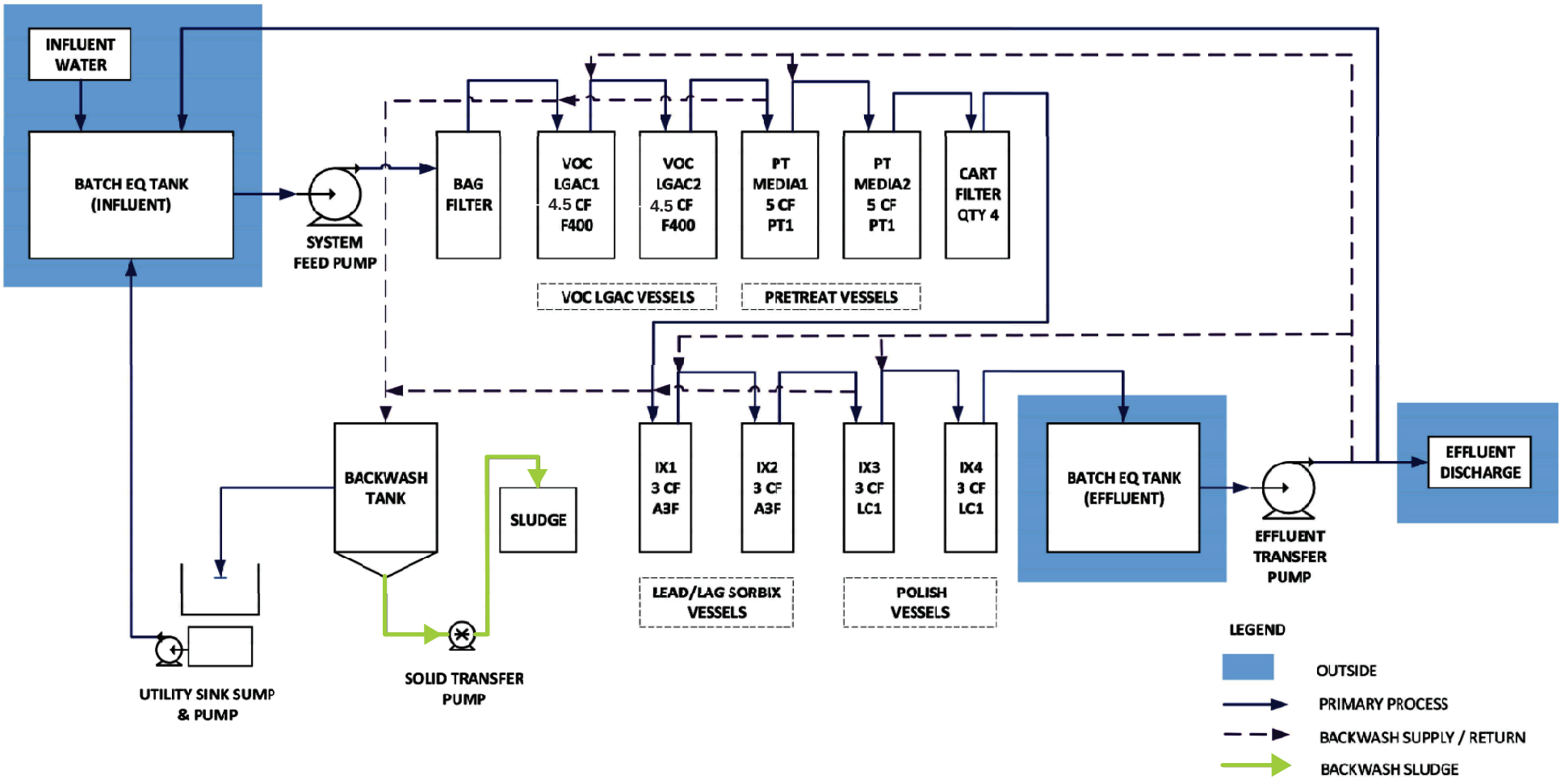
2020 PFAS WASTEWATER TREATABILITY STUDY EXTENSION REPORT
EIELSON AIR FORCE BASE, ALASKA

PRETREATMENT SYSTEM FLOW DIAGRAM

Ahtna Engineering Services LLC

Project Number:	Figure Number:
20298.05	2
Date: 12/21/2020	
Drafted By: J.B.	

Document Path: K:\Eielson\Projects\20298.05\TREATABILITY STUDY\Figures\Figure 2 - PTP.mxd



NOTES:
Adapted from Original Diagram by ECT2

2020 PFAS WASTEWATER TREATABILITY STUDY REPORT
EIELSON AIR FORCE BASE, ALASKA

TREATMENT SYSTEM FLOW DIAGRAM

Ahtna Engineering Services LLC

Project Number: 20298.05
Date: 12/7/2020
Drafted By: J.B.

Figure Number: 3

4382
4383
4388
4380
4384
Garrison Slough
N
Pretreatment System
10,000-Gallon Influent Tanks
Ion Exchange PFAS Treatment System
Electrical Connection
Building 4387
Tank 1
Tank 2
Tank 3
Tank 4
14,000-Gallon Effluent Tank
Discharge Location BMPs 2 and 3
BMP 4
1 inch = 40 feet
0
25
50
Feet

Legend

- Culvert
- Surface Drainage & Flow Direction
- Infiltration Area
- Wastewater Holding Tank
- Wastewater Treatment System

NOTES:
BMP = Best Management Practices

Land Discharge Location

Eielson Air Force Base PFAS Wastewater Treatment System
Eielson Air Force Base, Alaska

Ahtna Engineering Services, LLC

Project Number:	Figure Number:
20298.05	1
Date: 8/3/2023	
Drafted By: V.Z.	

Document Path: L:\Eielson\WWPPlus_20298\Native Files\2022\WP_ddMXD\LandDischarge_Loc_v4.mxd

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Eielson AFB - Wastewater Profile

1. Treatment Location - ***To Be Completed by Ahtna Intake Staff***

□ GAC Trailer □ PFAS Wastewater Treatment Plant

2. Wastewater Information - ***To Be Completed with Input by the Group Producing the Wastewater***

Wastewater Site Address/Source Location
(Site Designation/Building/Other)

Process Producing Wastewater
(e.g. Tank cleaning, Purge water from groundwater sampling, etc.)

Date and Time Delivered to Treatment System

Container(s) Type and Unique Identifiers + Applicable Notes
(e.g. 5,000 gallon tanker NON023456, 55-gallon steel drum WW-2019-01. If no identifier on drum, add one and record here.)

Color of Wastewater *(e.g. clear, black, white, top black, bottom clear)*

Odor of Wastewater *(e.g. soapy, fuel smell, no odor, organic smell)*

Representative Analytical Lab ID'(s) & Report Number(s)
(e.g. 18-WWTS-500-RS, J78717-2 -or- Not Applicable)

Analysis Conducted
(e.g. PFAS/PFOA, total metals analysis, VOCs, etc. -or- Not Applicable)

Lab Report/s Attached? □ Yes □ No

PFOS (ppt)	PFOA (ppt)	GenX Chemicals (ppt)	PFBS (ppt)	PFAS (ppt)

Total Volume (gallons)

PFOS (mg)	PFOA (mg)	GenX Chemicals (mg)	PFBS (mg)	PFAS (mg)

Wastewater Producer Contact Information
Name
Title
Phone Number(s)
E-mail Address

Eielson AFB - Wastewater Profile

3. Physical Characteristics of Waste - ***To Be Completed by Ahtna Intake Staff***	
Color	**Turbidity** *(NTU)*
Odor	**Dissolved Iron/Manganese** *(mg/L)*
% Solids	**Foaming Potential Shaker Test** *(Y/N)*
pH	**Date**

4. Regulatory Questions and Acceptance Authorization - ***To Be Completed by the Eielson AFB Technical Point of Contact***

Eielson AFB Technical Point of Contact

Name
Title
Contact Phone Number(s)
E-mail Address

Wastewater is Not a RCRA Hazardous Waste
(Initial and Date)

Wastewater is Not a TSCA Waste
(Initial and Date)

I authorize that the wastewater provided to Ahtna Solutions, LLC is not classified as toxic, hazardous, or infectious, or contains any other material that is prohibited by law for treatment.

Eielson AFB Technical Point of Contact Approval

Date ***Sign*** ***Print***

Notes: (Which tank is wastewater placed in? Transfer methods? Unique characteristics?

CAS = Chemical Abstract Service
GAC = granulated activated carbon
mg = milligrams
mg/L = milligrams per liter
NTU = Nephelometric Turbidity Unit
ppt = parts per trillion
RCRA = Resource Conservation and Recovery Act
TSCA = Toxic Substances Control Act

PFAS = per- and polyfluoroalkyl substances
PFBS = perfluorobutane sulfonic acid (CAS # 375-73-5)
PFOA = perfluorooctanoic acid (CAS # 335-67-1)
PFOS = perfluorooctane sulfonic acid (CAS # 1763-23-1)
GenX Chemicals, aka HFPO-DA (CAS # 13252-13-6)

Appendix D

Laboratory Analytical Reports
(provided under separate cover)

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Appendix E

Aqtesolv™ Outputs

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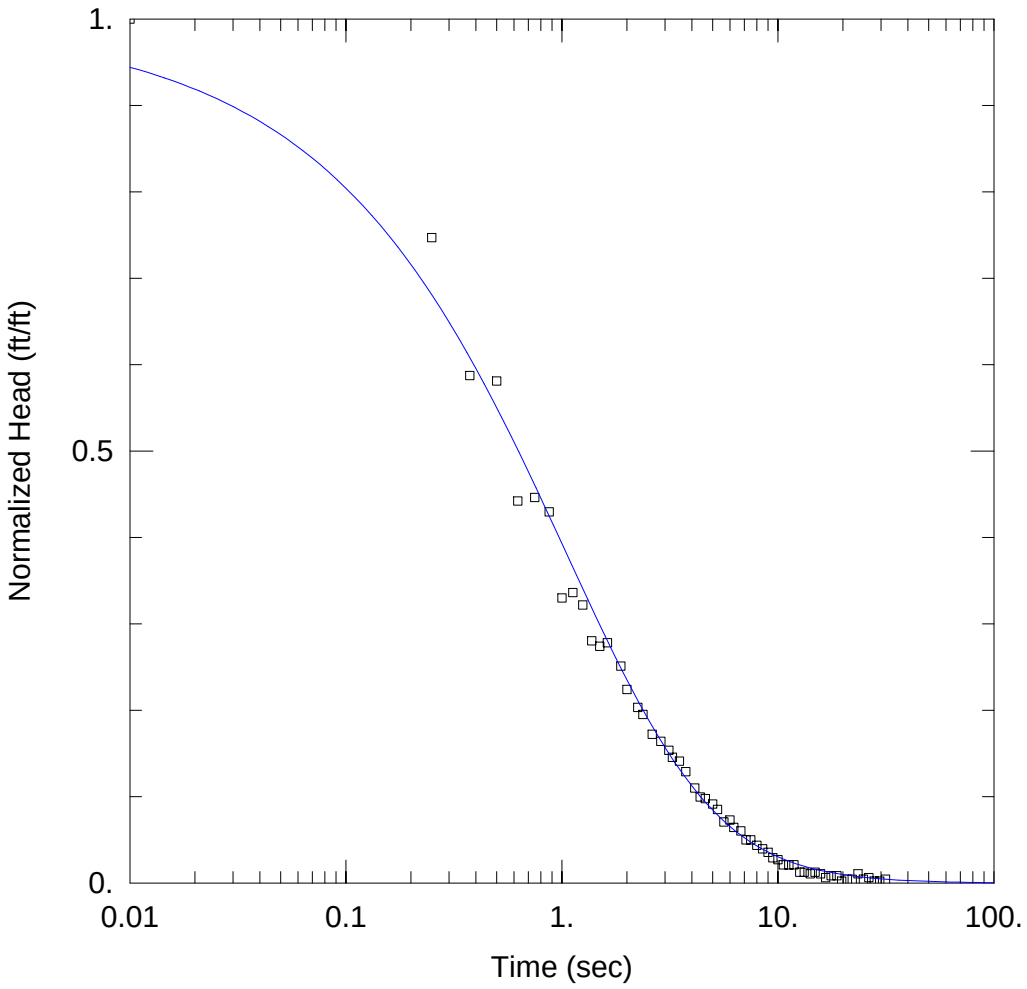
Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.033 cm/sec Ss = 0.0018 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

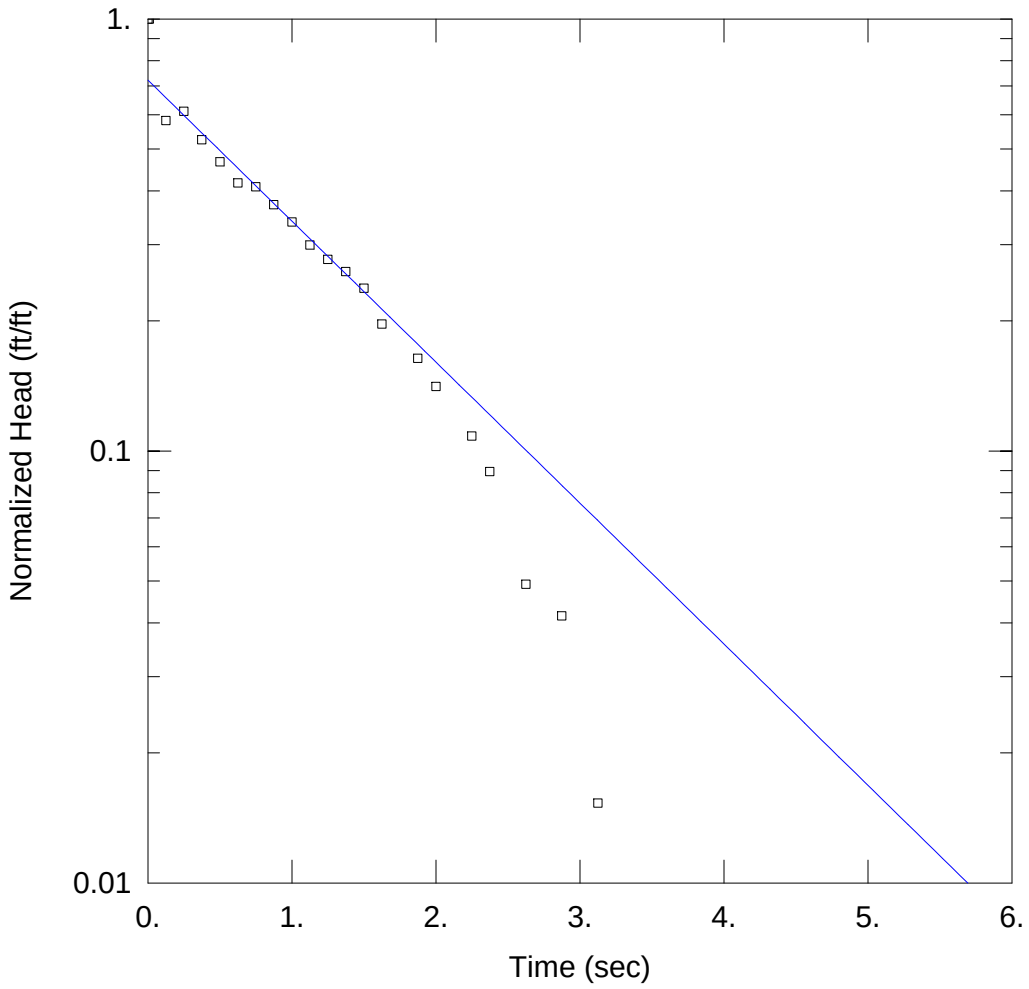
Saturated Thickness: 7.88 ft

WELL DATA (CACMW-001-60 (12.5-15.5))

Initial Displacement: 0.482 ft
Static Water Column Height: 7.88 ft
Total Well Penetration Depth: 7.88 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.022 cm/sec y0 = 0.66 ft

AQUIFER DATA

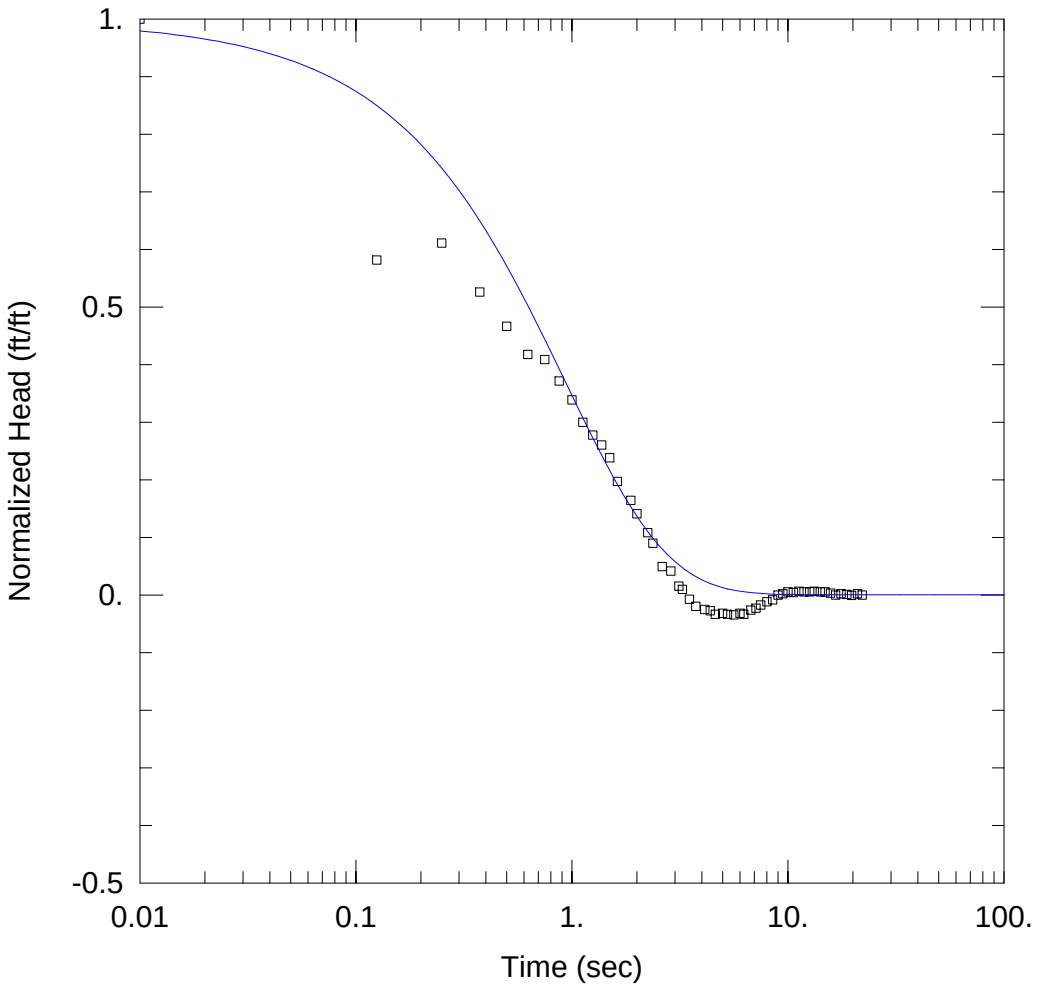
Saturated Thickness: 57.99 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-001-110 (62.5-65.5))

Initial Displacement: 0.915 ft
Static Water Column Height: 57.99 ft
Total Well Penetration Depth: 57.99 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.027 cm/sec Ss = 1.0E-5 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

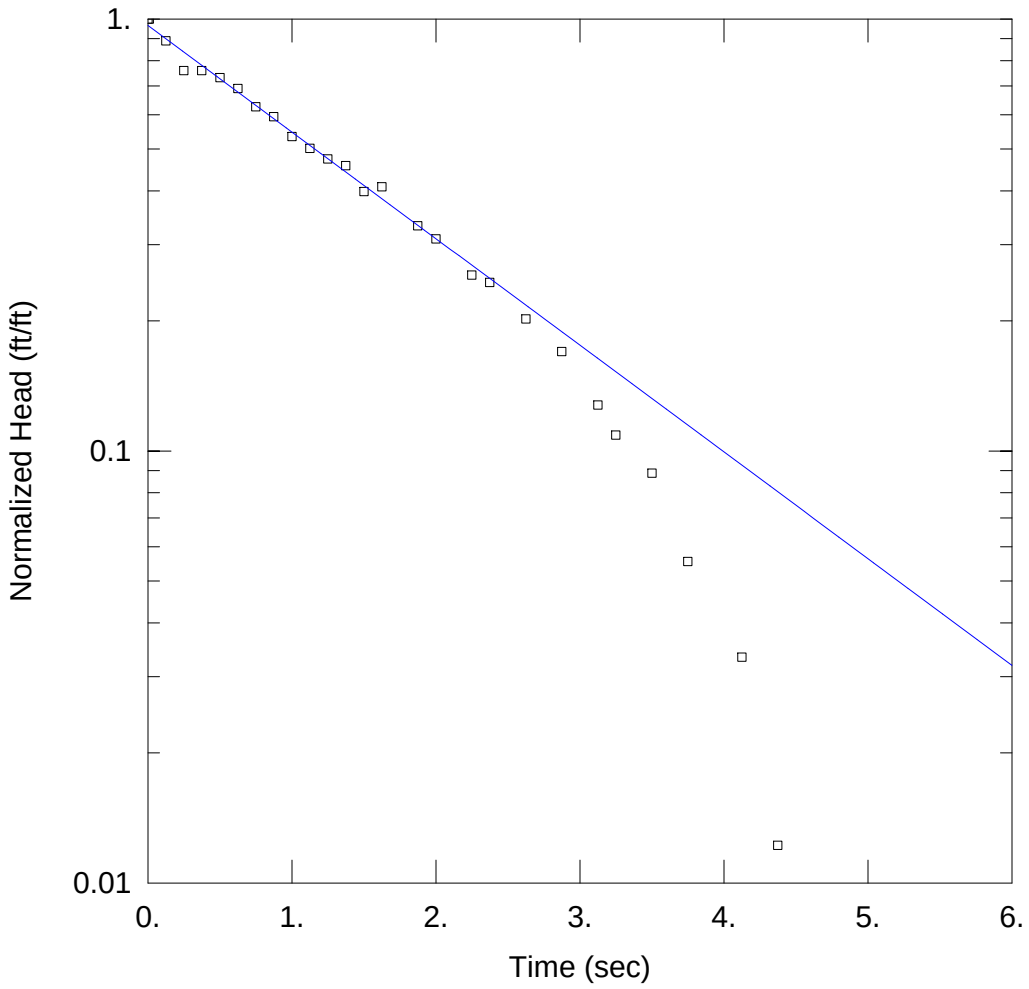
Saturated Thickness: 57.99 ft

WELL DATA (CACMW-001-110 (62.5-65.5))

Initial Displacement: 0.915 ft
Static Water Column Height: 57.99 ft
Total Well Penetration Depth: 57.99 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.02 cm/sec y0 = 0.87 ft

AQUIFER DATA

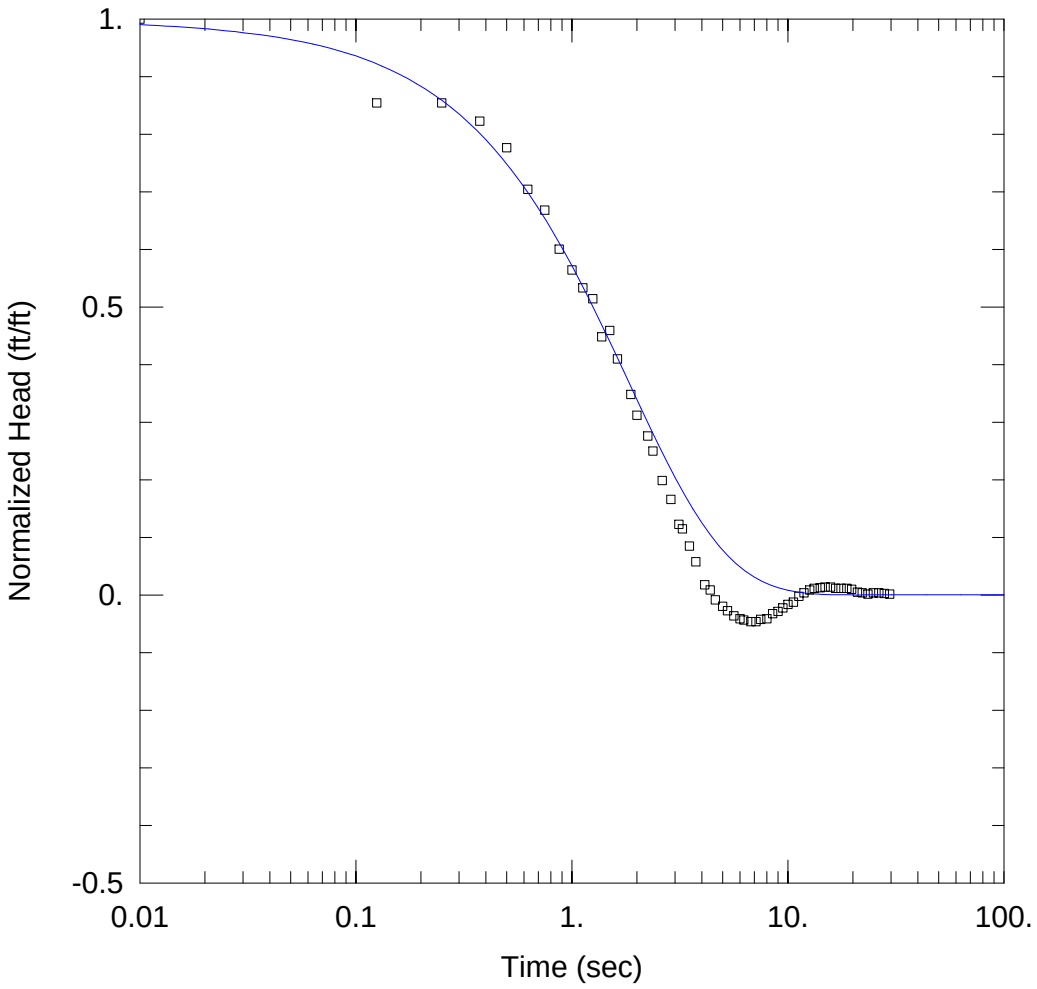
Saturated Thickness: 108.8 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-001-160 (113-116))

Initial Displacement: 0.901 ft
Static Water Column Height: 108.8 ft
Total Well Penetration Depth: 108.8 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.018 cm/sec Ss = 3.6E-6 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

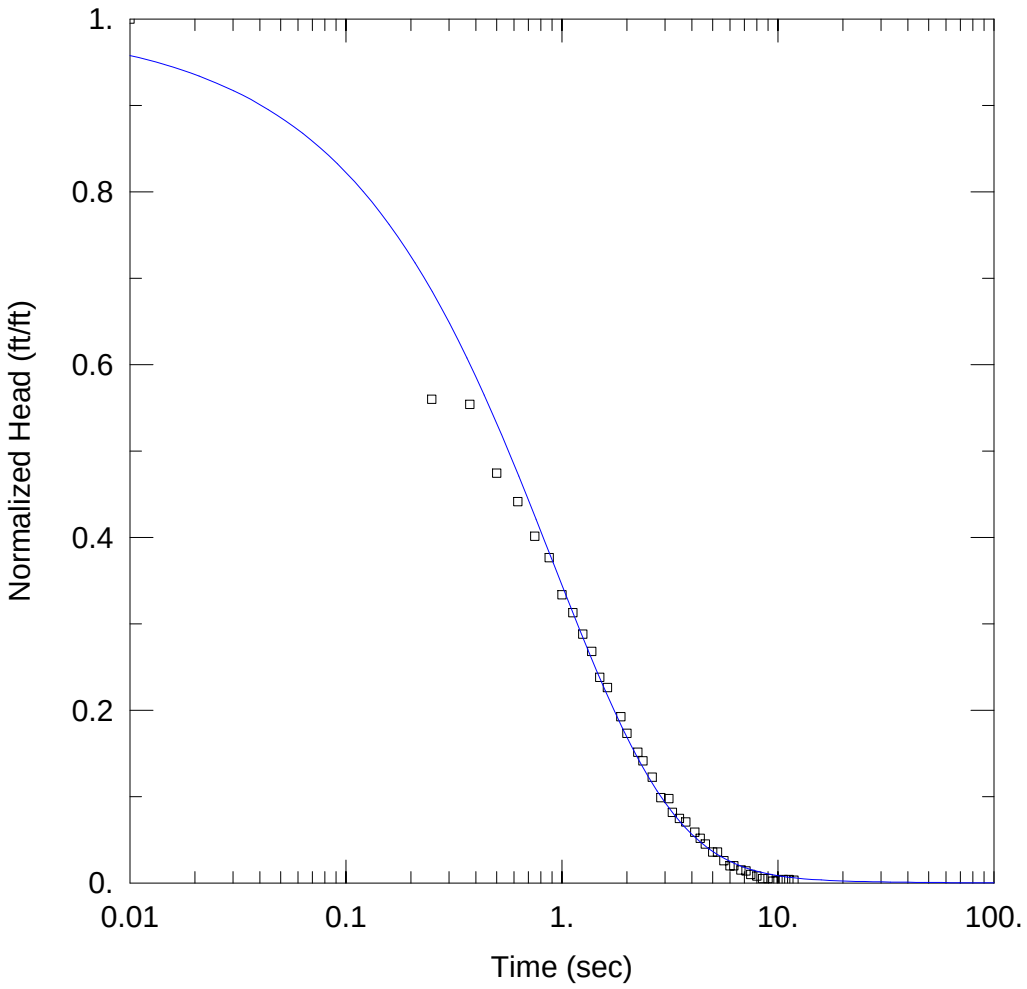
Saturated Thickness: 108.8 ft

WELL DATA (CACMW-001-160 (113-116))

Initial Displacement: 0.801 ft
Static Water Column Height: 108.8 ft
Total Well Penetration Depth: 108.8 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.019 cm/sec Ss = 0.00015 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

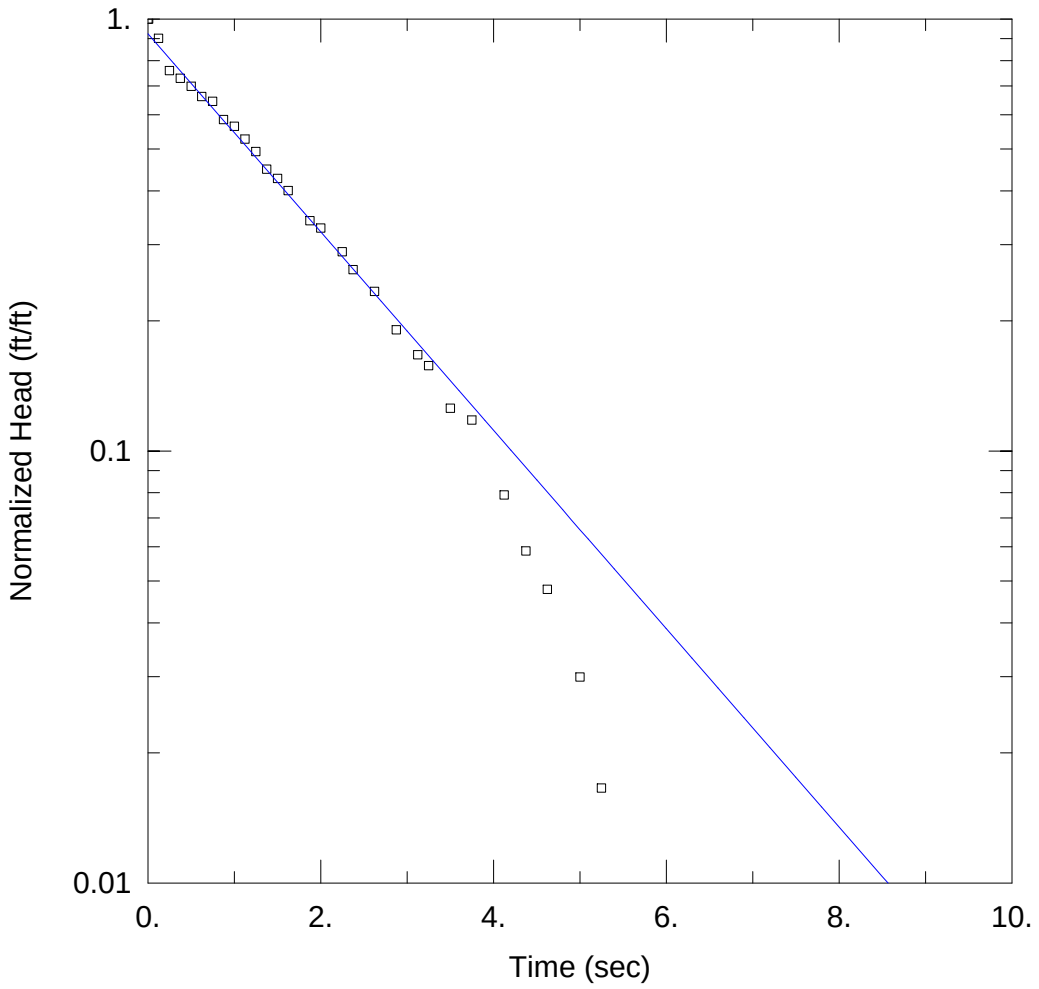
Saturated Thickness: 24.54 ft

WELL DATA (CACMW-002-60 (28.25-31.25))

Initial Displacement: 1.004 ft
Static Water Column Height: 24.54 ft
Total Well Penetration Depth: 24.54 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.014 cm/sec y0 = 1.45 ft

AQUIFER DATA

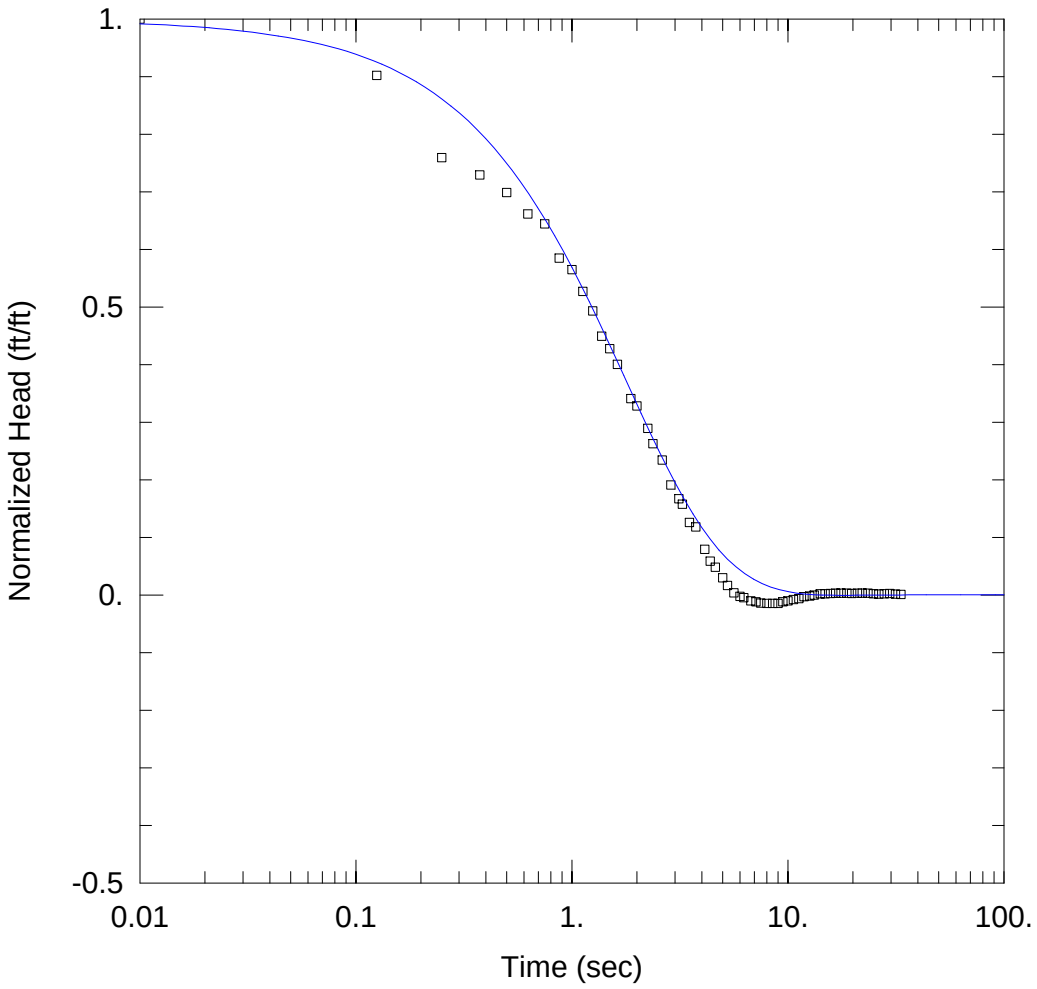
Saturated Thickness: 74.38 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-002-110 (78.25-81.25))

Initial Displacement: 1.569 ft
Static Water Column Height: 74.38 ft
Total Well Penetration Depth: 74.38 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.013 cm/sec Ss = 1.0E-6 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

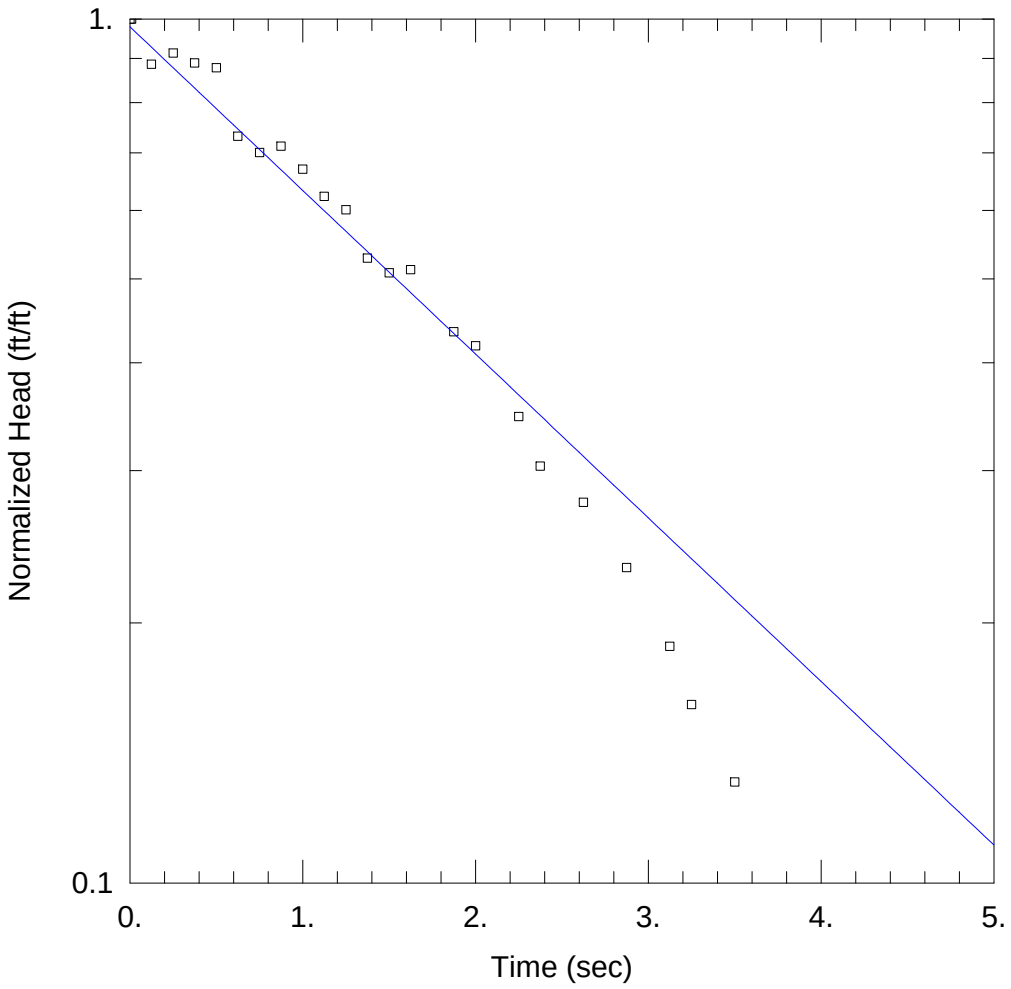
Saturated Thickness: 74.38 ft

WELL DATA (CACMW-002-110 (78.25-81.25))

Initial Displacement: 1.569 ft
Static Water Column Height: 74.38 ft
Total Well Penetration Depth: 74.38 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.014 cm/sec y0 = 0.98 ft

AQUIFER DATA

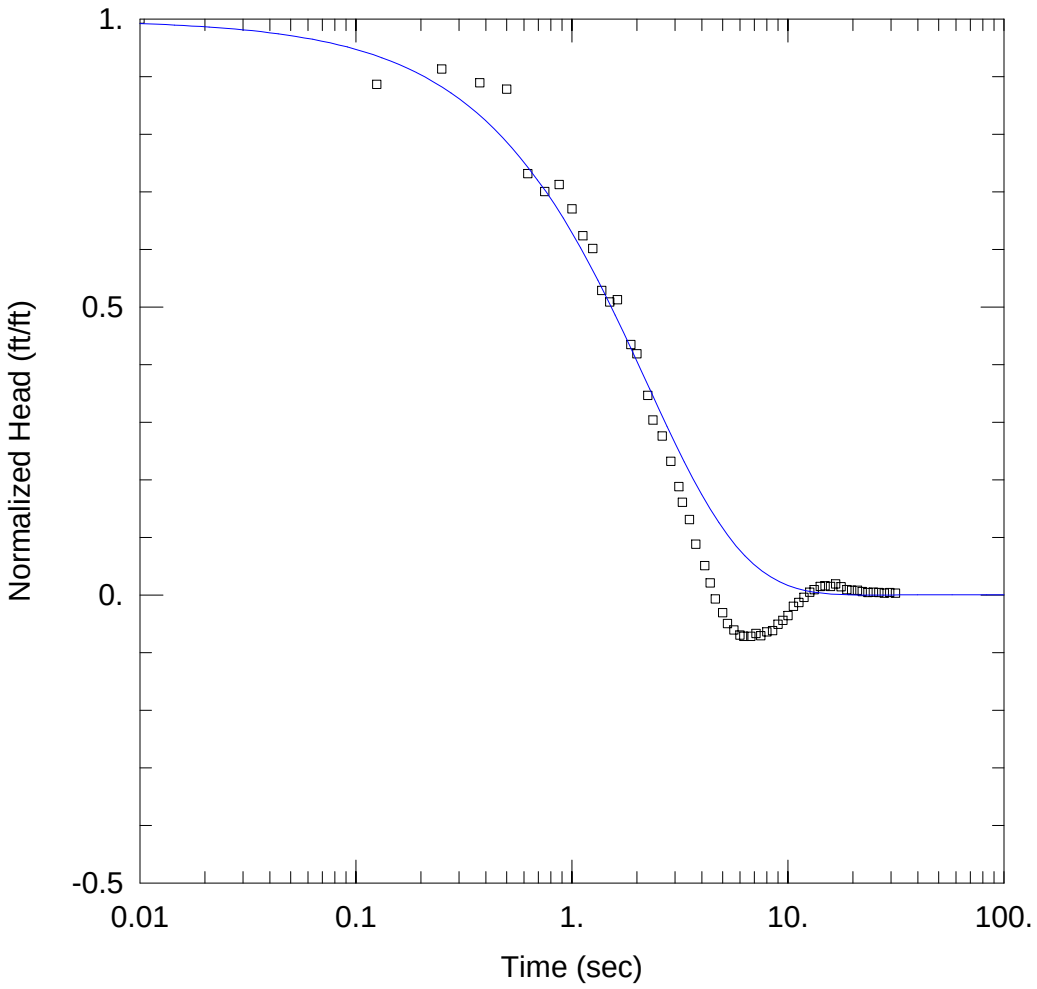
Saturated Thickness: 124.5 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-002-160 (128.25-131.25))

Initial Displacement: 1.001 ft
Static Water Column Height: 124.5 ft
Total Well Penetration Depth: 124.5 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.012 cm/sec Ss = 1.9E-6 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

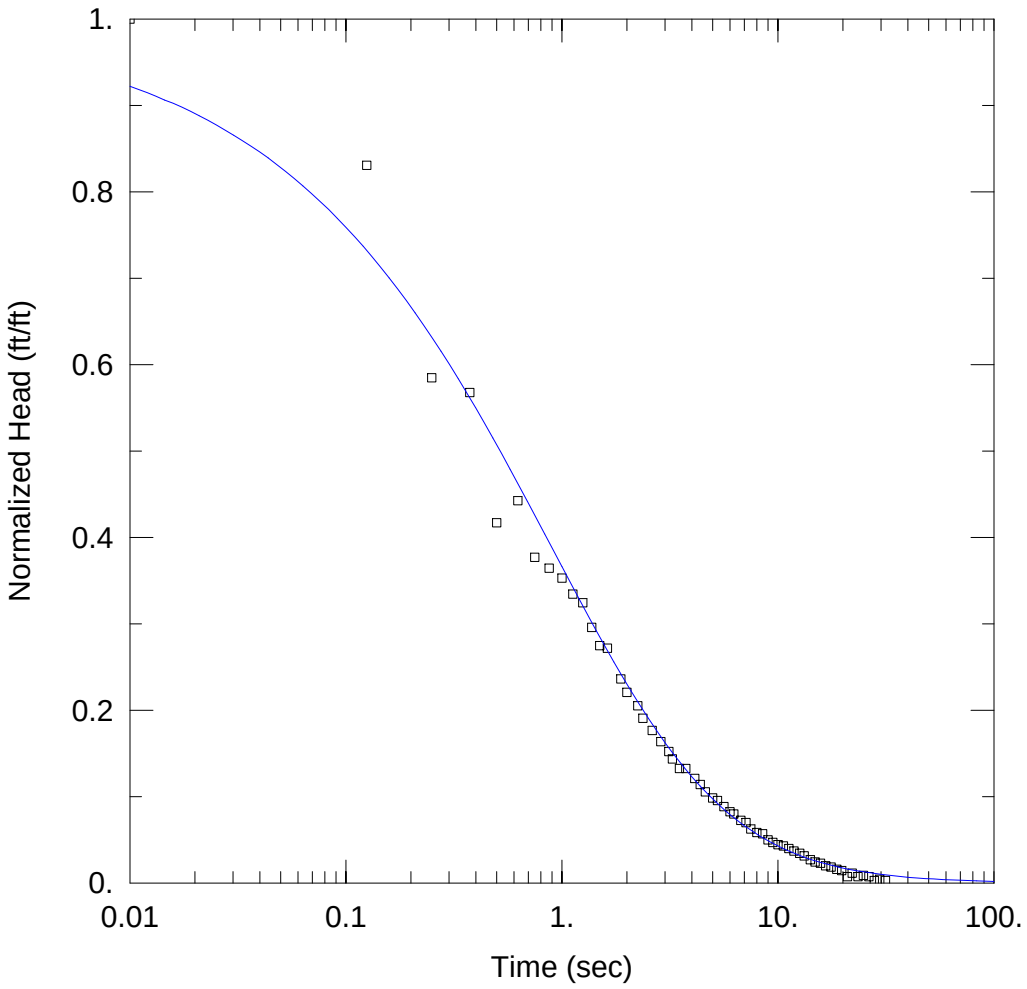
Saturated Thickness: 124.5 ft

WELL DATA (CACMW-002-160 (128.25-131.25))

Initial Displacement: 1.001 ft
Static Water Column Height: 124.5 ft
Total Well Penetration Depth: 124.5 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.015 cm/sec Ss = 0.0028 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

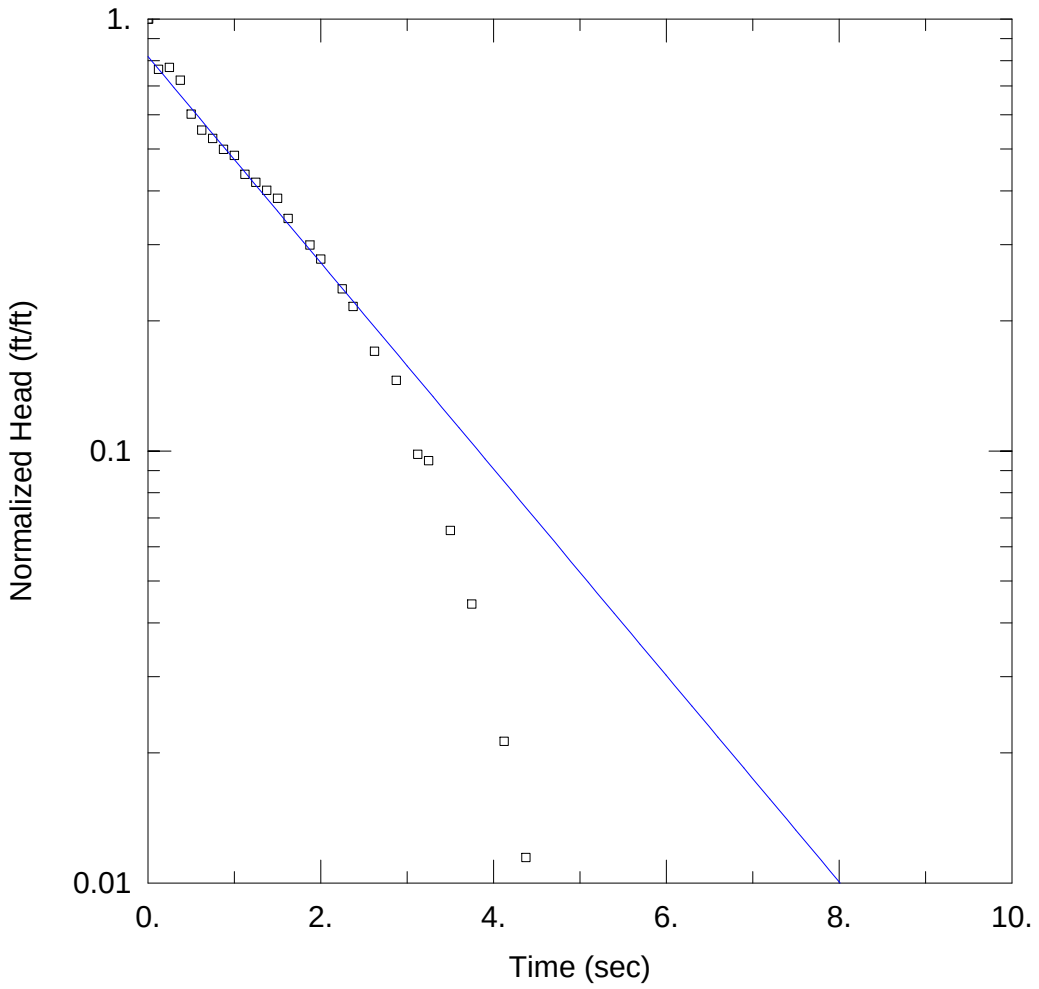
Saturated Thickness: 51.56 ft

WELL DATA (CACMW-003-60 (54.5-57.5))

Initial Displacement: 0.703 ft
Static Water Column Height: 51.56 ft
Total Well Penetration Depth: 51.56 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.034 cm/sec y0 = 0.5 ft

AQUIFER DATA

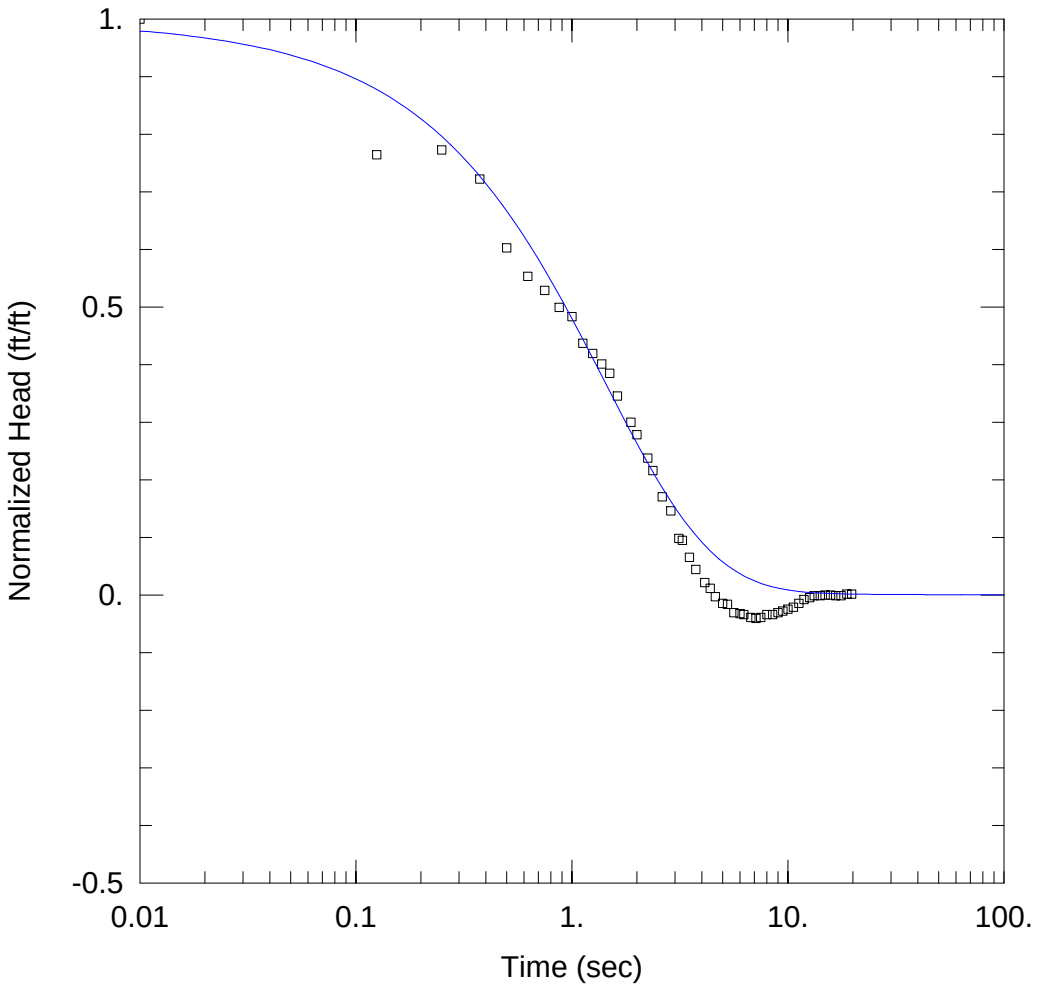
Saturated Thickness: 101.7 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-003-110)

Initial Displacement: 0.611 ft
Static Water Column Height: 101.7 ft
Total Well Penetration Depth: 101.7 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.033 cm/sec Ss = 6.5E-5 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

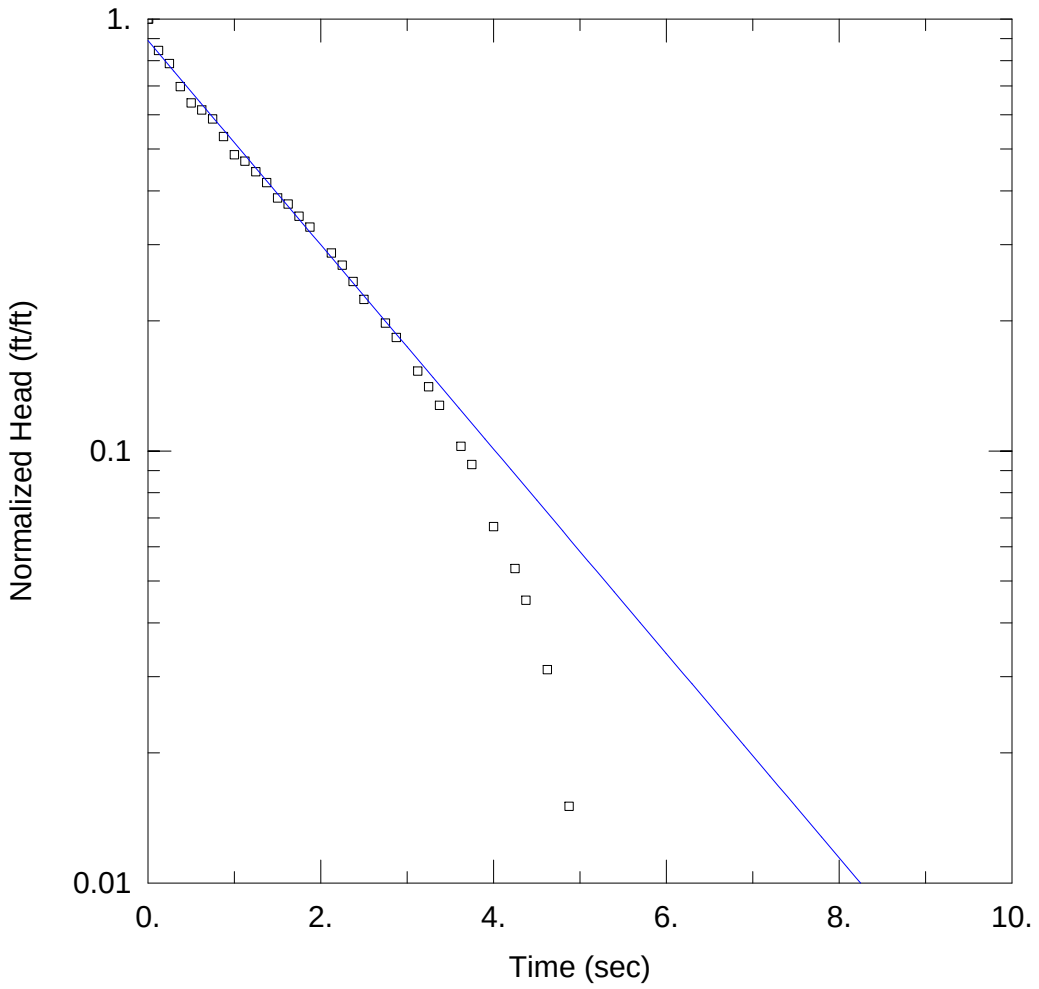
Saturated Thickness: 101.7 ft

WELL DATA (CACMW-003-110)

Initial Displacement: 0.611 ft
Static Water Column Height: 101.7 ft
Total Well Penetration Depth: 101.7 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0155 cm/sec y0 = 1.6 ft

AQUIFER DATA

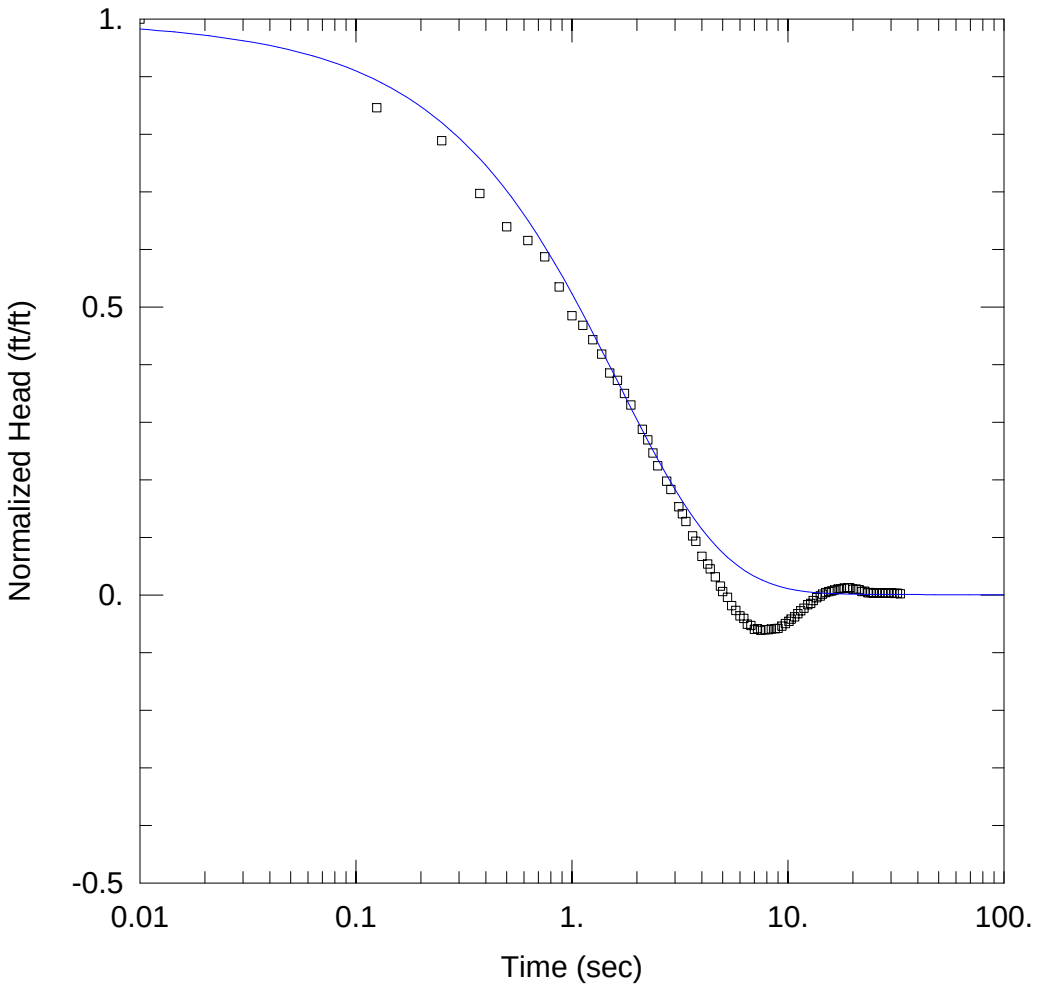
Saturated Thickness: 151.5 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-003-160 (154.5-157.5))

Initial Displacement: 1.796 ft
Static Water Column Height: 151.5 ft
Total Well Penetration Depth: 151.5 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.013 cm/sec Ss = 2.1E-5 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

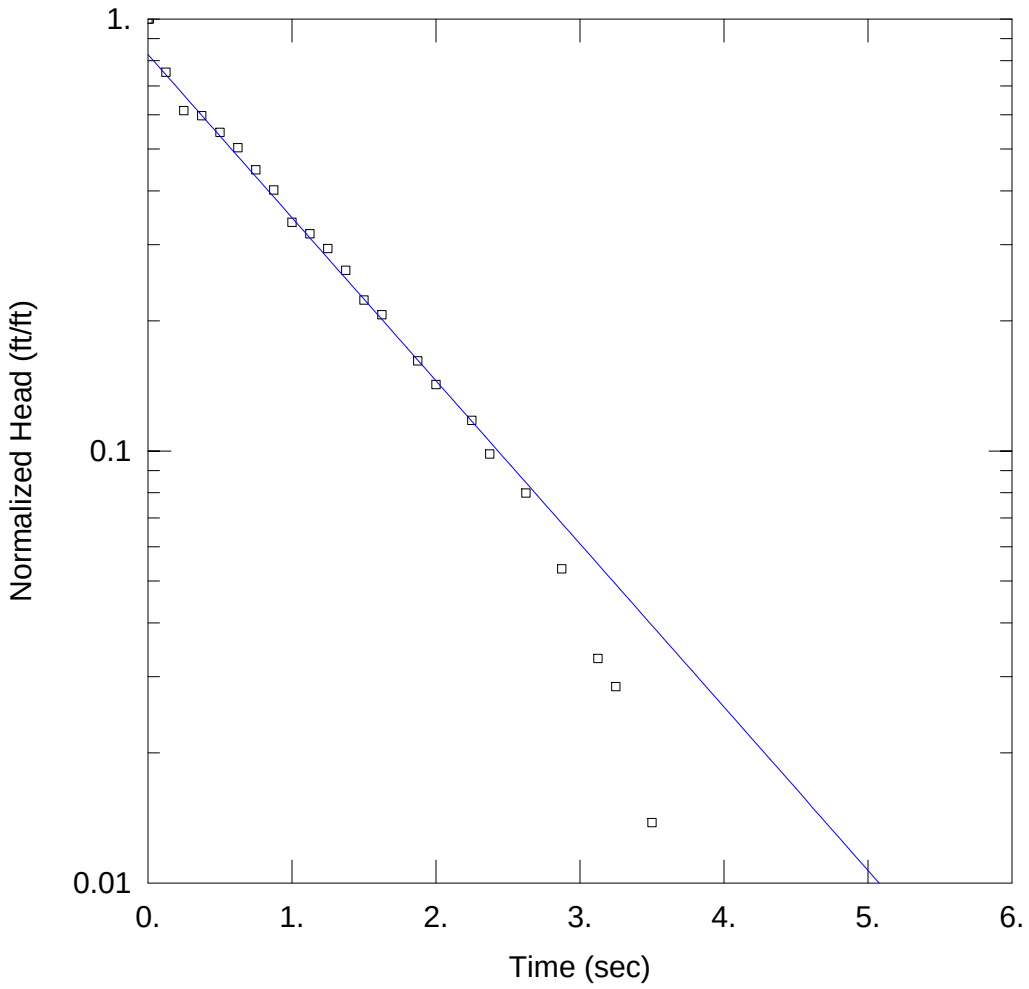
Saturated Thickness: 151.5 ft

WELL DATA (CACMW-003-160 (154.5-157.5))

Initial Displacement: 1.796 ft
Static Water Column Height: 151.5 ft
Total Well Penetration Depth: 151.5 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.021 cm/sec y0 = 0.9 ft

AQUIFER DATA

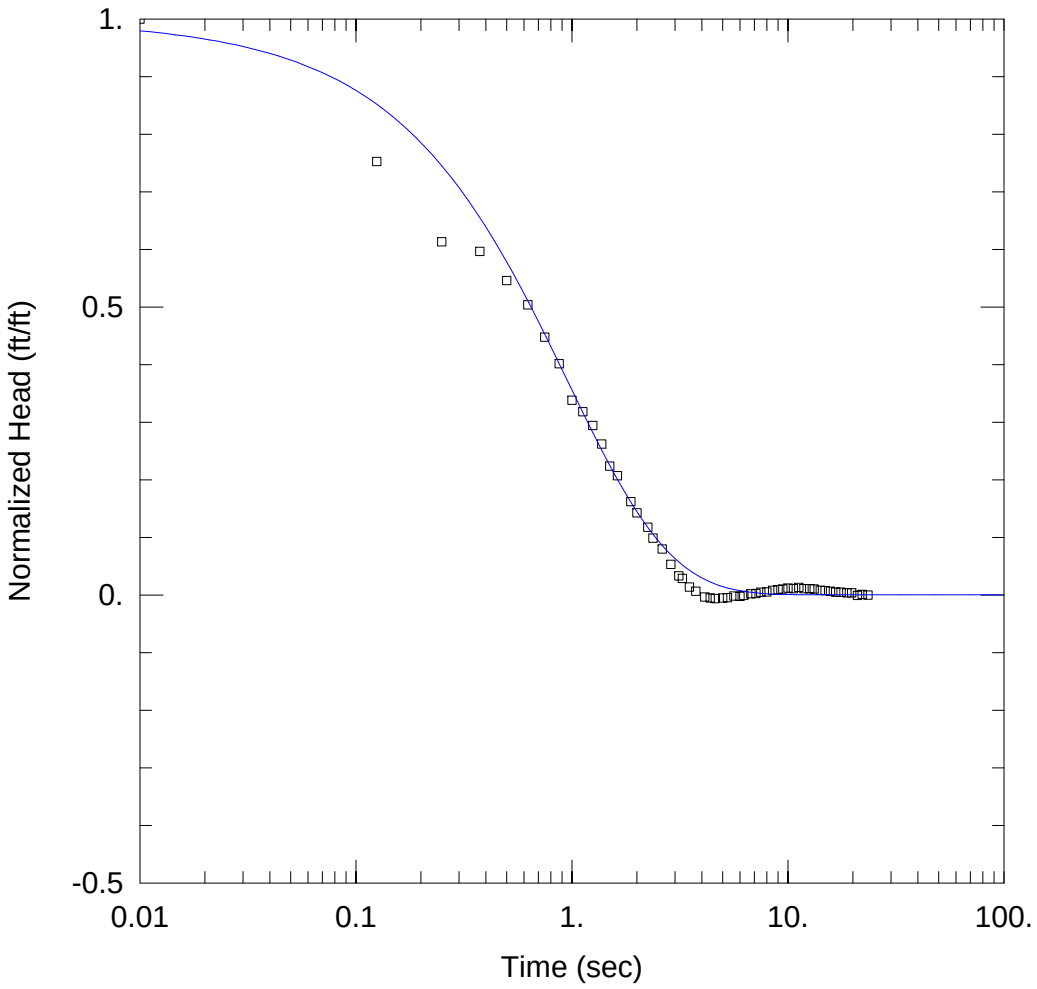
Saturated Thickness: 34.66 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-004-60 (38.75-41.75))

Initial Displacement: 1.088 ft
Static Water Column Height: 34.66 ft
Total Well Penetration Depth: 34.66 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.023 cm/sec Ss = 1.0E-5 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

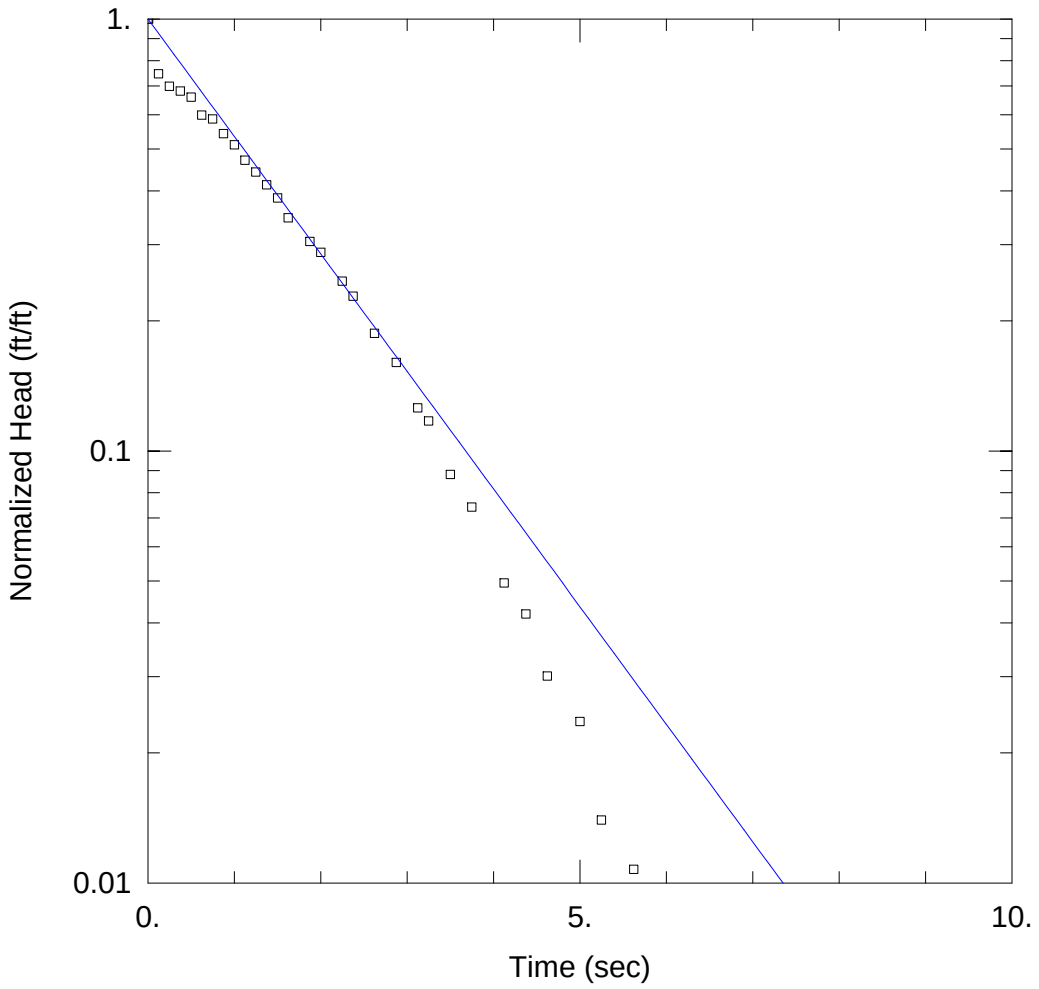
Saturated Thickness: 34.66 ft

WELL DATA (CACMW-004-60 (38.75-41.75))

Initial Displacement: 1.088 ft
Static Water Column Height: 34.66 ft
Total Well Penetration Depth: 34.66 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.021 cm/sec y0 = 0.93 ft

AQUIFER DATA

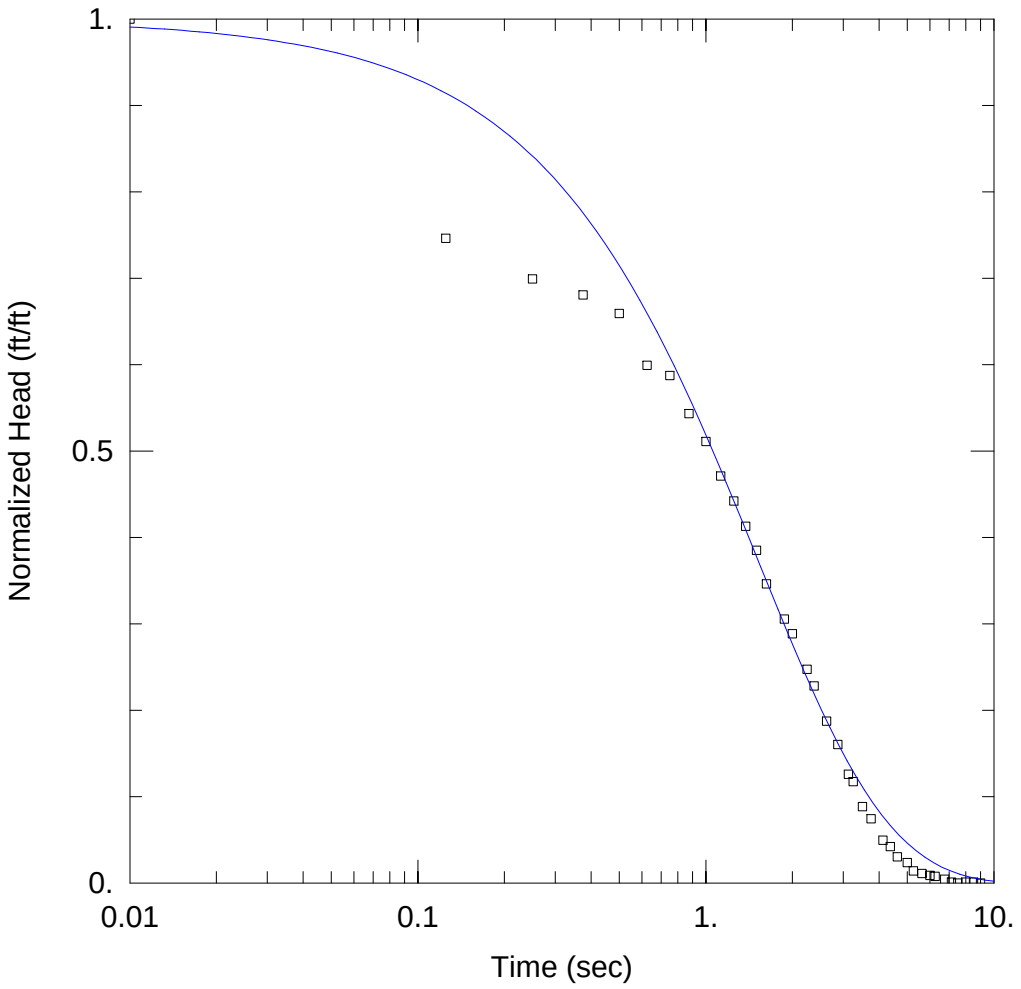
Saturated Thickness: 84.91 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-004-110 (88.75-91.75))

Initial Displacement: 0.93 ft
Static Water Column Height: 84.91 ft
Total Well Penetration Depth: 84.91 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.019 cm/sec Ss = 1.1E-6 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

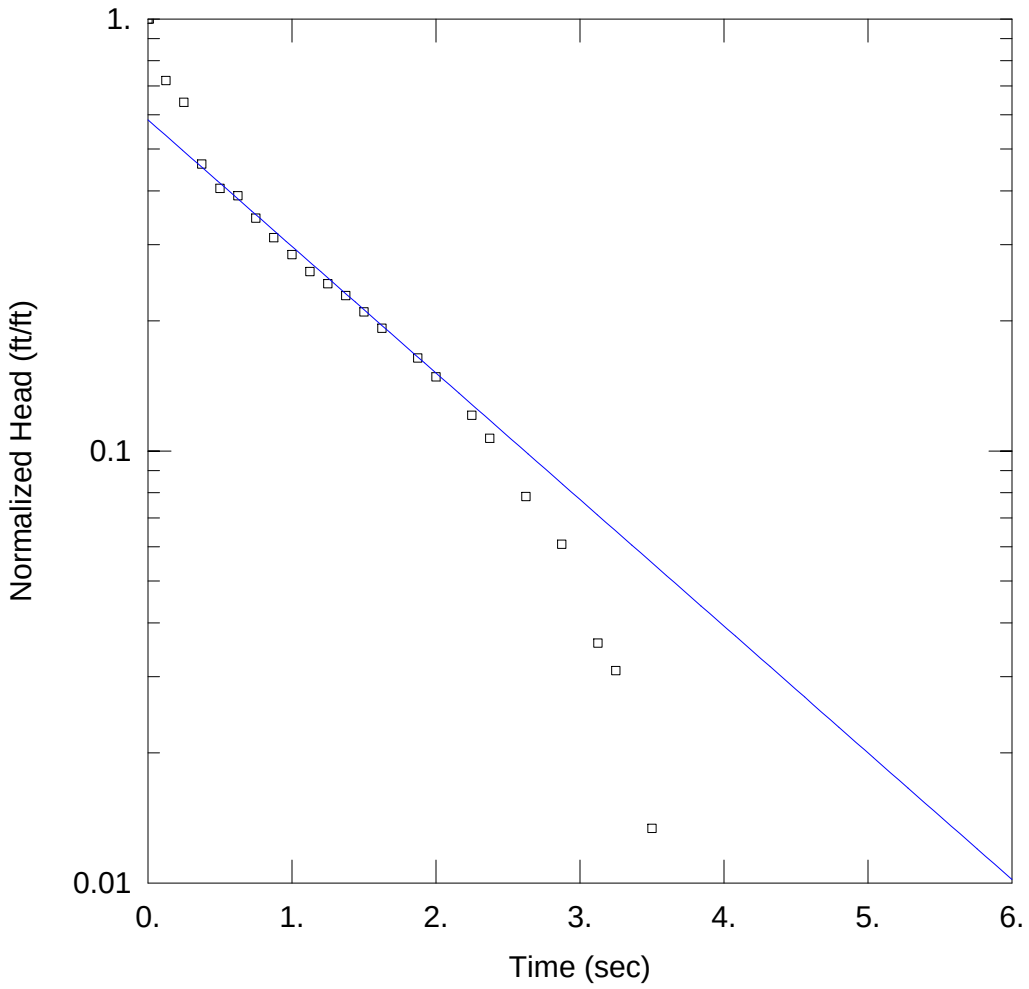
Saturated Thickness: 84.91 ft

WELL DATA (CACMW-004-110 (88.75-91.75))

Initial Displacement: 0.93 ft
Static Water Column Height: 84.91 ft
Total Well Penetration Depth: 84.91 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.019 cm/sec y0 = 0.96 ft

AQUIFER DATA

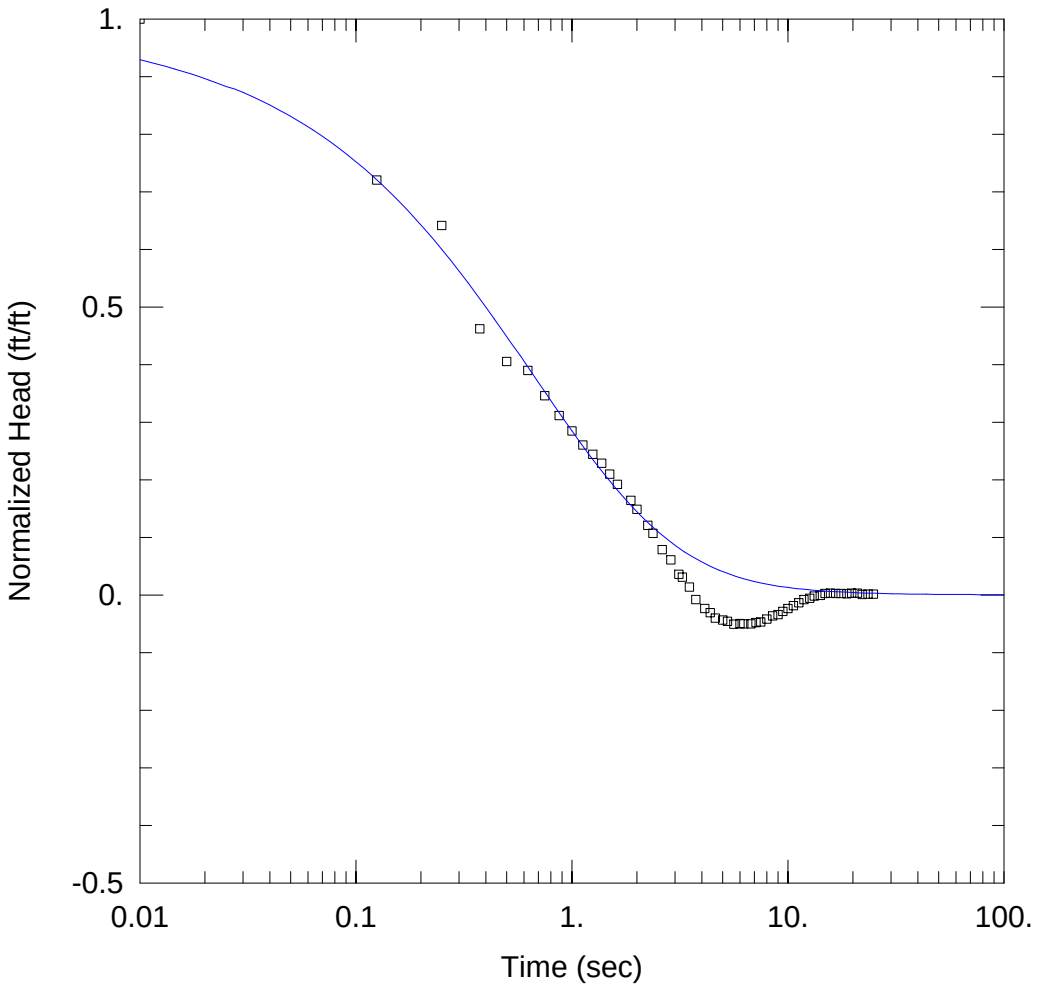
Saturated Thickness: 134.8 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-004-160 (138.75-141.75))

Initial Displacement: 1.644 ft
Static Water Column Height: 134.8 ft
Total Well Penetration Depth: 134.8 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.019 cm/sec Ss = 0.00053 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

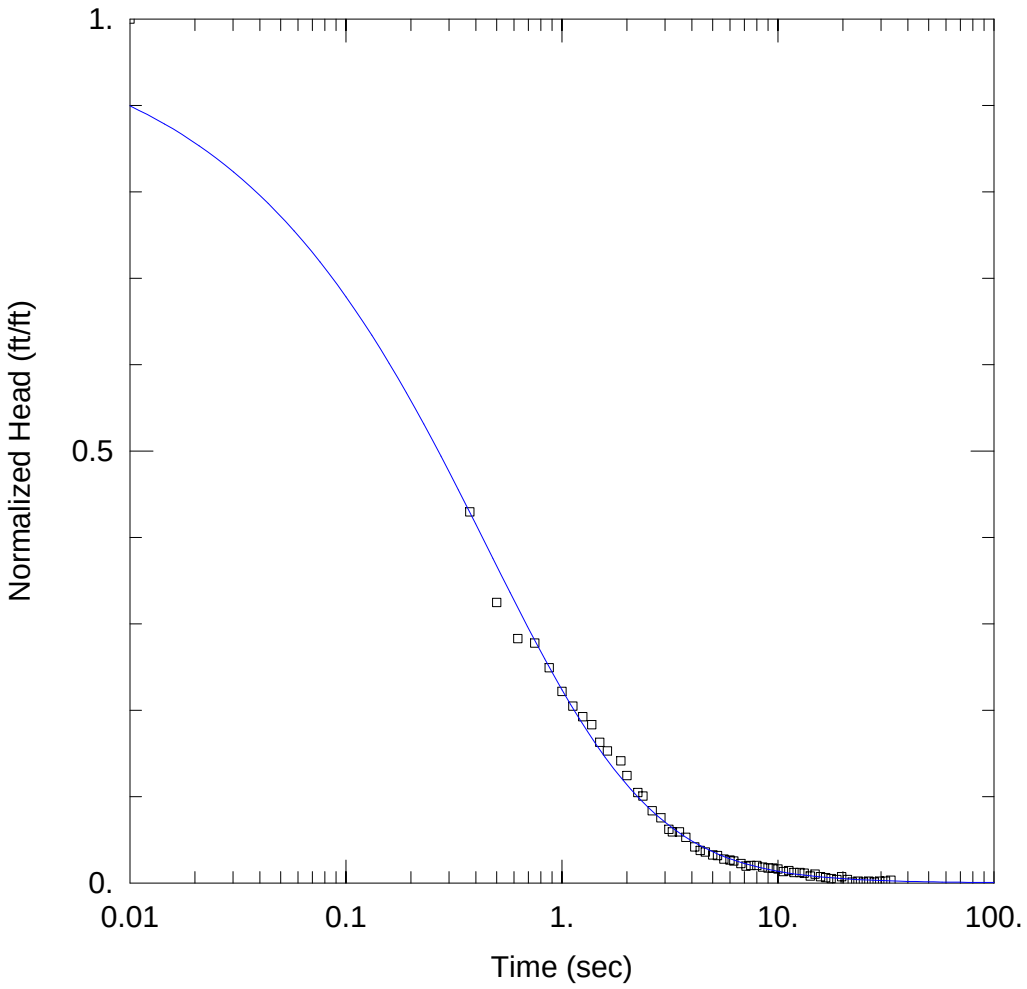
Saturated Thickness: 134.8 ft

WELL DATA (CACMW-004-160 (138.75-141.75))

Initial Displacement: 1.644 ft
Static Water Column Height: 134.8 ft
Total Well Penetration Depth: 134.8 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.021 cm/sec Ss = 0.0012 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

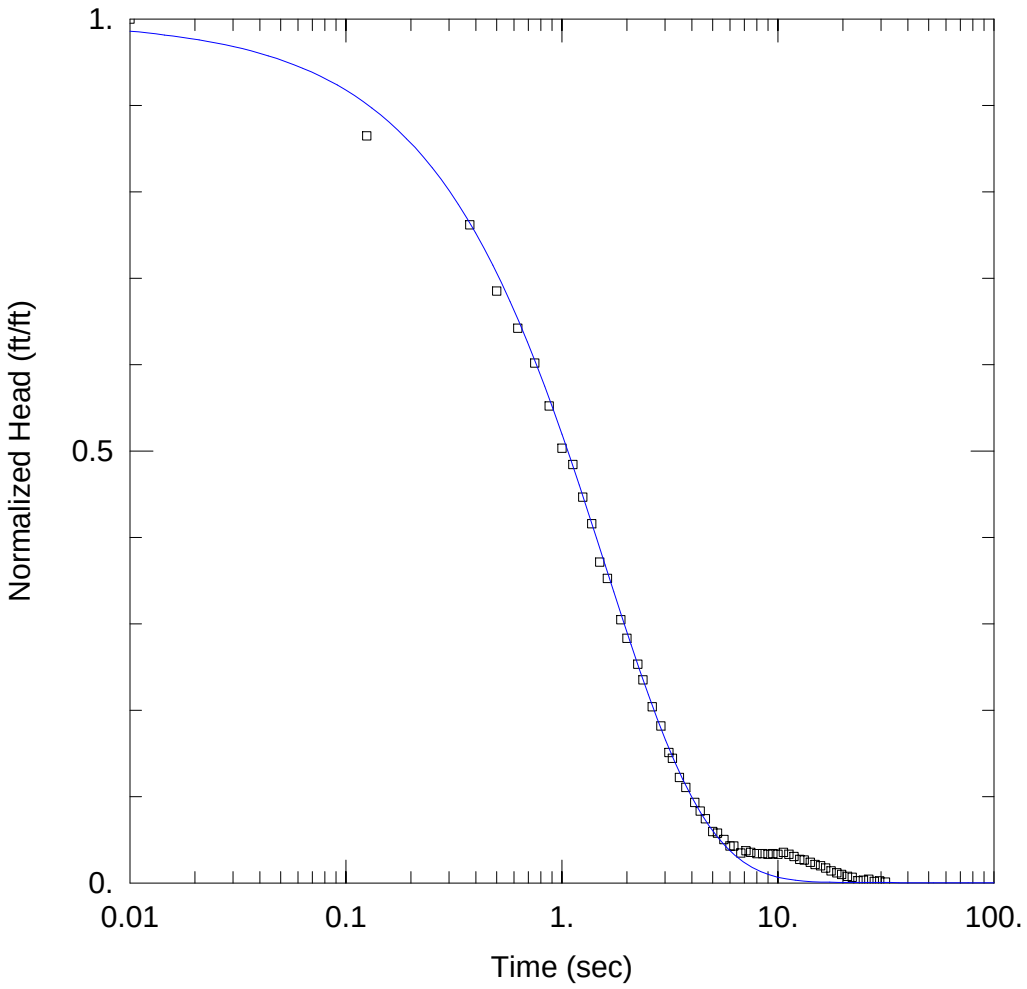
Saturated Thickness: 13.65 ft

WELL DATA (CACMW-005-060 (17.75-20.75))

Initial Displacement: 0.983 ft
Static Water Column Height: 13.65 ft
Total Well Penetration Depth: 13.65 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.016 cm/sec Ss = 1.0E-5 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

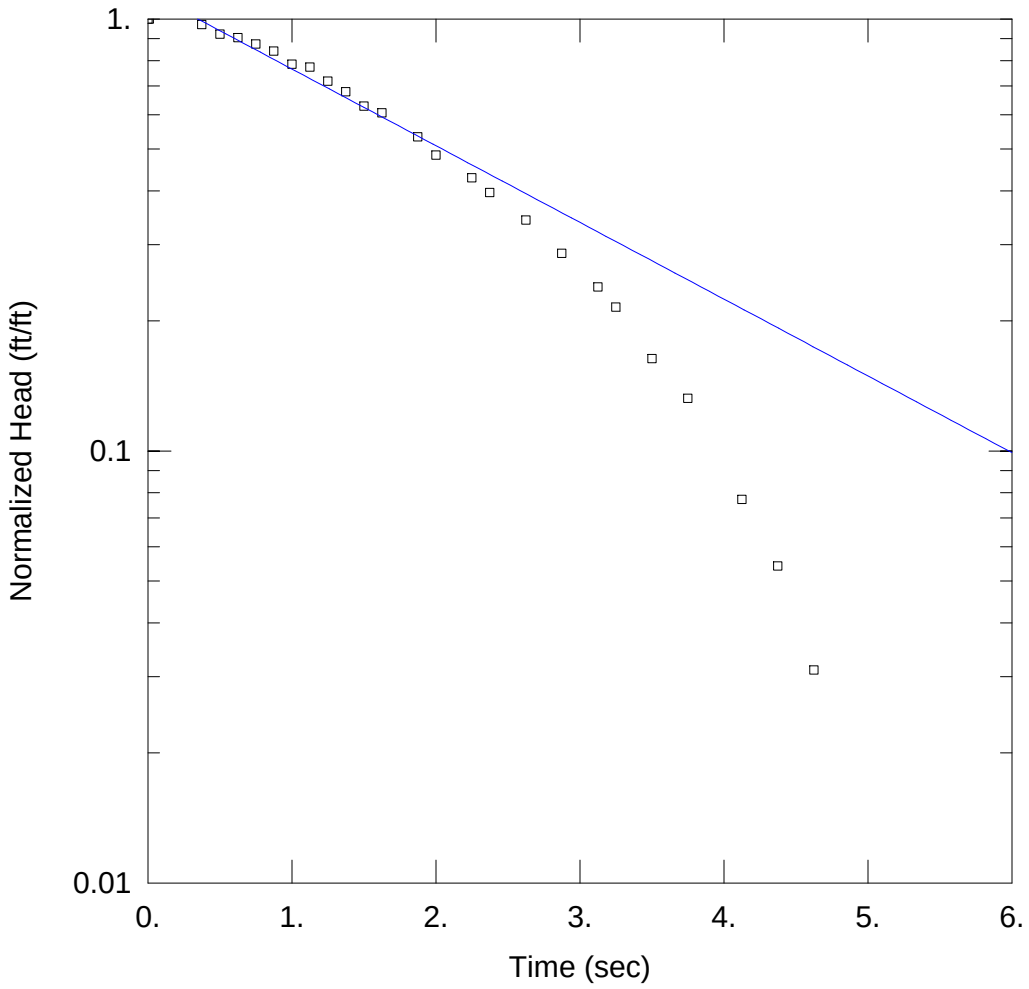
Saturated Thickness: 63.65 ft

WELL DATA (CACMW-005-110 (67.75-70.75))

Initial Displacement: 1.212 ft
Static Water Column Height: 63.65 ft
Total Well Penetration Depth: 63.65 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.015 cm/sec y0 = 1. ft

AQUIFER DATA

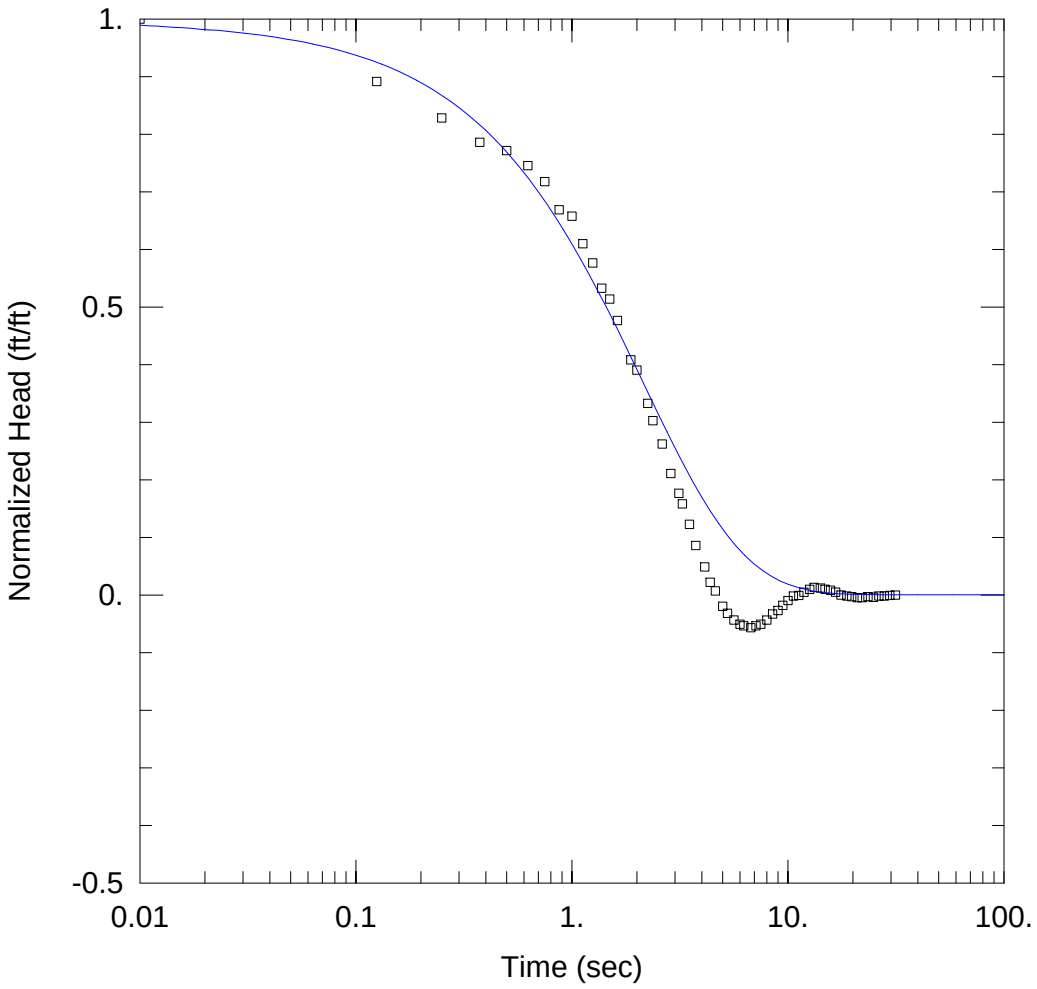
Saturated Thickness: 113.5 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-005-160 (117.75-120.75))

Initial Displacement: 0.868 ft
Static Water Column Height: 113.5 ft
Total Well Penetration Depth: 113.5 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.012 cm/sec Ss = 7.8E-6 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

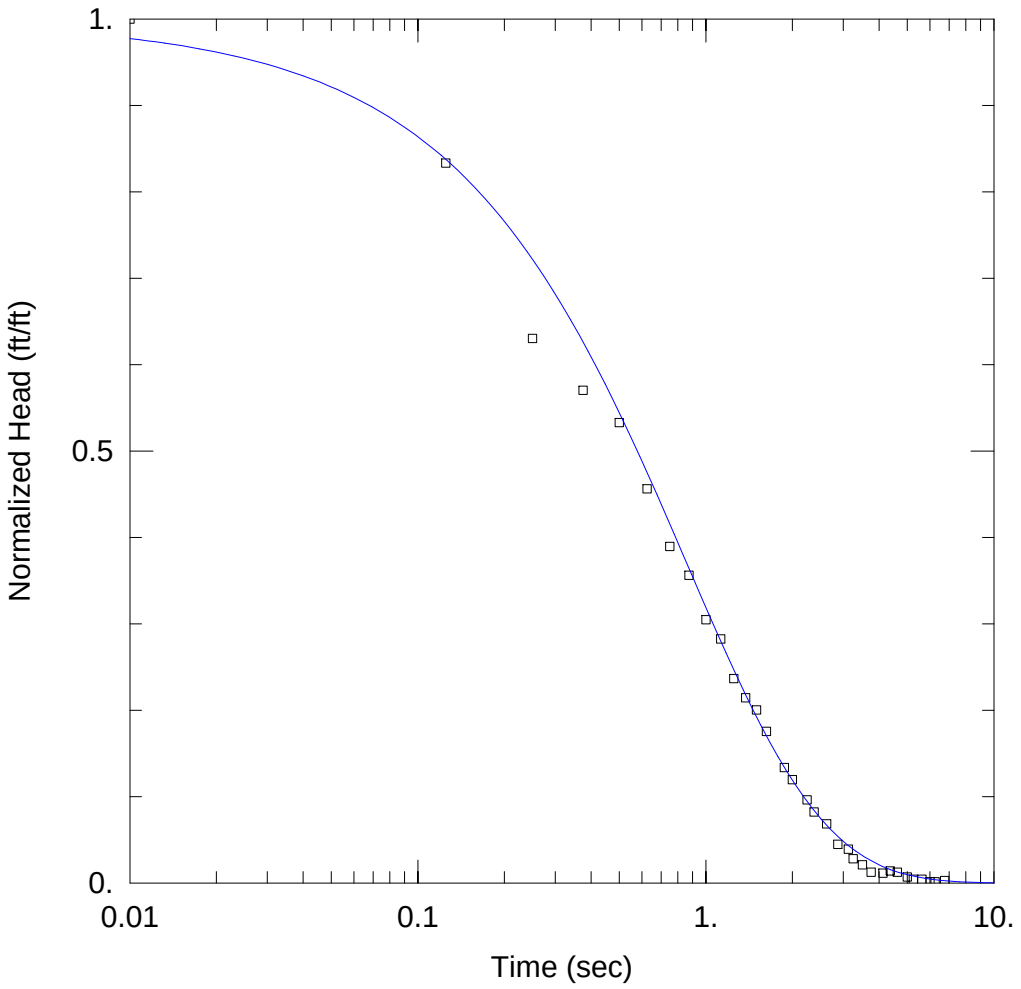
Saturated Thickness: 113.5 ft

WELL DATA (CACMW-005-160 (117.75-120.75))

Initial Displacement: 1.005 ft
Static Water Column Height: 113.5 ft
Total Well Penetration Depth: 113.5 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.041 cm/sec Ss = 1.7E-5 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

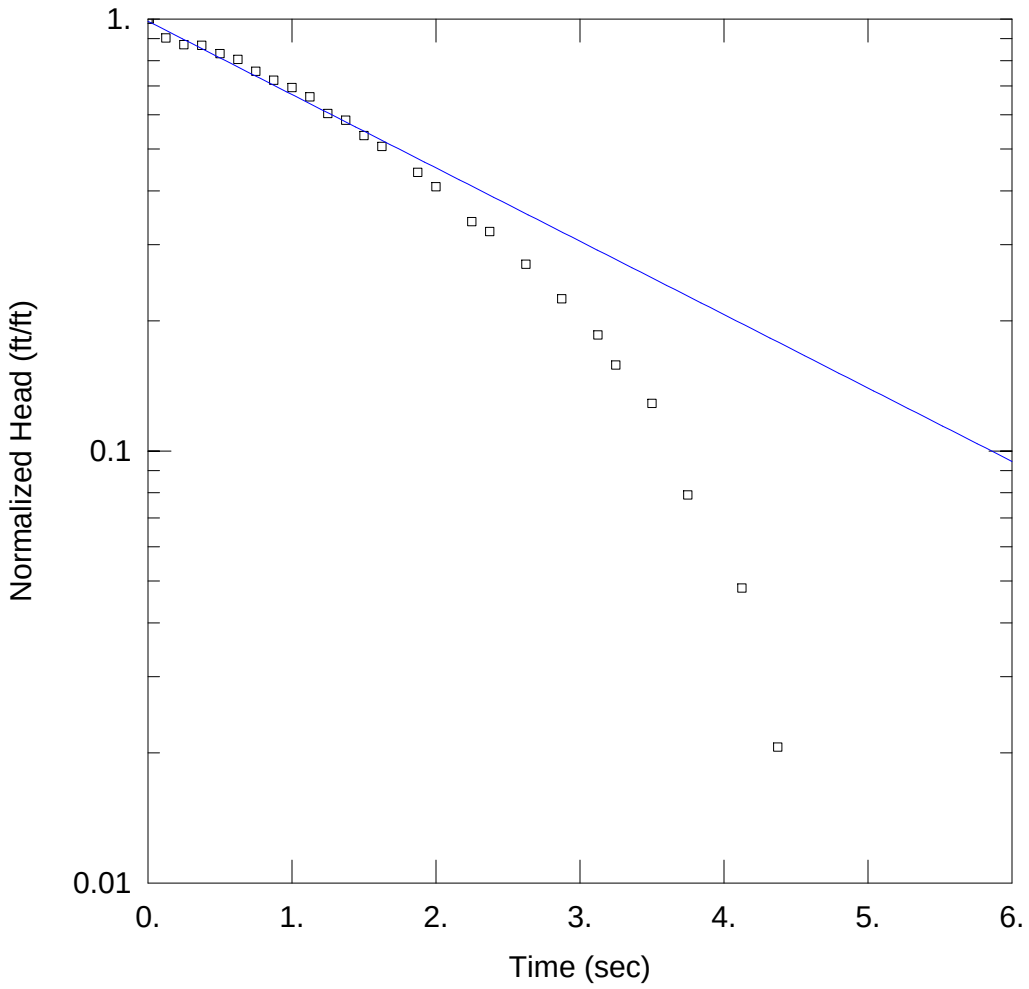
Saturated Thickness: 29.19 ft

WELL DATA (CACMW-006-060 (33.5-36.5))

Initial Displacement: 0.719 ft
Static Water Column Height: 29.19 ft
Total Well Penetration Depth: 29.19 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.013 cm/sec y0 = 1.15 ft

AQUIFER DATA

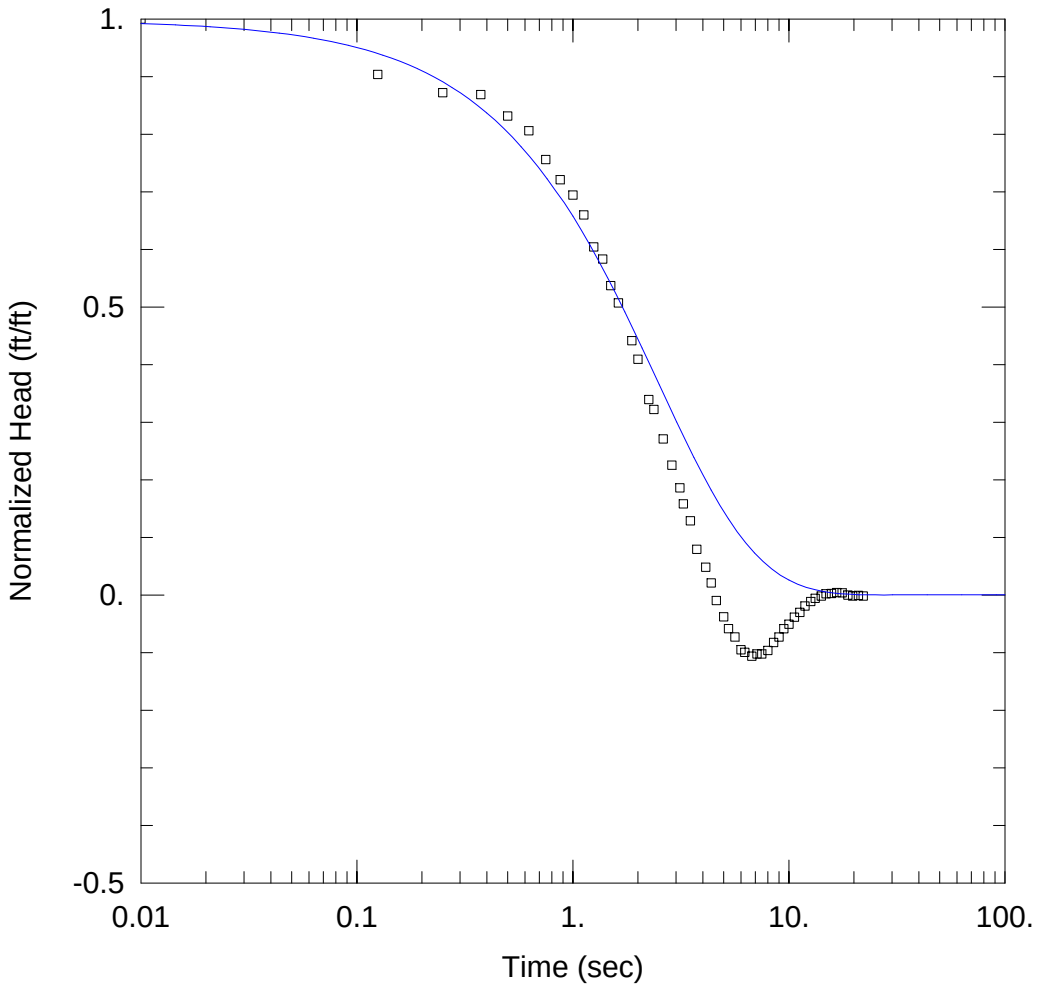
Saturated Thickness: 129.2 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-006-160 (133.5-136.5)))

Initial Displacement: 1.164 ft
Static Water Column Height: 129.2 ft
Total Well Penetration Depth: 129.2 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.011 cm/sec Ss = 2.8E-6 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

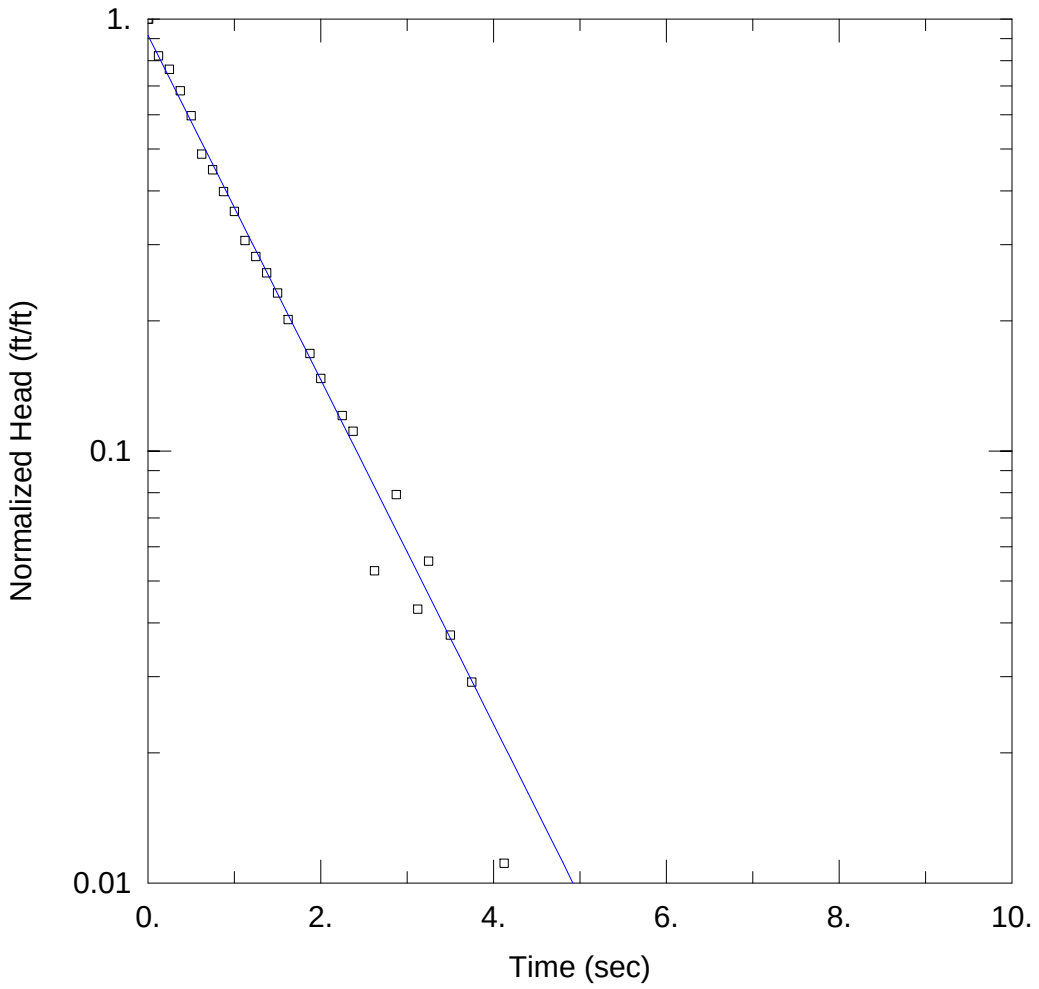
Saturated Thickness: 129.2 ft

WELL DATA (CACMW-006-160 (133.5-136.5)))

Initial Displacement: 1.164 ft
Static Water Column Height: 129.2 ft
Total Well Penetration Depth: 129.2 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.037 cm/sec y0 = 0.66 ft

AQUIFER DATA

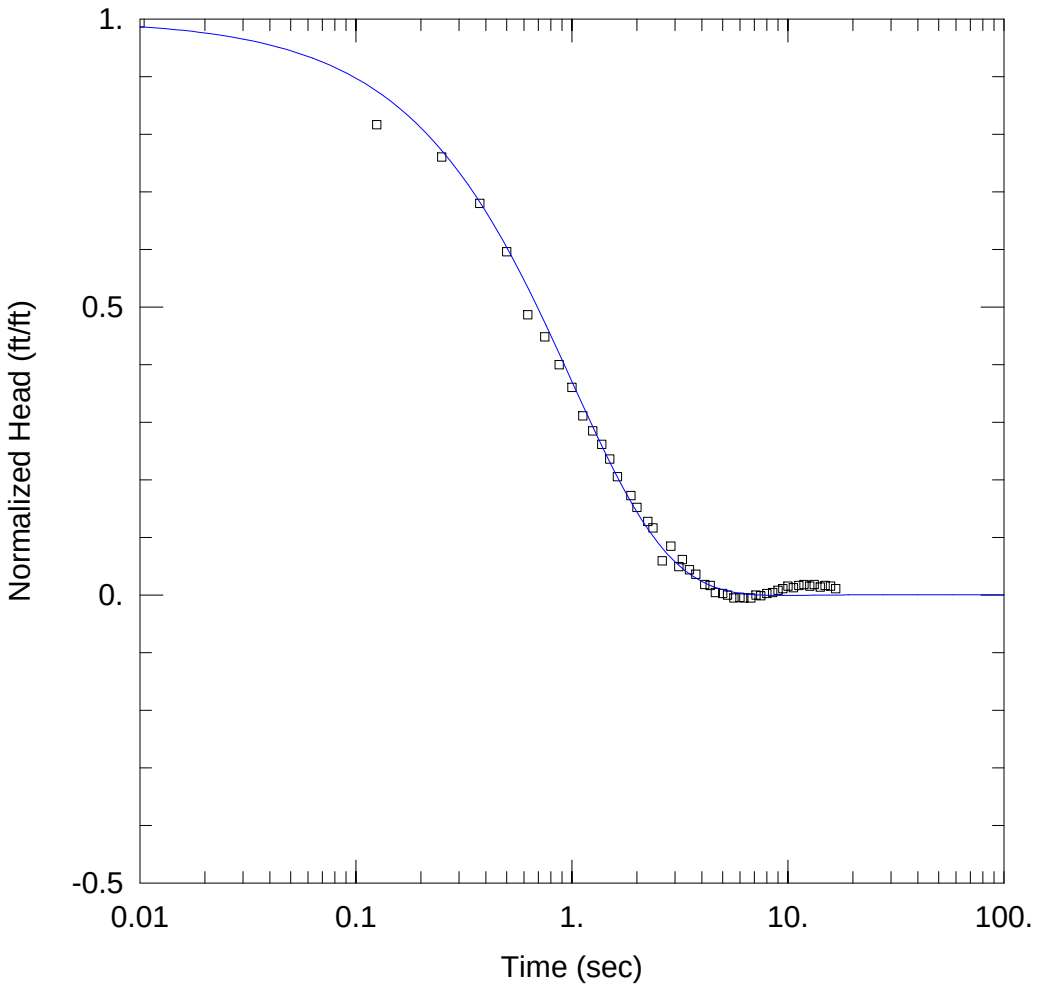
Saturated Thickness: 45.41 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-007-060 (49.25-52.25))

Initial Displacement: 0.72 ft
Static Water Column Height: 45.41 ft
Total Well Penetration Depth: 45.41 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.037 cm/sec Ss = 1.5E-6 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

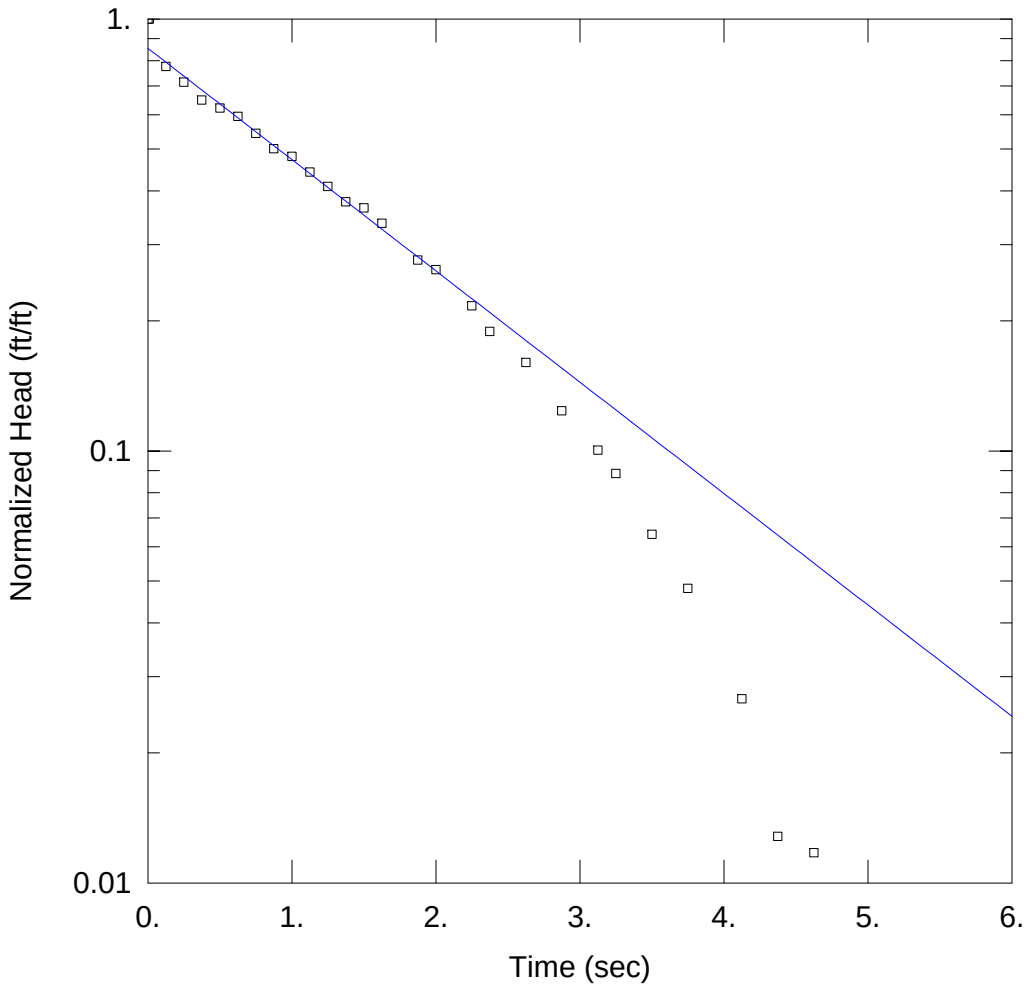
Saturated Thickness: 45.41 ft

WELL DATA (CACMW-007-060 (49.25-52.25))

Initial Displacement: 0.73 ft
Static Water Column Height: 45.41 ft
Total Well Penetration Depth: 45.41 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.02 cm/sec y0 = 0.8 ft

AQUIFER DATA

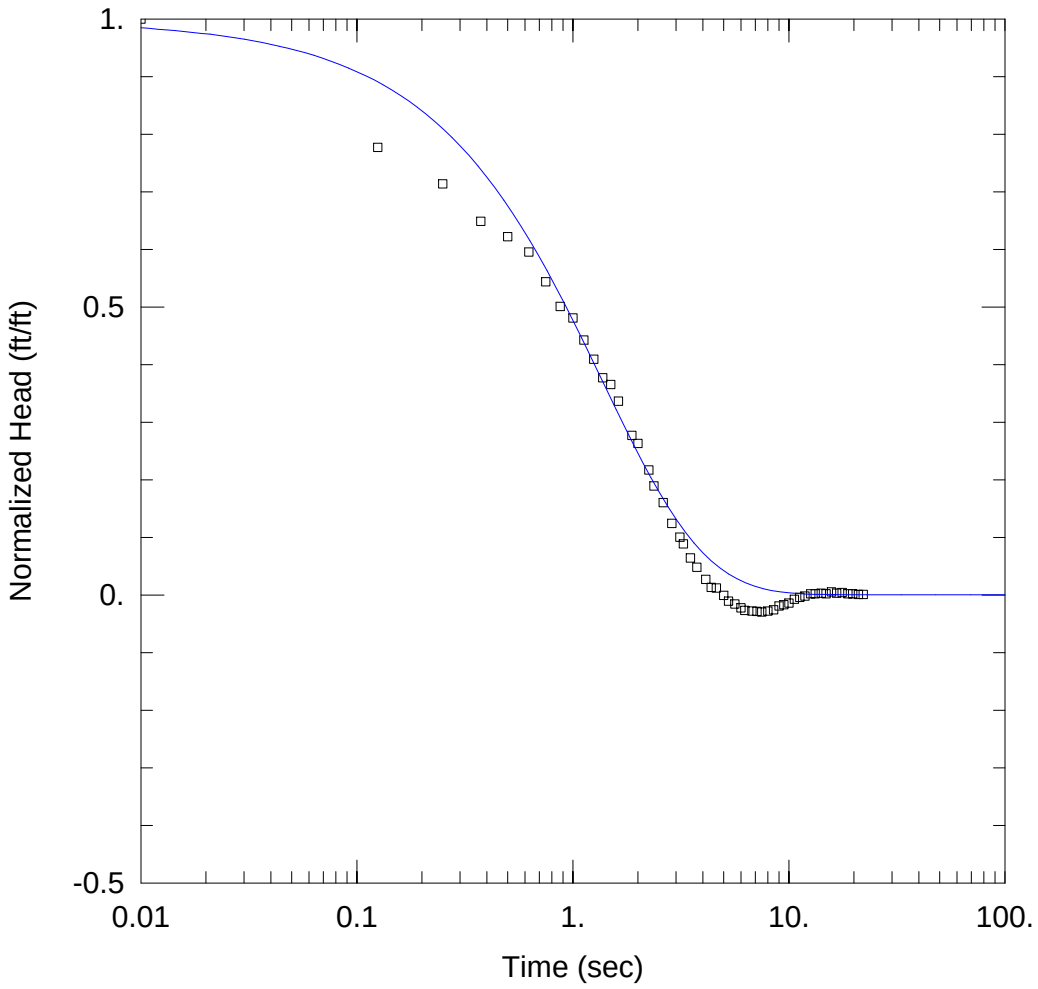
Saturated Thickness: 95.18 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-007-110 (99.25-102.25))

Initial Displacement: 0.936 ft
Static Water Column Height: 95.18 ft
Total Well Penetration Depth: 95.18 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.02 cm/sec Ss = 1.0E-5 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

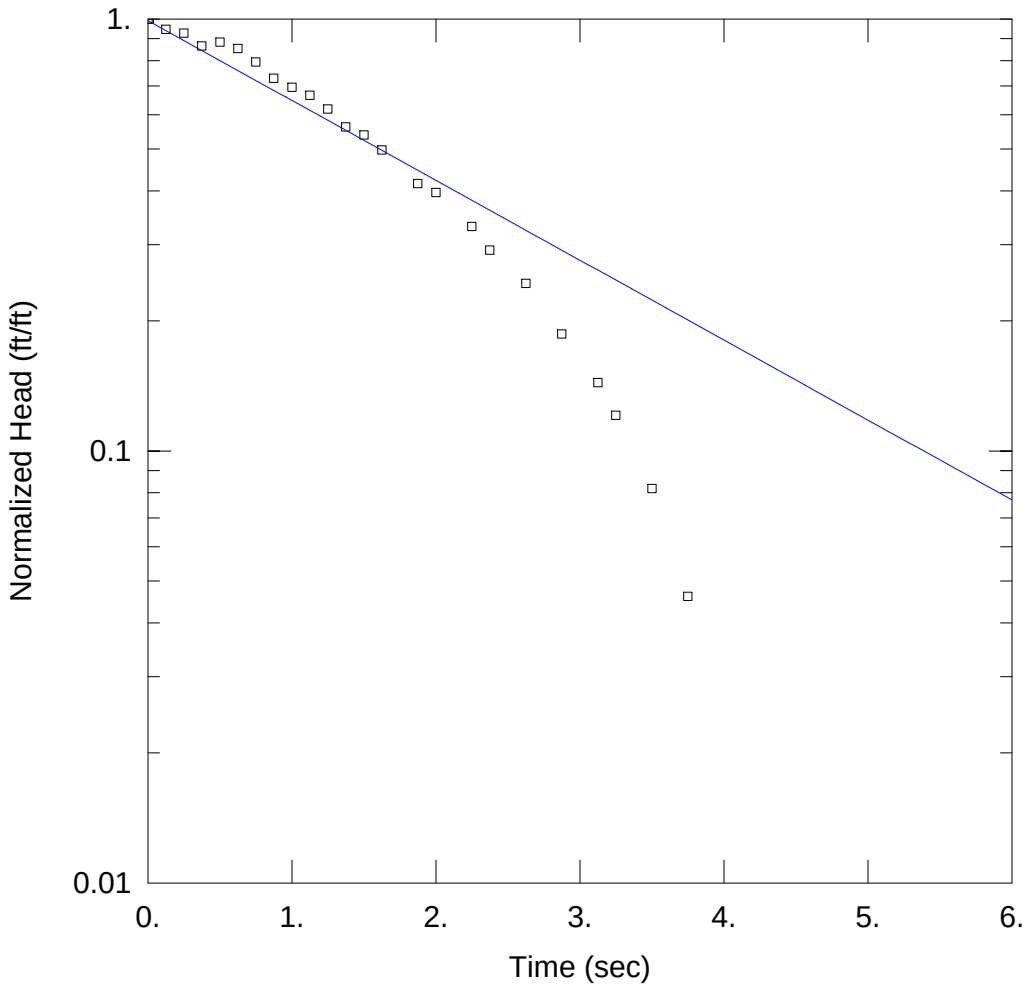
Saturated Thickness: 95.18 ft

WELL DATA (CACMW-007-110 (99.25-102.25))

Initial Displacement: 0.936 ft
Static Water Column Height: 95.18 ft
Total Well Penetration Depth: 95.18 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.016 cm/sec y0 = 0.86 ft

AQUIFER DATA

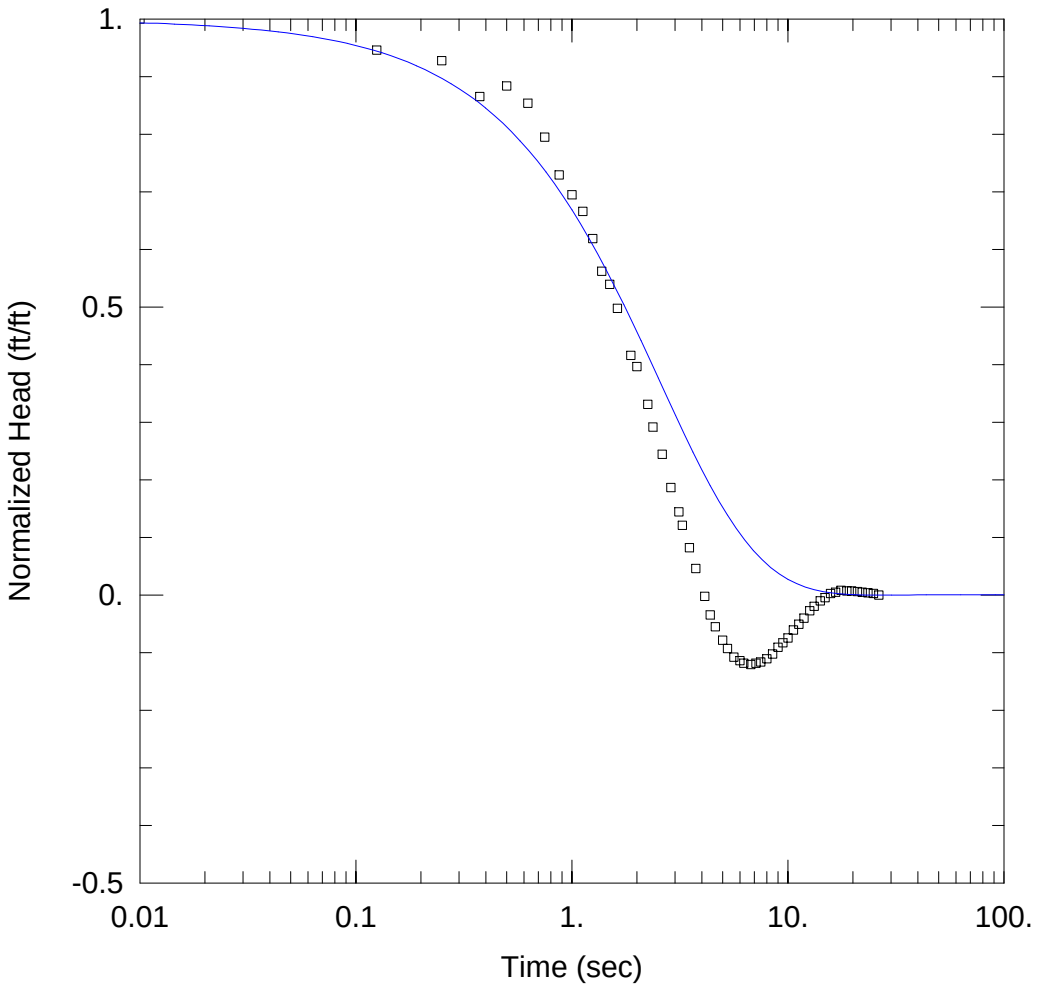
Saturated Thickness: 145.6 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-007-160 (149.25-152.25))

Initial Displacement: 0.868 ft
Static Water Column Height: 145.6 ft
Total Well Penetration Depth: 145.6 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.012 cm/sec Ss = 1.8E-6 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

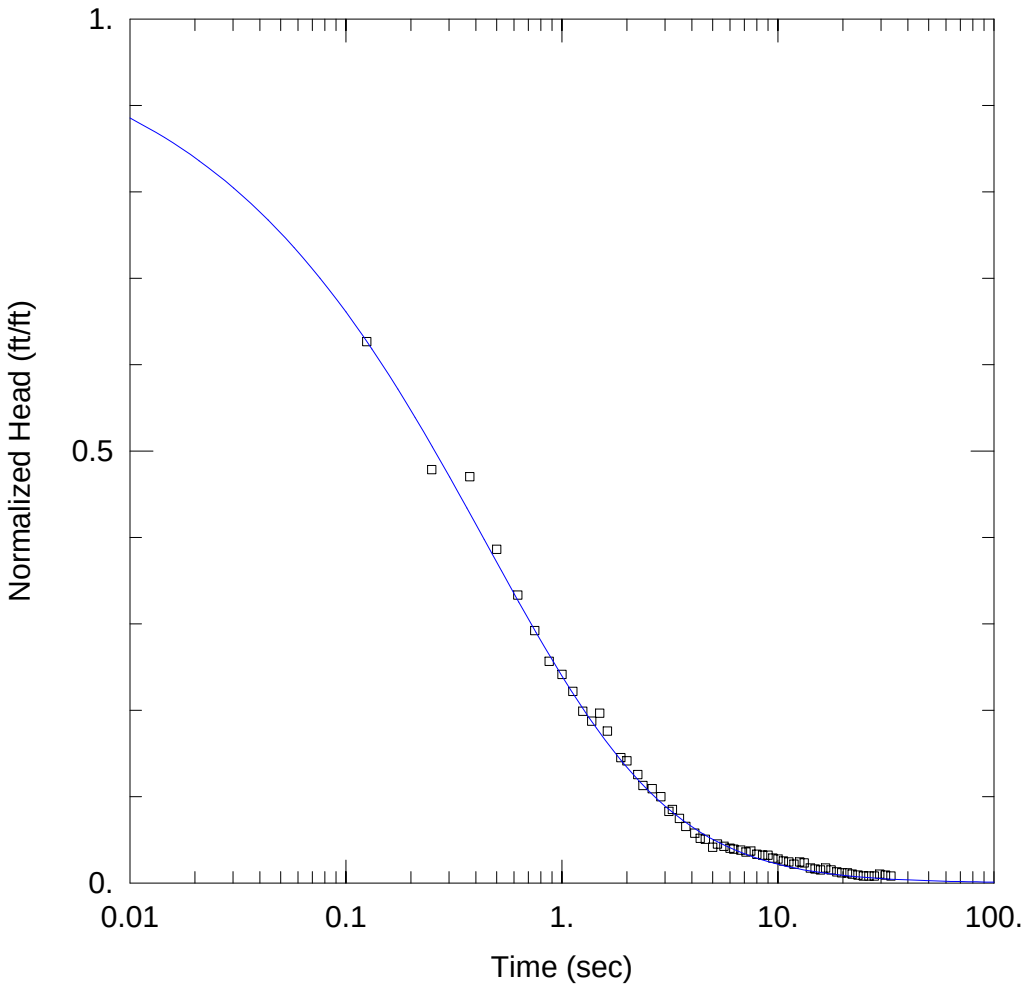
Saturated Thickness: 145.6 ft

WELL DATA (CACMW-007-160 (149.25-152.25))

Initial Displacement: 0.868 ft
Static Water Column Height: 145.6 ft
Total Well Penetration Depth: 145.6 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.023 cm/sec Ss = 0.0034 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

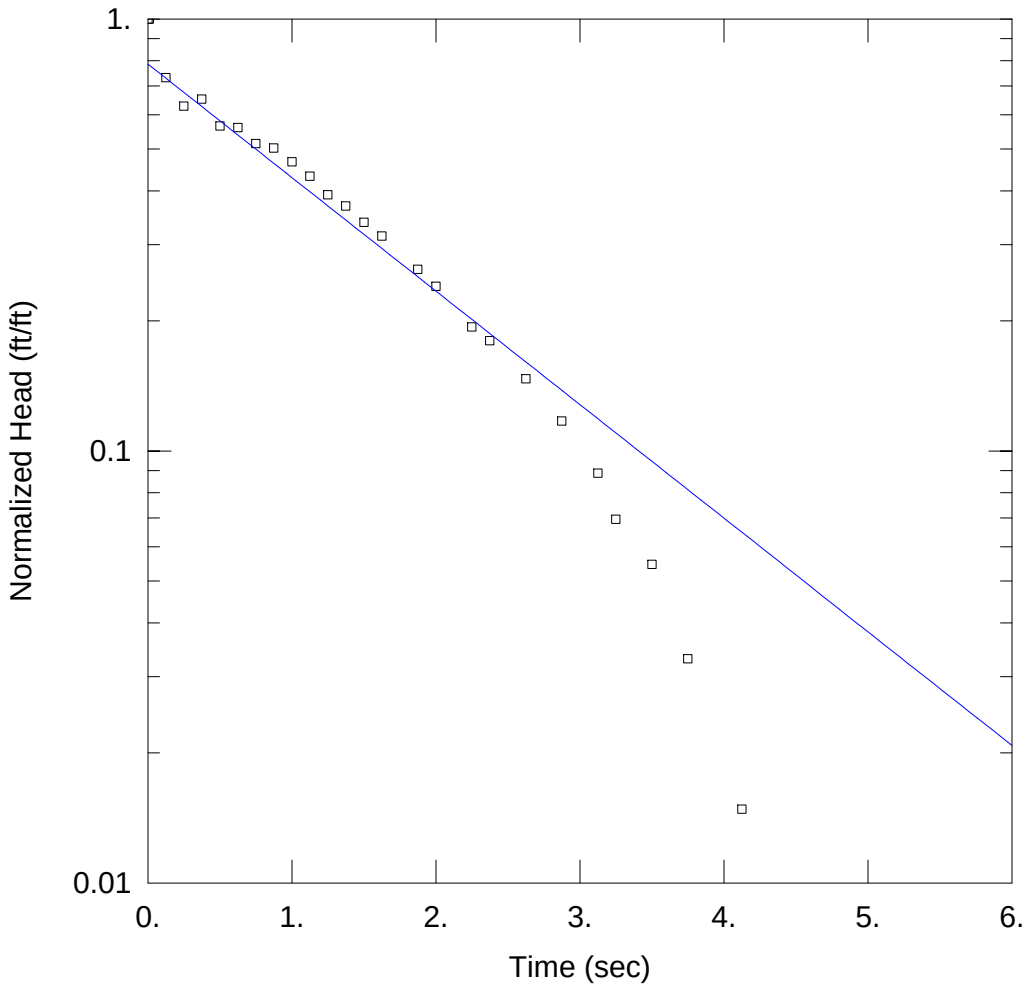
Saturated Thickness: 18.93 ft

WELL DATA (CACMW-008-060 (23-26))

Initial Displacement: 0.87 ft
Static Water Column Height: 18.93 ft
Total Well Penetration Depth: 18.93 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.021 cm/sec y0 = 0.69 ft

AQUIFER DATA

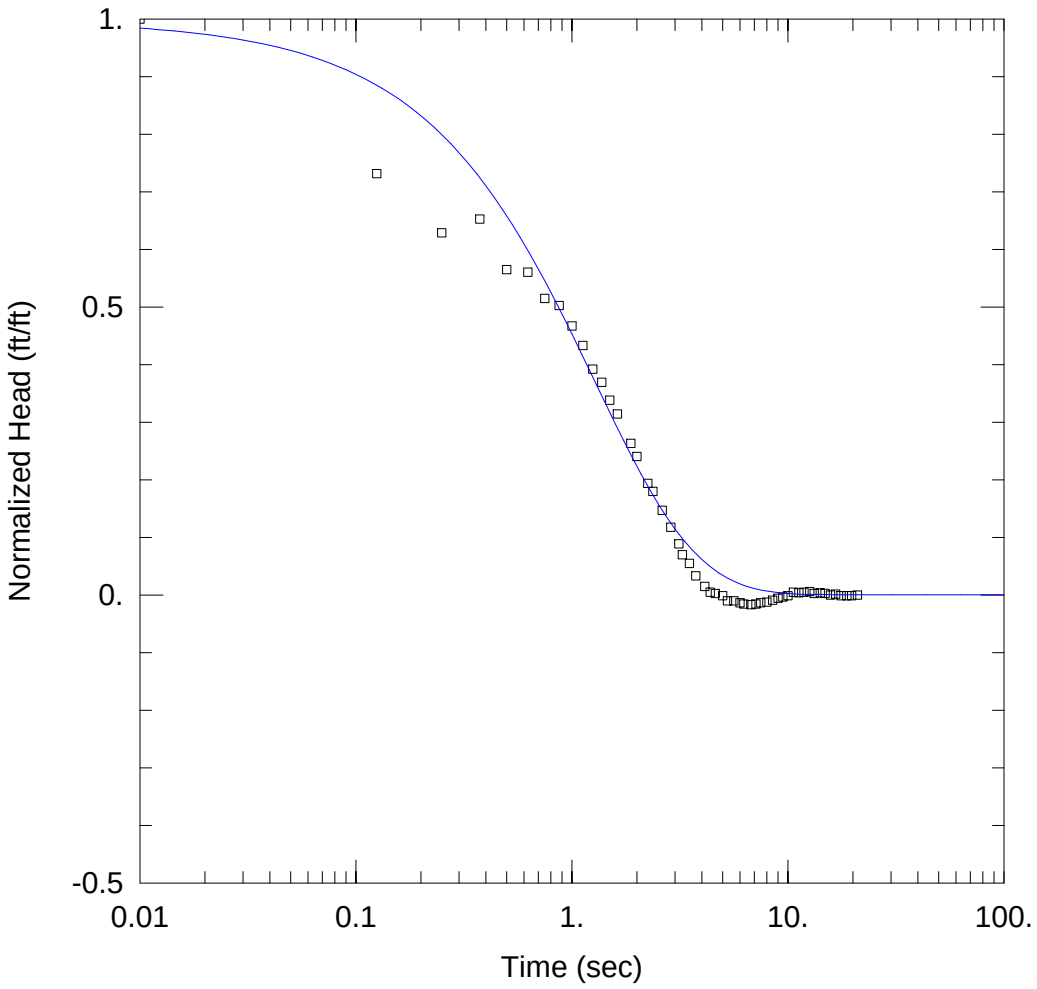
Saturated Thickness: 68.88 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-008-110 (73-76))

Initial Displacement: 0.878 ft
Static Water Column Height: 68.88 ft
Total Well Penetration Depth: 68.88 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.023 cm/sec Ss = 1.0E-5 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

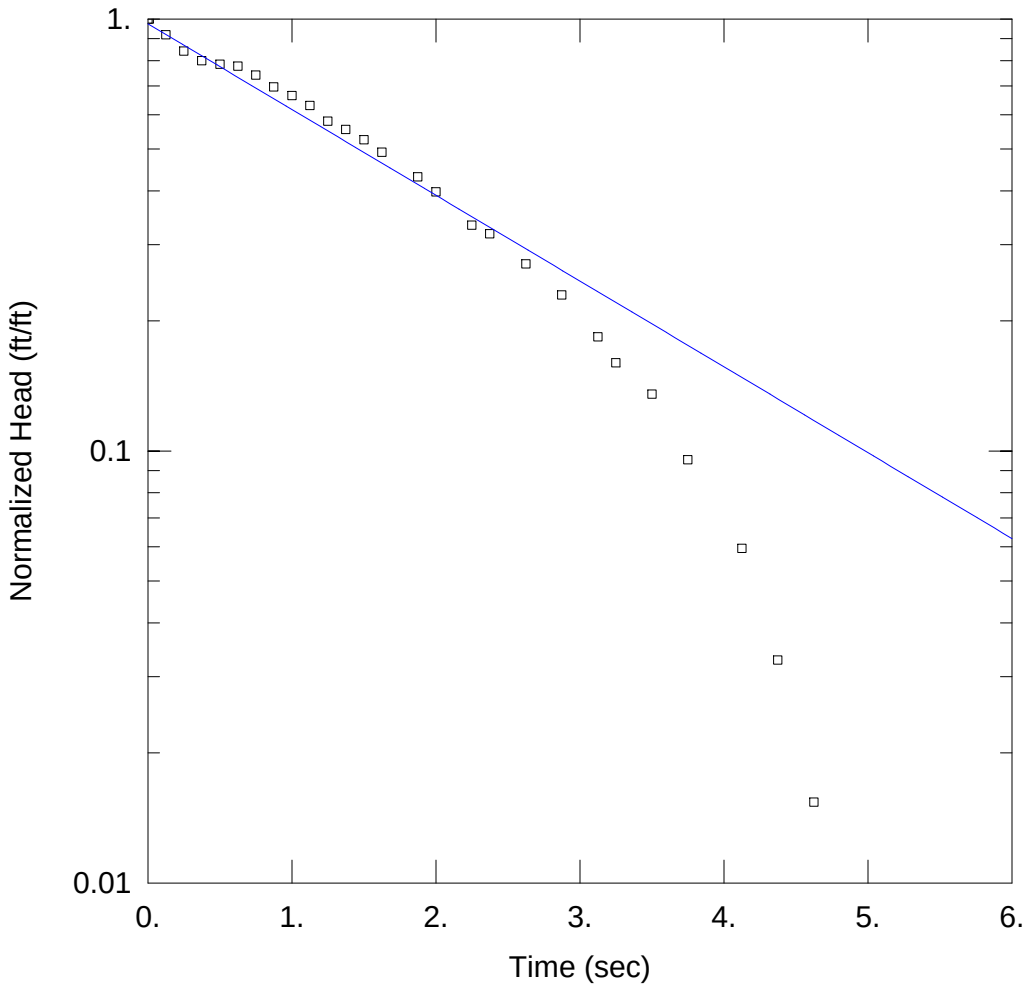
Saturated Thickness: 68.88 ft

WELL DATA (CACMW-008-110 (73-76))

Initial Displacement: 0.878 ft
Static Water Column Height: 68.88 ft
Total Well Penetration Depth: 68.88 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.015 cm/sec y0 = 0.95 ft

AQUIFER DATA

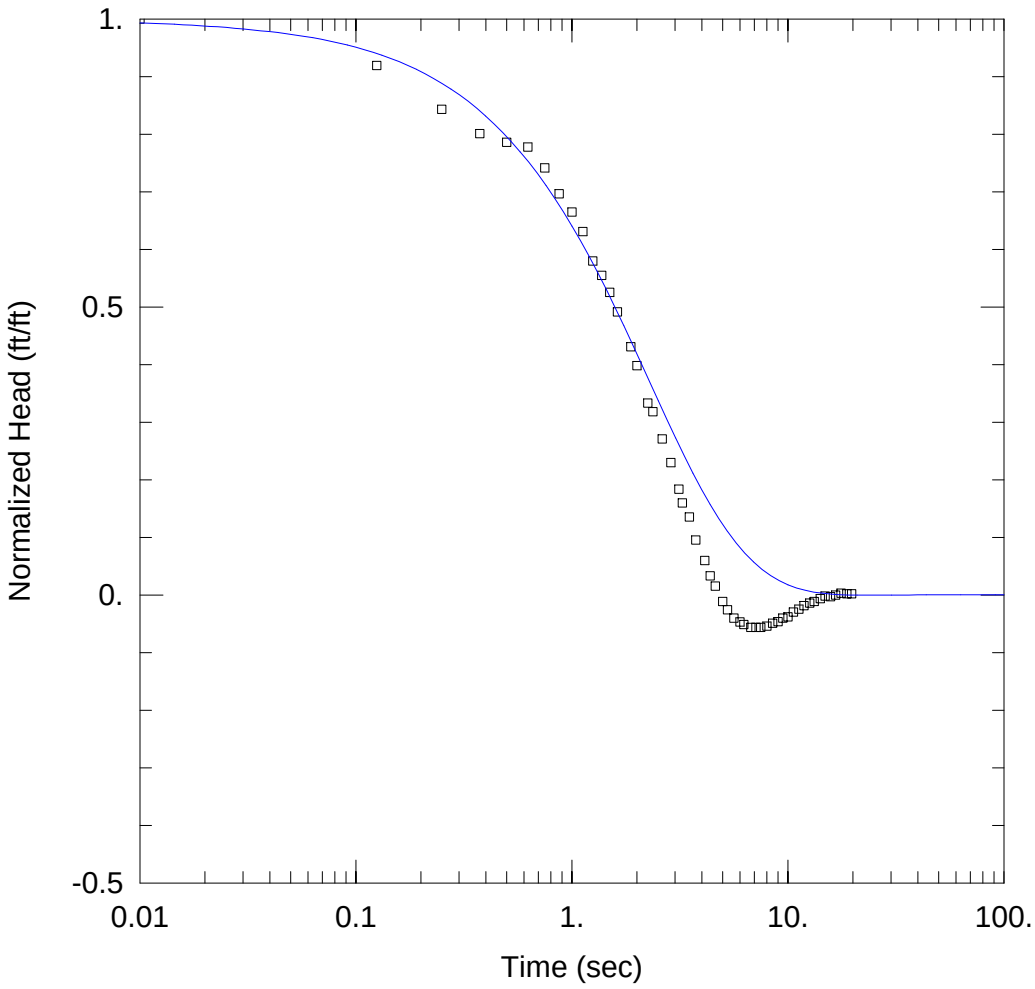
Saturated Thickness: 118.8 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (CACMW-008-160 (123-126))

Initial Displacement: 0.975 ft
Static Water Column Height: 118.8 ft
Total Well Penetration Depth: 118.8 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Slug Test Analysis

Prepared By:	Prepared For:
Arcadis	AFCEC Eielson AFB
Project:	**Location:**
30167435	Fairbanks, AK



SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.012 cm/sec Ss = 1.1E-6 ft^{-1}
Kz/Kr = 1.

AQUIFER DATA

Saturated Thickness: 118.8 ft

WELL DATA (CACMW-008-160 (123-126))

Initial Displacement: 0.975 ft
Static Water Column Height: 118.8 ft
Total Well Penetration Depth: 118.8 ft
Screen Length: 3. ft
Casing Radius: 0.042 ft
Well Radius: 0.25 ft

Appendix F

HydroGeoSieveXL Outputs

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Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
4.66	25.4	0	0	100
4.25	19.1	6.90	0.0690	93.1
3.66	12.7	6.70	0.0670	86.4
3.25	9.51	4.20	0.0420	82.2
2.25	4.76	5.20	0.0520	77.0
0.999	2.00	3.20	0.0320	73.8
-3.75	0.0740	69.0	0.690	4.80
-4.79	0.0361	2.02	0.0202	2.78
-5.44	0.0229	0.738	0.00738	2.04
-6.22	0.0134	0	0	2.04
-6.67	0.00980	0	0	2.04
-7.22	0.00670	0.369	0.00369	1.67
-7.64	0.00500	0.369	0.00369	1.30
-8.24	0.00330	0	0	1.30
-9.58	0.00130	0.738	0.00738	0.563
-10.8	0.000546	0.563	0.00563	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.219
d_{17}	0.415
d_{20}	0.498
d_{50}	1.34
d_{60}	1.61
de (Kruger)	0.0855
de (Kozeny)	0.0558
de (Zunker)	0.0662
de (Zamarin)	0.0778
Io (Alyameni)	0

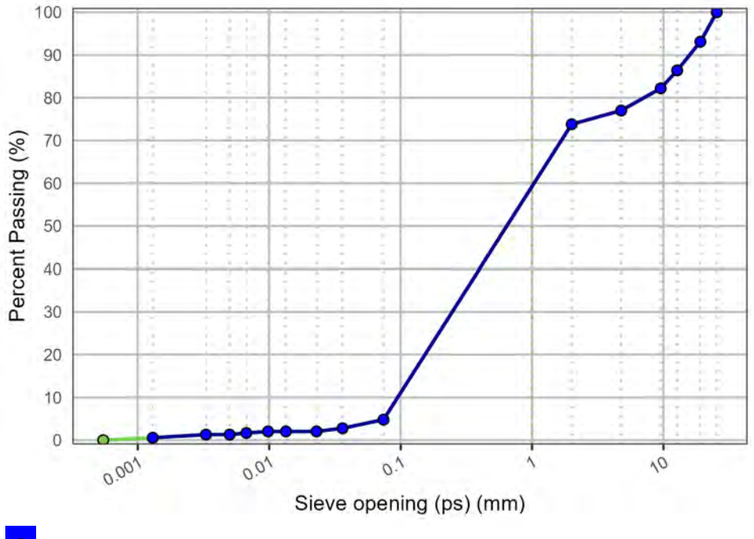
Other Useful Parameters	
Uniformity Coefficient	7.37
n computed	0.320
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	0.791
σ_φ	2.42

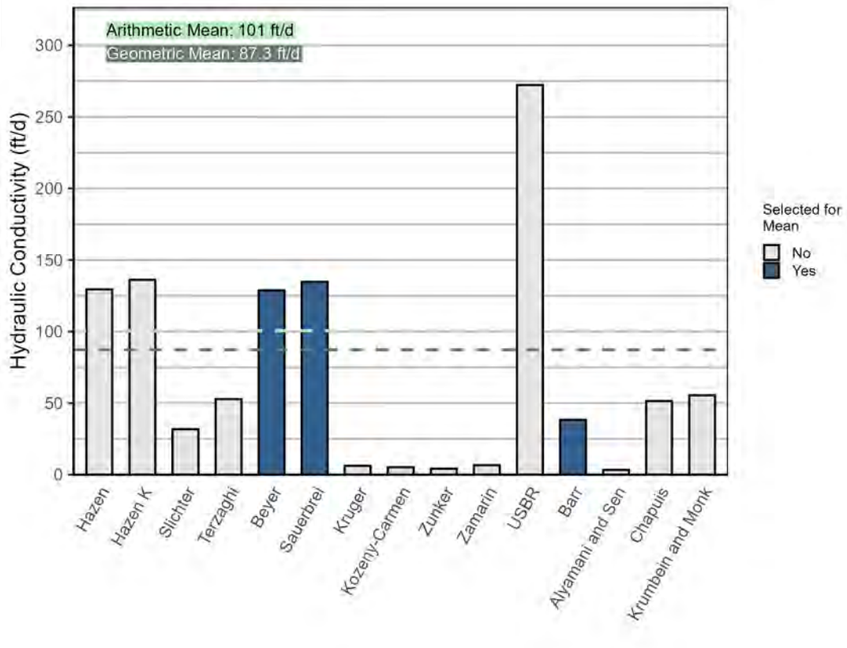
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	4.57E-02	1.50E-03	1.29E+02	No
Hazen K (cm/s) = d_{10} (mm)	4.80E-02	1.58E-03	1.36E+02	No
Slichter	1.12E-02	3.68E-04	3.18E+01	No
Terzaghi	1.86E-02	6.11E-04	5.28E+01	No
Beyer	4.54E-02	1.49E-03	1.29E+02	Yes
Sauerbrei	4.75E-02	1.56E-03	1.35E+02	Yes
Kruger	2.18E-03	7.15E-05	6.18E+00	No
Kozeny-Carmen	1.81E-03	5.93E-05	5.13E+00	No
Zunker	1.49E-03	4.89E-05	4.23E+00	No
Zamarin	2.32E-03	7.62E-05	6.58E+00	No
USBR	9.60E-02	3.15E-03	2.72E+02	No
Barr	1.35E-02	4.44E-04	3.83E+01	Yes
Alyamani and Sen	1.17E-03	3.85E-05	3.32E+00	No
Chapuis	1.81E-02	5.95E-04	5.14E+01	No
Krumbein and Monk	1.96E-02	6.42E-04	5.55E+01	No
Arithmetic Mean	**3.55E-02**	**1.16E-03**	**1.01E+02**	**Yes**
Geometric Mean	**3.08E-02**	**1.01E-03**	**8.73E+01**	**No**

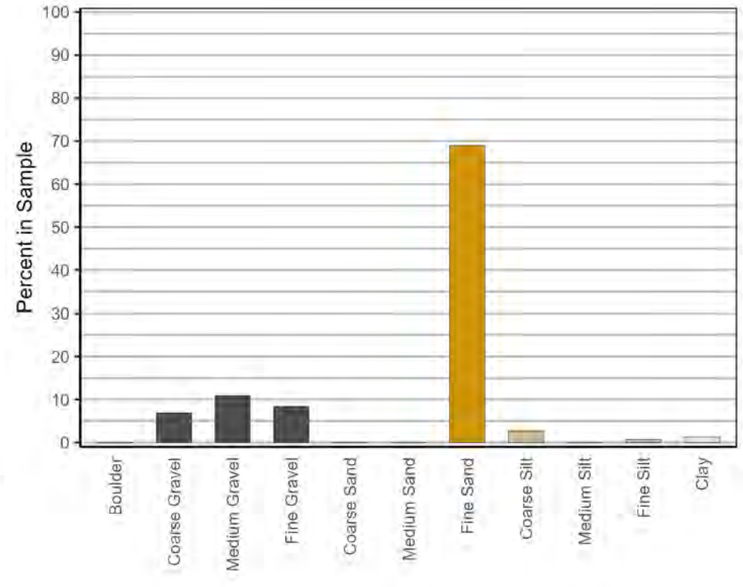
Note: Coefficient of variation of selected results (0.537) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; LITTLE MEDIUM GRAVEL; TRACE FINE GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	6.90
Medium Gravel (8-16 mm)	10.9
Fine Gravel (2-8 mm)	8.40
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	69.0
Coarse Silt (0.016-0.063 mm)	2.76
Medium Silt (0.008-0.016 mm)	0
Fine Silt (0.002-0.008 mm)	0.738
Clay (<0.002 mm)	1.30







Eielson
CACMW-004-160
CACMW-004-160-142.75-062424-GT

GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 1

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.64	50.0	0	0	100
5.25	38.1	11.9	0.119	88.1
4.66	25.4	15.5	0.155	72.6
4.25	19.1	9.20	0.0920	63.4
3.66	12.7	18.1	0.181	45.3
3.25	9.51	11.2	0.112	34.1
2.25	4.76	14.4	0.144	19.7
0.999	2.00	7.70	0.0770	12.0
-0.234	0.850	2.60	0.0260	9.40
-1.25	0.420	1.30	0.0130	8.10
-2.0	0.250	2.00	0.0200	6.10
-2.74	0.149	2.80	0.0280	3.30
-3.24	0.106	0.900	0.00900	2.40
-3.75	0.0740	0.600	0.00600	1.80
-5.31	0.0252	1.80	0.0180	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	1.12
d_{17}	3.79
d_{20}	4.86
d_{50}	14.3
d_{60}	17.9
de (Kruger)	1.23
de (Kozeny)	1.04
de (Zunker)	1.10
de (Zamarin)	1.16
Io (Alyameni)	0

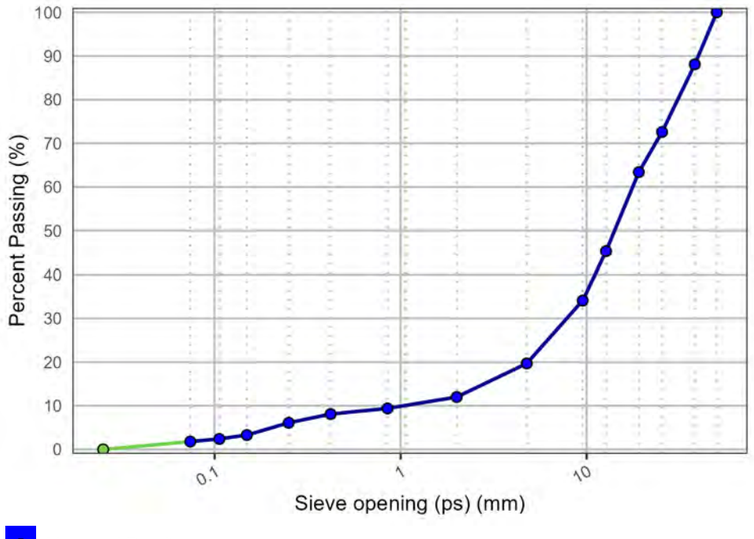
Other Useful Parameters	
Uniformity Coefficient	16.0
n computed	0.268
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	9.34
σ_φ	2.01

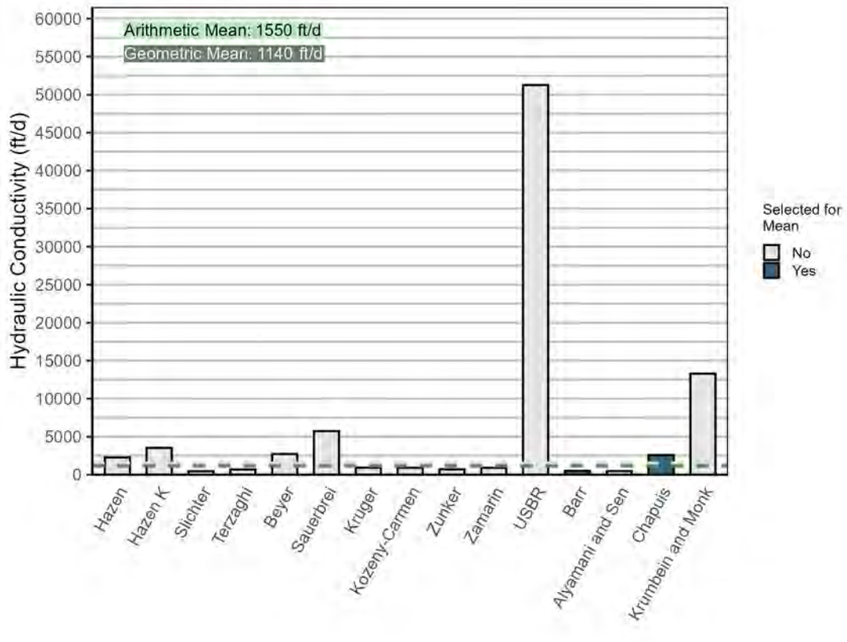
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	8.00E-01	2.62E-02	2.27E+03	No
Hazen K (cm/s) = d_{10} (mm)	1.24E+00	4.08E-02	3.53E+03	No
Slichter	1.63E-01	5.34E-03	4.62E+02	No
Terzaghi	2.43E-01	7.97E-03	6.89E+02	No
Beyer	9.60E-01	3.15E-02	2.72E+03	No
Sauerbrei	2.02E+00	6.64E-02	5.74E+03	No
Kruger	3.25E-01	1.07E-02	9.21E+02	No
Kozeny-Carmen	3.19E-01	1.05E-02	9.03E+02	No
Zunker	2.48E-01	8.15E-03	7.04E+02	No
Zamarin	3.18E-01	1.04E-02	9.01E+02	No
USBR	1.81E+01	5.93E-01	5.13E+04	No
Barr	1.78E-01	5.85E-03	5.05E+02	Yes
Alyamani and Sen	1.65E-01	5.40E-03	4.67E+02	No
Chapuis	9.13E-01	3.00E-02	2.59E+03	Yes
Krumbein and Monk	4.69E+00	1.54E-01	1.33E+04	No
Arithmetic Mean	**5.46E-01**	**1.79E-02**	**1.55E+03**	**Yes**
Geometric Mean	**4.03E-01**	**1.32E-02**	**1.14E+03**	**No**

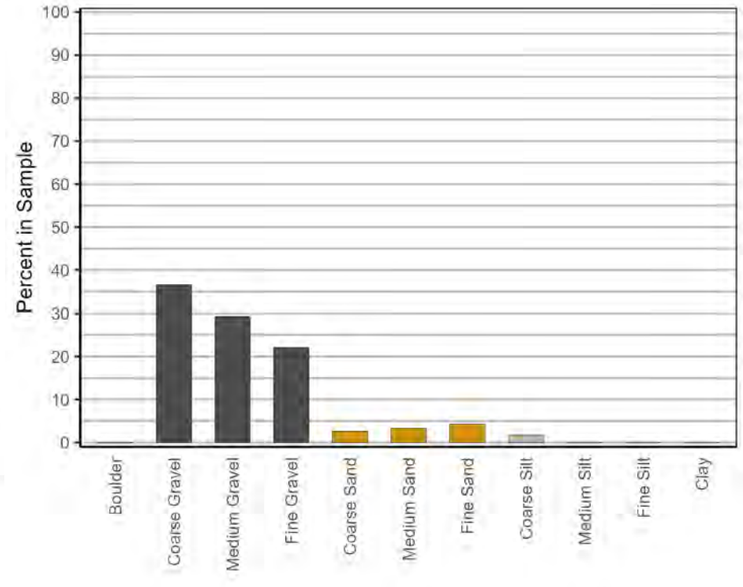
Note: Coefficient of variation of selected results (0.952) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME MEDIUM GRAVEL; SOME FINE GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	36.6
Medium Gravel (8-16 mm)	29.3
Fine Gravel (2-8 mm)	22.1
Coarse Sand (0.5-2 mm)	2.60
Medium Sand (0.25-0.5 mm)	3.30
Fine Sand (0.063-0.25 mm)	4.30
Coarse Silt (0.016-0.063 mm)	1.80
Medium Silt (0.008-0.016 mm)	N/A
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







Eielson
CACMW-004-160
CACMW-004-160-42.75-062424-GT

GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 2

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	24.8	0.248	75.2
4.25	19.1	7.50	0.0750	67.7
3.66	12.7	12.7	0.127	55.0
3.25	9.51	7.40	0.0740	47.6
2.25	4.76	16.4	0.164	31.2
0.999	2.00	12.5	0.125	18.7
-0.234	0.850	6.10	0.0610	12.6
-1.25	0.420	5.00	0.0500	7.60
-2.0	0.250	3.70	0.0370	3.90
-2.74	0.149	2.20	0.0220	1.70
-3.24	0.106	0.500	0.00500	1.20
-3.75	0.0740	0.300	0.00300	0.900
-5.31	0.0252	0.900	0.00900	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.626
d_{17}	1.68
d_{20}	2.29
d_{50}	10.5
d_{60}	15.2
de (Kruger)	1.47
de (Kozeny)	1.27
de (Zunker)	1.33
de (Zamarin)	1.40
Io (Alyameni)	0

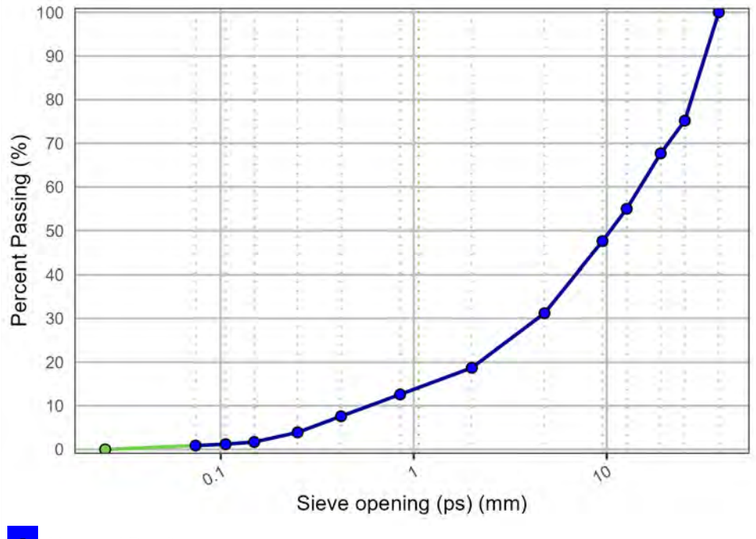
Other Useful Parameters	
Uniformity Coefficient	24.3
n computed	0.258
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	6.89
σ_φ	2.12

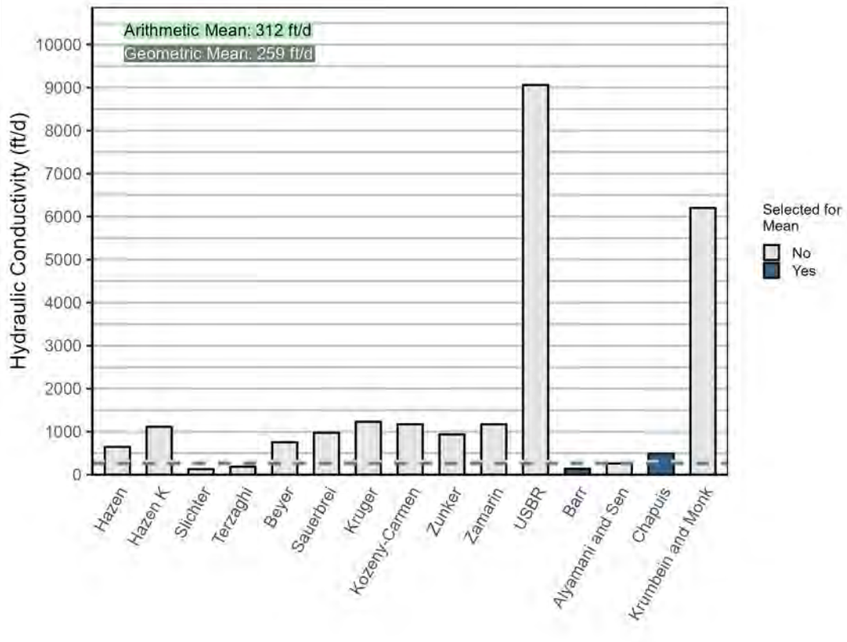
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	2.29E-01	7.50E-03	6.48E+02	No
Hazen K (cm/s) = d_{10} (mm)	3.92E-01	1.29E-02	1.11E+03	No
Slichter	4.52E-02	1.48E-03	1.28E+02	No
Terzaghi	6.52E-02	2.14E-03	1.85E+02	No
Beyer	2.66E-01	8.74E-03	7.55E+02	No
Sauerbrei	3.44E-01	1.13E-02	9.75E+02	No
Kruger	4.34E-01	1.43E-02	1.23E+03	No
Kozeny-Carmen	4.14E-01	1.36E-02	1.17E+03	No
Zunker	3.30E-01	1.08E-02	9.35E+02	No
Zamarin	4.13E-01	1.36E-02	1.17E+03	No
USBR	3.20E+00	1.05E-01	9.06E+03	No
Barr	4.87E-02	1.60E-03	1.38E+02	Yes
Alyamani and Sen	9.25E-02	3.04E-03	2.62E+02	No
Chapuis	1.72E-01	5.63E-03	4.86E+02	Yes
Krumbein and Monk	2.19E+00	7.18E-02	6.20E+03	No
Arithmetic Mean	**1.10E-01**	**3.61E-03**	**3.12E+02**	**Yes**
Geometric Mean	**9.14E-02**	**3.00E-03**	**2.59E+02**	**No**

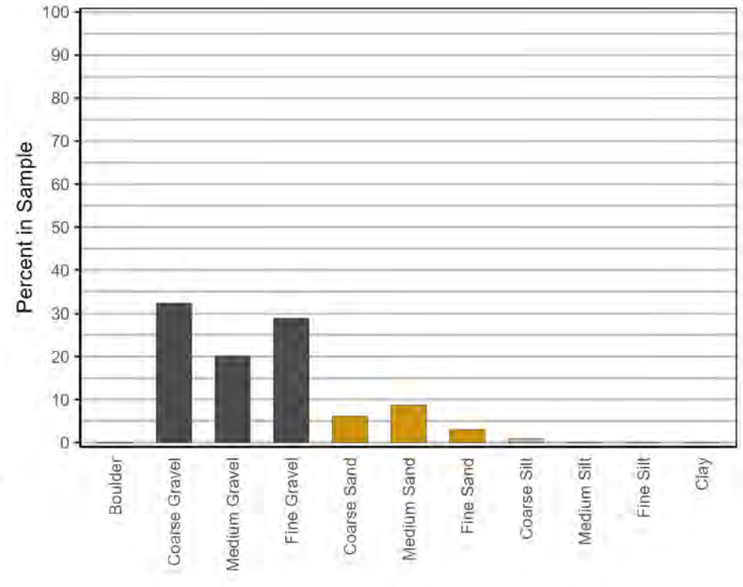
Note: Coefficient of variation of selected results (0.789) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME FINE GRAVEL; SOME MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	32.3
Medium Gravel (8-16 mm)	20.1
Fine Gravel (2-8 mm)	28.9
Coarse Sand (0.5-2 mm)	6.10
Medium Sand (0.25-0.5 mm)	8.70
Fine Sand (0.063-0.25 mm)	3.00
Coarse Silt (0.016-0.063 mm)	0.900
Medium Silt (0.008-0.016 mm)	N/A
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 3

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
4.66	25.4	0	0	100
4.25	19.1	3.40	0.0340	96.6
3.66	12.7	13.0	0.130	83.6
3.25	9.51	8.10	0.0810	75.5
2.25	4.76	13.4	0.134	62.1
0.999	2.00	9.10	0.0910	53.0
-3.75	0.0740	50.6	0.506	2.40
-4.79	0.0361	0.934	0.00934	1.47
-5.44	0.0229	0	0	1.47
-6.22	0.0134	0	0	1.47
-6.67	0.00980	0.265	0.00265	1.20
-7.22	0.00670	0.265	0.00265	0.935
-7.64	0.00500	0	0	0.935
-8.24	0.00330	0.531	0.00531	0.404
-9.58	0.00130	0.265	0.00265	0.139
-10.3	0.000798	0.139	0.00139	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.363
d_{17}	0.630
d_{20}	0.744
d_{50}	1.89
d_{60}	4.12
de (Kruger)	0.199
de (Kozeny)	0.117
de (Zunker)	0.146
de (Zamarin)	0.180
Io (Alyameni)	0

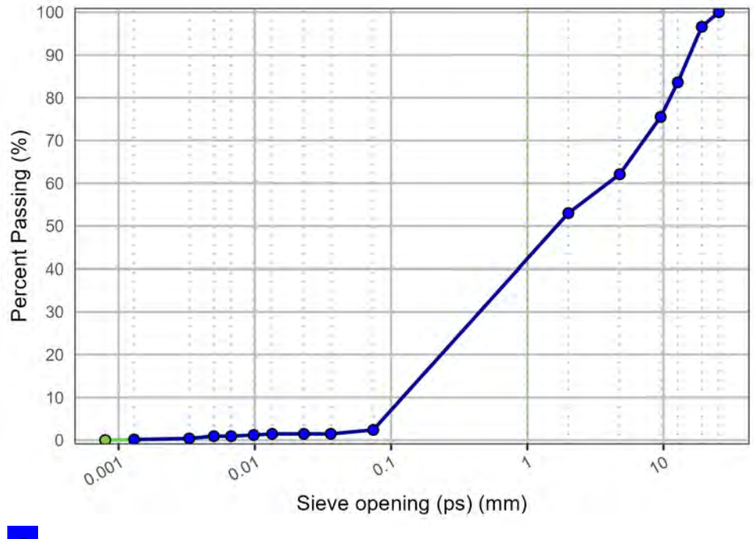
Other Useful Parameters	
Uniformity Coefficient	11.3
n computed	0.286
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	1.53
σ_φ	2.13

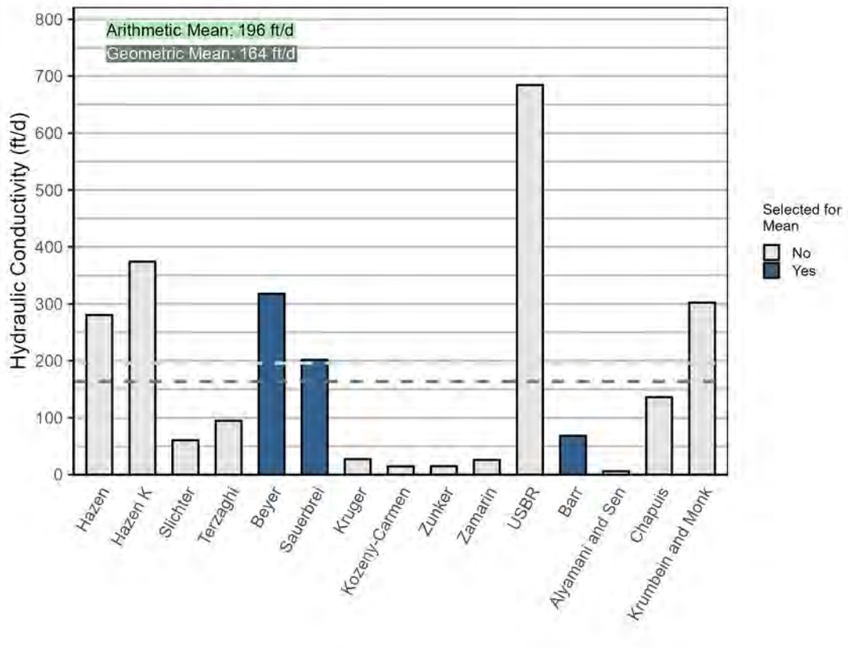
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	9.89E-02	3.25E-03	2.80E+02	No
Hazen K (cm/s) = d_{10} (mm)	1.32E-01	4.33E-03	3.74E+02	No
Slichter	2.14E-02	7.01E-04	6.05E+01	No
Terzaghi	3.34E-02	1.10E-03	9.48E+01	No
Beyer	1.12E-01	3.68E-03	3.18E+02	Yes
Sauerbrei	7.12E-02	2.33E-03	2.02E+02	Yes
Kruger	9.57E-03	3.14E-04	2.71E+01	No
Kozeny-Carmen	5.17E-03	1.70E-04	1.47E+01	No
Zunker	5.28E-03	1.73E-04	1.50E+01	No
Zamarin	9.14E-03	3.00E-04	2.59E+01	No
USBR	2.41E-01	7.92E-03	6.84E+02	No
Barr	2.41E-02	7.91E-04	6.83E+01	Yes
Alyamani and Sen	2.18E-03	7.15E-05	6.18E+00	No
Chapuis	4.80E-02	1.58E-03	1.36E+02	No
Krumbein and Monk	1.07E-01	3.50E-03	3.02E+02	No
Arithmetic Mean	**6.91E-02**	**2.27E-03**	**1.96E+02**	**Yes**
Geometric Mean	**5.77E-02**	**1.89E-03**	**1.64E+02**	**No**

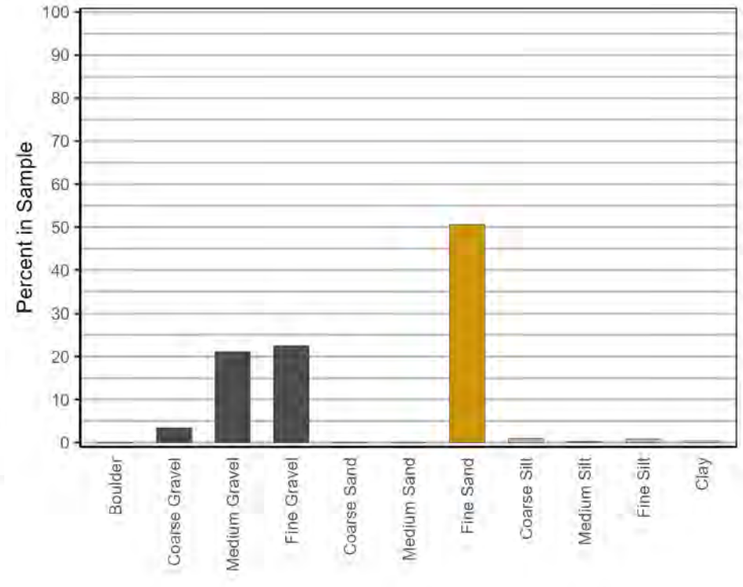
Note: Coefficient of variation of selected results (0.637) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; SOME FINE GRAVEL; SOME MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	3.40
Medium Gravel (8-16 mm)	21.1
Fine Gravel (2-8 mm)	22.5
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	50.6
Coarse Silt (0.016-0.063 mm)	0.934
Medium Silt (0.008-0.016 mm)	0.265
Fine Silt (0.002-0.008 mm)	0.796
Clay (<0.002 mm)	0.404







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CACMW-005-160-100-061824-GT

GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 4

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	3.40	0.0340	96.6
4.25	19.1	14.9	0.149	81.7
3.66	12.7	12.2	0.122	69.5
3.25	9.51	7.20	0.0720	62.3
2.25	4.76	19.4	0.194	42.9
0.999	2.00	12.4	0.124	30.5
-3.75	0.0740	28.7	0.287	1.80
-4.79	0.0361	0.343	0.00343	1.46
-5.44	0.0229	0.306	0.00306	1.15
-6.22	0.0134	0.153	0.00153	0.998
-6.67	0.00980	0.153	0.00153	0.845
-7.22	0.00670	0.153	0.00153	0.692
-7.64	0.00500	0.153	0.00153	0.539
-8.24	0.00330	0	0	0.539
-9.58	0.00130	0.306	0.00306	0.233
-10.8	0.000546	0.233	0.00233	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.624
d_{17}	1.09
d_{20}	1.30
d_{50}	6.50
d_{60}	8.95
de (Kruger)	0.198
de (Kozeny)	0.131
de (Zunker)	0.155
de (Zamarin)	0.181
Io (Alyameni)	0

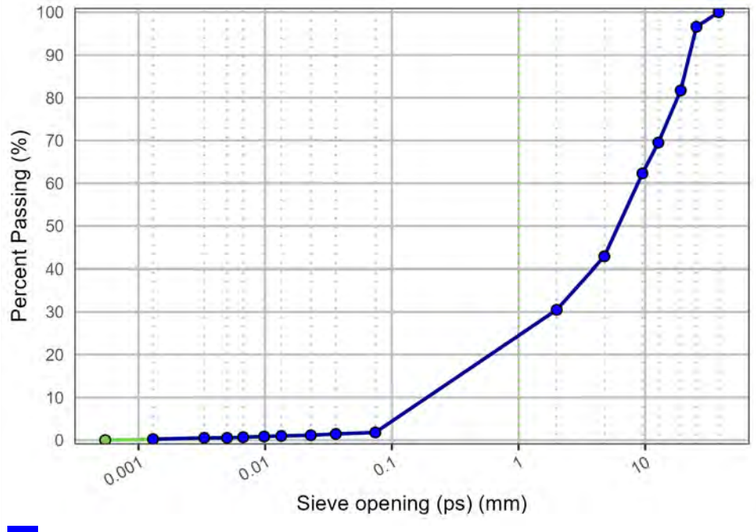
Other Useful Parameters	
Uniformity Coefficient	14.3
n computed	0.273
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	3.44
σ_φ	2.04

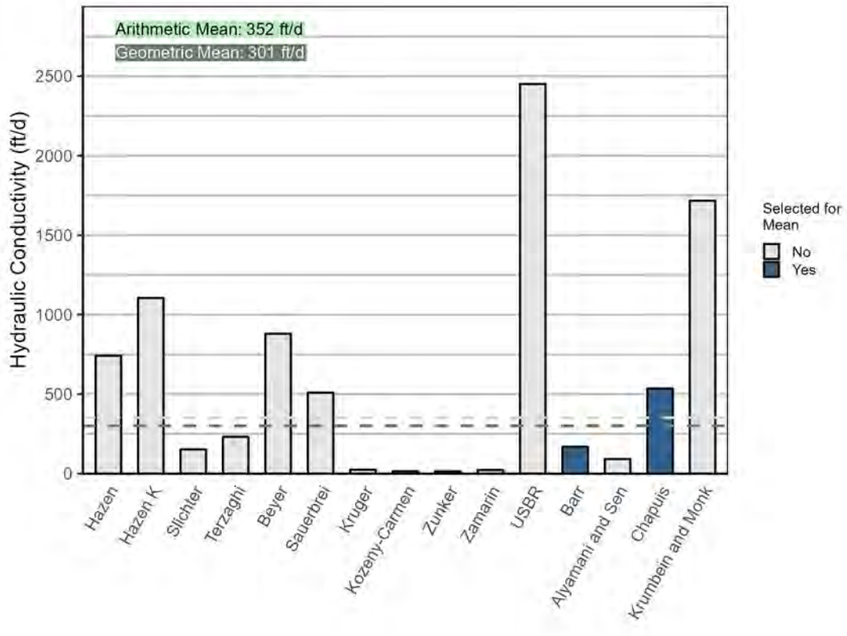
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	2.62E-01	8.58E-03	7.42E+02	No
Hazen K (cm/s) = d_{10} (mm)	3.90E-01	1.28E-02	1.10E+03	No
Slichter	5.40E-02	1.77E-03	1.53E+02	No
Terzaghi	8.18E-02	2.68E-03	2.32E+02	No
Beyer	3.11E-01	1.02E-02	8.80E+02	No
Sauerbrei	1.80E-01	5.90E-03	5.10E+02	No
Kruger	8.74E-03	2.87E-04	2.48E+01	No
Kozeny-Carmen	5.40E-03	1.77E-04	1.53E+01	No
Zunker	5.18E-03	1.70E-04	1.47E+01	No
Zamarin	8.08E-03	2.65E-04	2.29E+01	No
USBR	8.65E-01	2.84E-02	2.45E+03	No
Barr	5.96E-02	1.96E-03	1.69E+02	Yes
Alyamani and Sen	3.24E-02	1.06E-03	9.20E+01	No
Chapuis	1.89E-01	6.20E-03	5.36E+02	Yes
Krumbein and Monk	6.06E-01	1.99E-02	1.72E+03	No
Arithmetic Mean	**1.24E-01**	**4.08E-03**	**3.52E+02**	**Yes**
Geometric Mean	**1.06E-01**	**3.48E-03**	**3.01E+02**	**No**

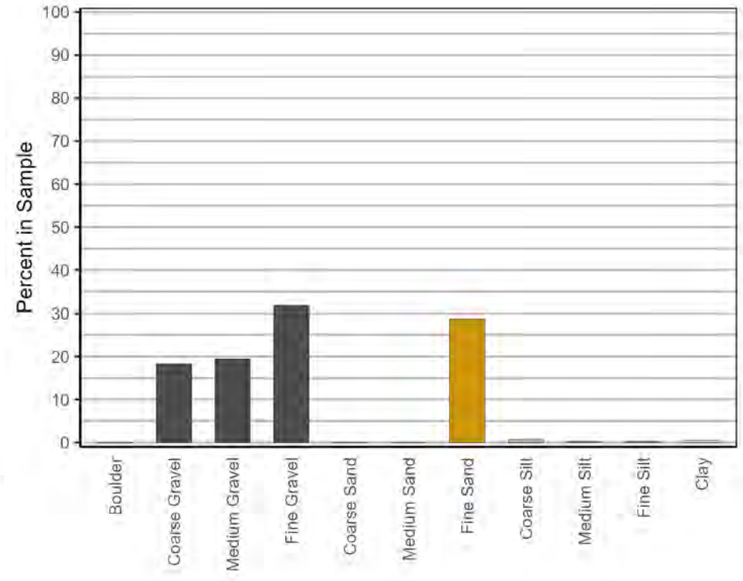
Note: Coefficient of variation of selected results (0.736) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE GRAVEL; SOME FINE SAND; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	18.3
Medium Gravel (8-16 mm)	19.4
Fine Gravel (2-8 mm)	31.8
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	28.7
Coarse Silt (0.016-0.063 mm)	0.649
Medium Silt (0.008-0.016 mm)	0.306
Fine Silt (0.002-0.008 mm)	0.306
Clay (<0.002 mm)	0.539







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 5

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
4.66	25.4	0	0	100
4.25	19.1	1.20	0.0120	98.8
3.66	12.7	6.90	0.0690	91.9
3.25	9.51	9.00	0.0900	82.9
2.25	4.76	10.0	0.100	72.9
0.999	2.00	7.20	0.0720	65.7
-3.75	0.0740	62.3	0.623	3.40
-4.79	0.0361	0.355	0.00355	3.05
-5.44	0.0229	0.659	0.00659	2.39
-6.22	0.0134	0	0	2.39
-6.67	0.00980	0	0	2.39
-7.22	0.00670	0.659	0.00659	1.73
-7.64	0.00500	0.330	0.00330	1.40
-8.24	0.00330	0.235	0.00235	1.16
-9.58	0.00130	0.330	0.00330	0.832
-13	0.000124	0.832	0.00832	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.278
d_{17}	0.494
d_{20}	0.587
d_{50}	1.51
d_{60}	1.82
de (Kruger)	0.0625
de (Kozeny)	0.0221
de (Zunker)	0.0310
de (Zamarin)	0.0464
lo (Alyameni)	0

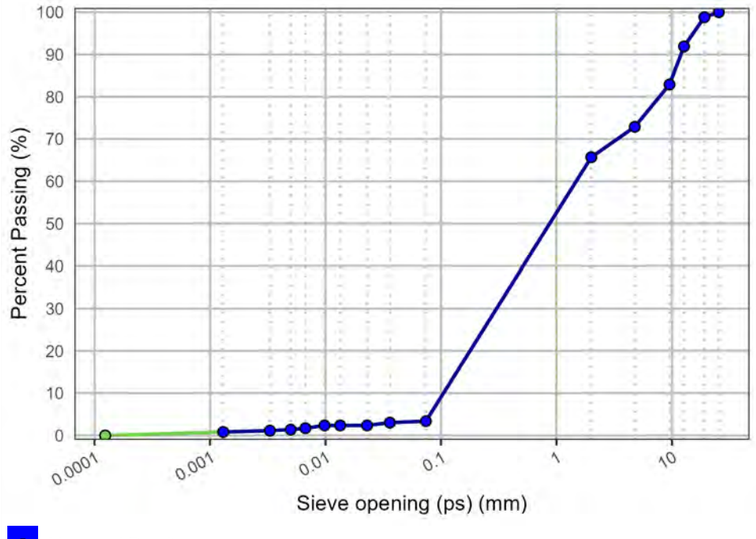
Other Useful Parameters	
Uniformity Coefficient	6.56
n computed	0.330
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	0.940
σ_φ	2.16

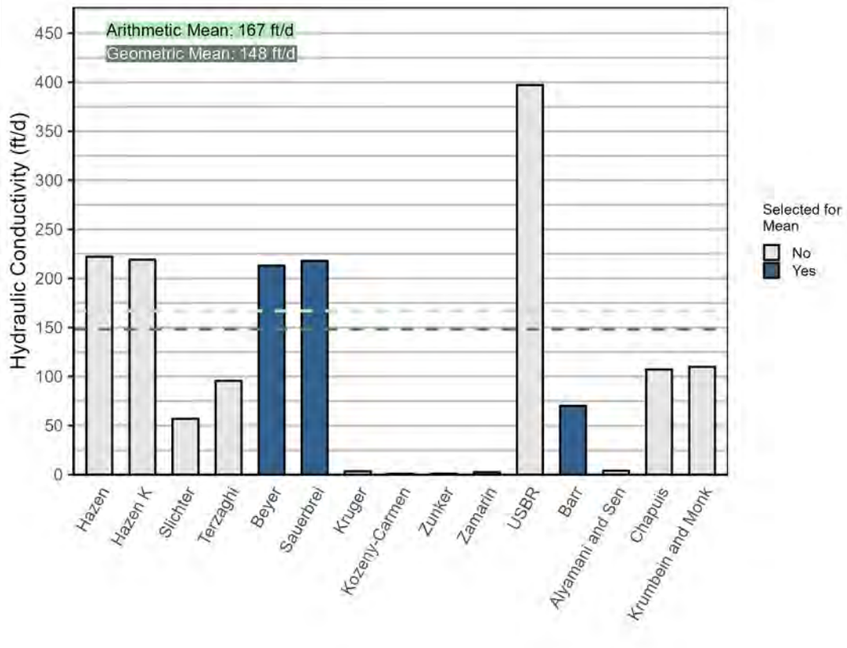
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	7.84E-02	2.57E-03	2.22E+02	No
Hazen K (cm/s) = d_{10} (mm)	7.73E-02	2.54E-03	2.19E+02	No
Slichter	2.01E-02	6.59E-04	5.70E+01	No
Terzaghi	3.37E-02	1.11E-03	9.56E+01	No
Beyer	7.51E-02	2.47E-03	2.13E+02	Yes
Sauerbrei	7.69E-02	2.52E-03	2.18E+02	Yes
Kruger	1.24E-03	4.08E-05	3.52E+00	No
Kozeny-Carmen	3.22E-04	1.06E-05	9.13E-01	No
Zunker	3.58E-04	1.18E-05	1.02E+00	No
Zamarin	9.03E-04	2.96E-05	2.56E+00	No
USBR	1.40E-01	4.60E-03	3.97E+02	No
Barr	2.47E-02	8.12E-04	7.01E+01	Yes
Alyamani and Sen	1.44E-03	4.72E-05	4.08E+00	No
Chapuis	3.78E-02	1.24E-03	1.07E+02	No
Krumbein and Monk	3.88E-02	1.27E-03	1.10E+02	No
Arithmetic Mean	**5.89E-02**	**1.93E-03**	**1.67E+02**	**Yes**
Geometric Mean	**5.23E-02**	**1.72E-03**	**1.48E+02**	**No**

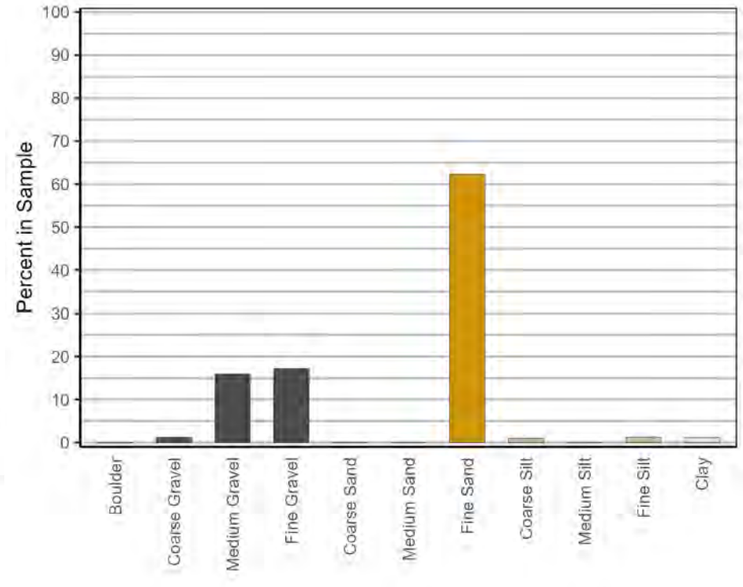
Note: Coefficient of variation of selected results (0.503) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; LITTLE FINE GRAVEL; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	1.20
Medium Gravel (8-16 mm)	15.9
Fine Gravel (2-8 mm)	17.2
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	62.3
Coarse Silt (0.016-0.063 mm)	1.01
Medium Silt (0.008-0.016 mm)	0
Fine Silt (0.002-0.008 mm)	1.22
Clay (<0.002 mm)	1.16







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 6

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	7.20	0.0720	92.8
4.25	19.1	0	0	92.8
3.66	12.7	13.3	0.133	79.5
3.25	9.51	4.90	0.0490	74.6
2.25	4.76	10.2	0.102	64.4
0.999	2.00	16.1	0.161	48.3
-3.75	0.0740	46.4	0.464	1.90
-4.79	0.0361	0.450	0.00450	1.45
-5.44	0.0229	0.204	0.00204	1.25
-6.22	0.0134	0.204	0.00204	1.04
-6.67	0.00980	0	0	1.04
-7.22	0.00670	0	0	1.04
-7.64	0.00500	0.204	0.00204	0.837
-8.24	0.00330	0.204	0.00204	0.633
-9.58	0.00130	0.322	0.00322	0.311
-10.9	0.000529	0.311	0.00311	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.410
d_{17}	0.701
d_{20}	0.825
d_{50}	2.29
d_{60}	4.01
de (Kruger)	0.155
de (Kozeny)	0.0965
de (Zunker)	0.117
de (Zamarin)	0.140
Io (Alyameni)	0

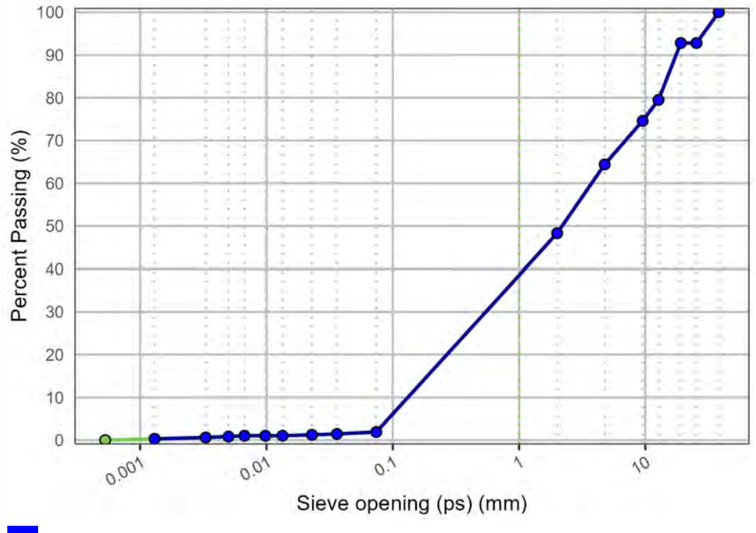
Other Useful Parameters	
Uniformity Coefficient	9.76
n computed	0.296
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	1.77
σ_φ	2.21

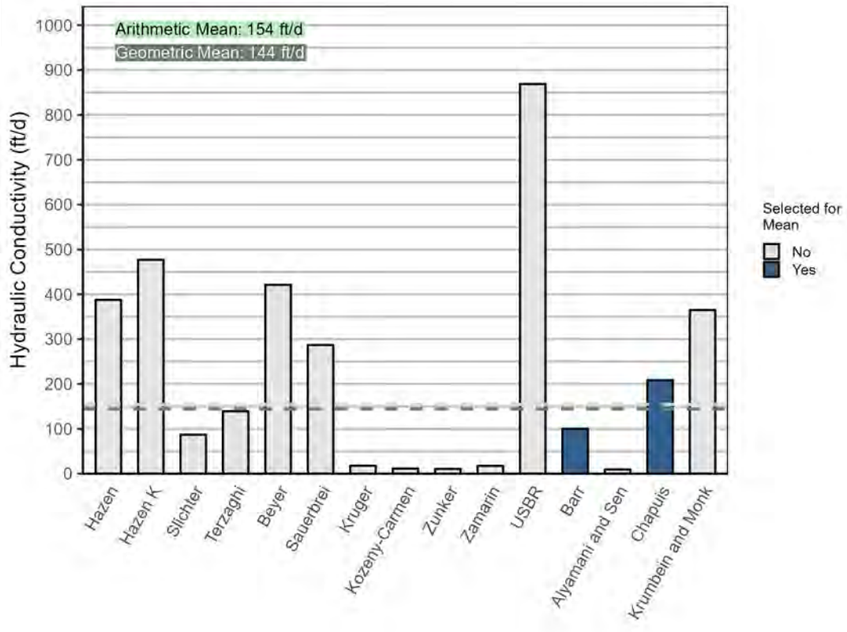
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	1.37E-01	4.49E-03	3.88E+02	No
Hazen K (cm/s) = d_{10} (mm)	1.68E-01	5.52E-03	4.77E+02	No
Slichter	3.07E-02	1.01E-03	8.70E+01	No
Terzaghi	4.91E-02	1.61E-03	1.39E+02	No
Beyer	1.49E-01	4.87E-03	4.21E+02	No
Sauerbrei	1.01E-01	3.32E-03	2.87E+02	No
Kruger	6.25E-03	2.05E-04	1.77E+01	No
Kozeny-Carmen	4.03E-03	1.32E-04	1.14E+01	No
Zunker	3.74E-03	1.23E-04	1.06E+01	No
Zamarin	6.13E-03	2.01E-04	1.74E+01	No
USBR	3.07E-01	1.01E-02	8.69E+02	No
Barr	3.53E-02	1.16E-03	1.00E+02	Yes
Alyamani and Sen	3.33E-03	1.09E-04	9.43E+00	No
Chapuis	7.35E-02	2.41E-03	2.08E+02	Yes
Krumbein and Monk	1.29E-01	4.22E-03	3.65E+02	No
Arithmetic Mean	**5.44E-02**	**1.79E-03**	**1.54E+02**	**Yes**
Geometric Mean	**5.10E-02**	**1.67E-03**	**1.44E+02**	**No**

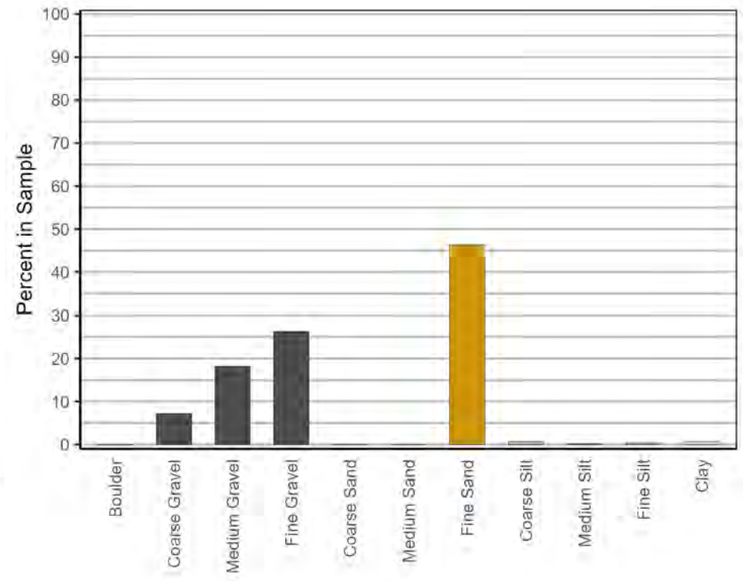
Note: Coefficient of variation of selected results (0.497) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	7.20
Medium Gravel (8-16 mm)	18.2
Fine Gravel (2-8 mm)	26.3
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	46.4
Coarse Silt (0.016-0.063 mm)	0.654
Medium Silt (0.008-0.016 mm)	0.204
Fine Silt (0.002-0.008 mm)	0.408
Clay (<0.002 mm)	0.633







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 7

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	25.2	0.252	74.8
4.25	19.1	17.2	0.172	57.6
3.66	12.7	8.30	0.0830	49.3
3.25	9.51	11.7	0.117	37.6
2.25	4.76	4.40	0.0440	33.2
0.999	2.00	30.9	0.309	2.30
-4.79	0.0361	0.816	0.00816	1.48
-5.44	0.0229	0.147	0.00147	1.34
-6.22	0.0134	0.147	0.00147	1.19
-6.67	0.00980	0.294	0.00294	0.897
-7.22	0.00670	0	0	0.897
-7.64	0.00500	0.294	0.00294	0.603
-8.24	0.00330	0	0	0.603
-9.58	0.00130	0.0849	0.000849	0.518
-19.6	0.00000124	0.518	0.00518	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	2.69
d_{17}	3.31
d_{20}	3.58
d_{50}	13.2
d_{60}	19.9
de (Kruger)	0.107
de (Kozeny)	0.000480
de (Zunker)	0.00167
de (Zamarin)	0.0343
Io (Alyameni)	0.0508

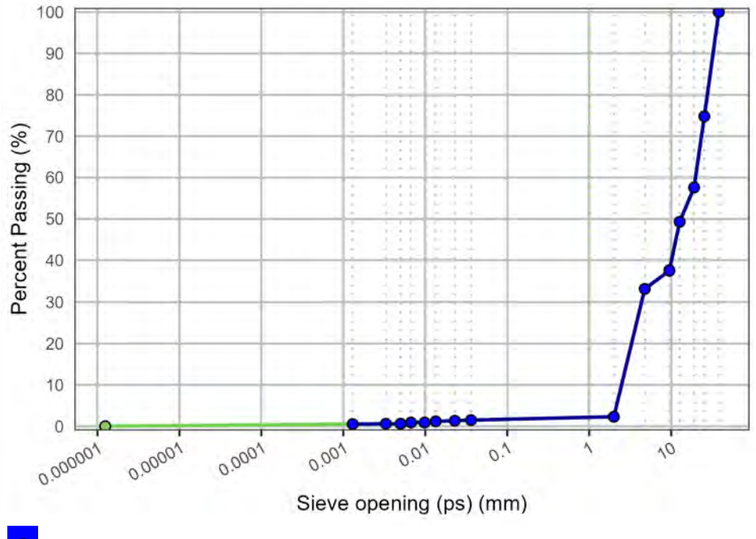
Other Useful Parameters	
Uniformity Coefficient	7.42
n computed	0.319
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	9.30
σ_φ	1.41

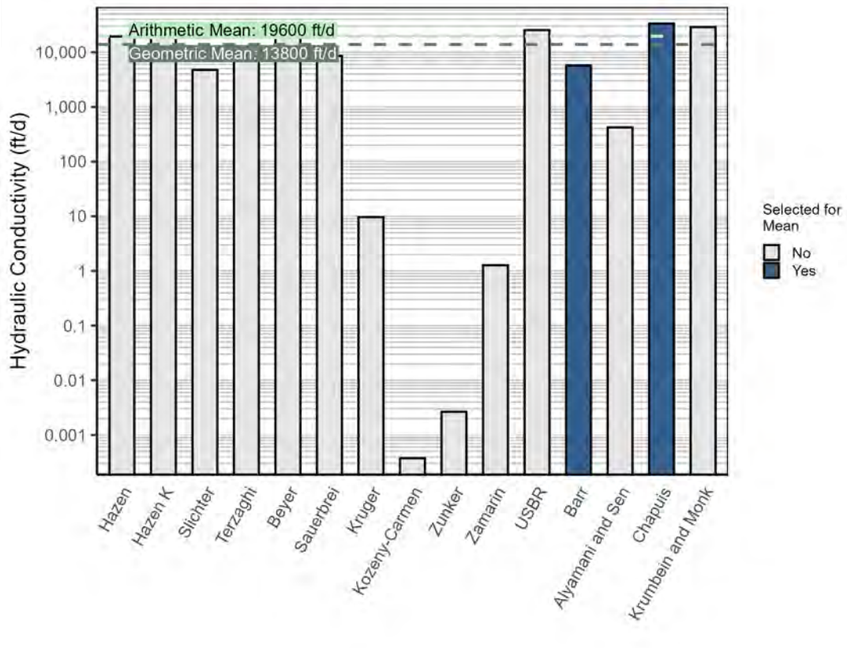
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	6.85E+00	2.25E-01	1.94E+04	No
Hazen K (cm/s) = d_{10} (mm)	7.22E+00	2.37E-01	2.05E+04	No
Slichter	1.68E+00	5.51E-02	4.76E+03	No
Terzaghi	2.78E+00	9.13E-02	7.89E+03	No
Beyer	6.82E+00	2.24E-01	1.93E+04	No
Sauerbrei	3.01E+00	9.89E-02	8.54E+03	No
Kruger	3.40E-03	1.11E-04	9.63E+00	No
Kozeny-Carmen	1.33E-07	4.36E-09	3.76E-04	No
Zunker	9.39E-07	3.08E-08	2.66E-03	No
Zamarin	4.49E-04	1.47E-05	1.27E+00	No
USBR	8.96E+00	2.94E-01	2.54E+04	No
Barr	2.02E+00	6.63E-02	5.72E+03	Yes
Alyamani and Sen	1.49E-01	4.88E-03	4.22E+02	No
Chapuis	1.18E+01	3.87E-01	3.35E+04	Yes
Krumbein and Monk	1.02E+01	3.34E-01	2.88E+04	No
Arithmetic Mean	**6.91E+00**	**2.27E-01**	**1.96E+04**	**No**
Geometric Mean	**4.88E+00**	**1.60E-01**	**1.38E+04**	**Yes**

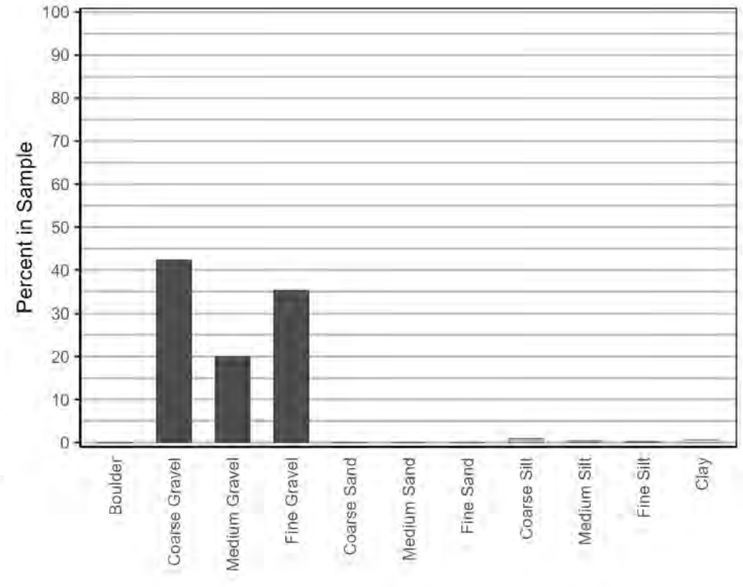
Note: Coefficient of variation of selected results (1) > 1, geometric mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; AND FINE GRAVEL; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	42.4
Medium Gravel (8-16 mm)	20.0
Fine Gravel (2-8 mm)	35.3
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	N/A
Coarse Silt (0.016-0.063 mm)	0.962
Medium Silt (0.008-0.016 mm)	0.441
Fine Silt (0.002-0.008 mm)	0.294
Clay (<0.002 mm)	0.603







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 8

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	28.7	0.287	71.3
4.25	19.1	6.80	0.0680	64.5
3.66	12.7	15.5	0.155	49.0
3.25	9.51	5.70	0.0570	43.3
2.25	4.76	15.4	0.154	27.9
0.999	2.00	9.70	0.0970	18.2
-0.234	0.850	3.80	0.0380	14.4
-1.25	0.420	2.20	0.0220	12.2
-2.0	0.250	6.60	0.0660	5.60
-2.74	0.149	2.40	0.0240	3.20
-3.24	0.106	0.900	0.00900	2.30
-3.75	0.0740	0.400	0.00400	1.90
-6.21	0.0134	1.90	0.0190	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.363
d_{17}	1.64
d_{20}	2.51
d_{50}	13.1
d_{60}	17.2
de (Kruger)	0.994
de (Kozeny)	0.689
de (Zunker)	0.782
de (Zamarin)	0.892
Io (Alyameni)	0

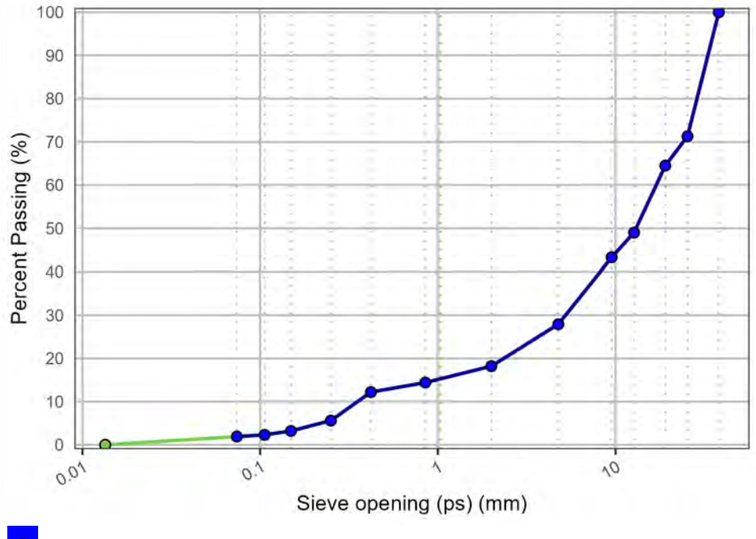
Other Useful Parameters	
Uniformity Coefficient	47.4
n computed	0.255
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	7.05
σ_φ	2.24

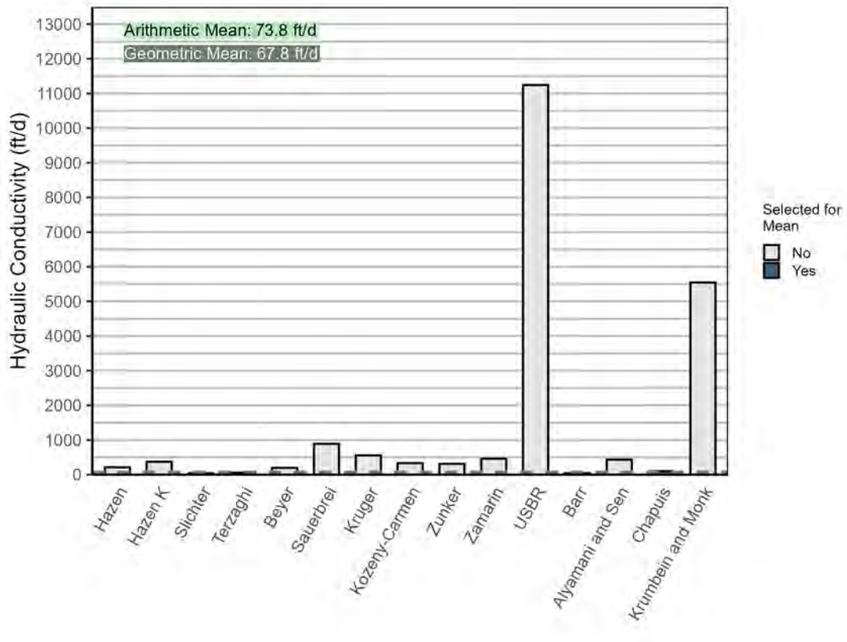
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	7.48E-02	2.45E-03	2.12E+02	No
Hazen K (cm/s) = d_{10} (mm)	1.32E-01	4.33E-03	3.74E+02	No
Slichter	1.47E-02	4.82E-04	4.17E+01	No
Terzaghi	2.10E-02	6.87E-04	5.94E+01	No
Beyer	6.98E-02	2.29E-03	1.98E+02	No
Sauerbrei	3.14E-01	1.03E-02	8.90E+02	No
Kruger	1.96E-01	6.44E-03	5.57E+02	No
Kozeny-Carmen	1.17E-01	3.84E-03	3.32E+02	No
Zunker	1.10E-01	3.62E-03	3.13E+02	No
Zamarin	1.63E-01	5.34E-03	4.62E+02	No
USBR	3.97E+00	1.30E-01	1.12E+04	No
Barr	1.58E-02	5.17E-04	4.47E+01	Yes
Alyamani and Sen	1.53E-01	5.01E-03	4.33E+02	No
Chapuis	3.63E-02	1.19E-03	1.03E+02	Yes
Krumbein and Monk	1.96E+00	6.42E-02	5.55E+03	No
Arithmetic Mean	**2.60E-02**	**8.54E-04**	**7.38E+01**	**Yes**
Geometric Mean	**2.39E-02**	**7.84E-04**	**6.78E+01**	**No**

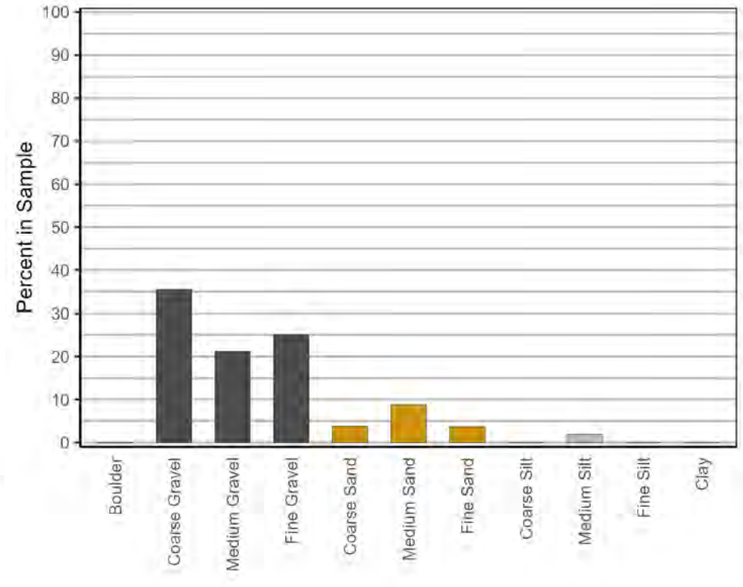
Note: Coefficient of variation of selected results (0.558) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME FINE GRAVEL; SOME MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	35.5
Medium Gravel (8-16 mm)	21.2
Fine Gravel (2-8 mm)	25.1
Coarse Sand (0.5-2 mm)	3.80
Medium Sand (0.25-0.5 mm)	8.80
Fine Sand (0.063-0.25 mm)	3.70
Coarse Silt (0.016-0.063 mm)	N/A
Medium Silt (0.008-0.016 mm)	1.90
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 9

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
3.66	12.7	0	0	100
3.25	9.51	8.50	0.0850	91.5
2.25	4.76	32.0	0.320	59.5
0.999	2.00	34.7	0.347	24.8
-0.234	0.850	10.7	0.107	14.1
-1.25	0.420	3.90	0.0390	10.2
-2.0	0.250	2.30	0.0230	7.90
-2.74	0.149	1.60	0.0160	6.30
-3.24	0.106	0.700	0.00700	5.60
-3.75	0.0740	0.800	0.00800	4.80
-6.86	0.00857	4.80	0.0480	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.405
d_{17}	1.16
d_{20}	1.48
d_{50}	4.00
d_{60}	4.83
de (Kruger)	0.572
de (Kozeny)	0.265
de (Zunker)	0.342
de (Zamarin)	0.457
Io (Alyameni)	0

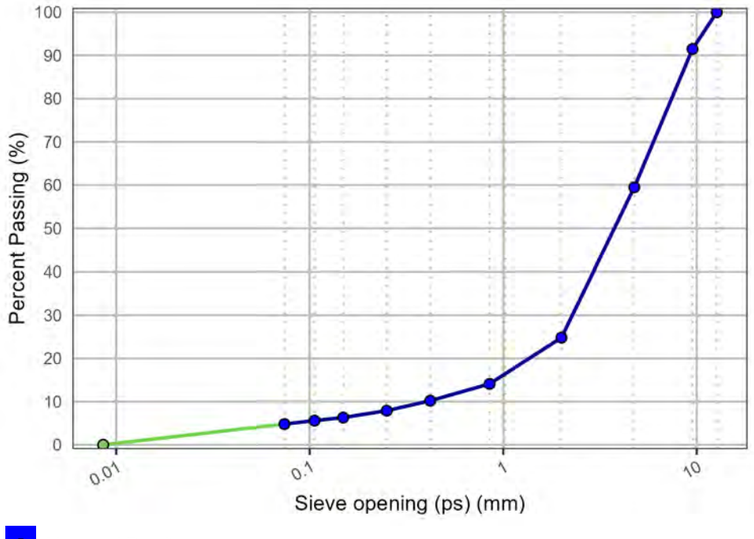
Other Useful Parameters	
Uniformity Coefficient	11.9
n computed	0.283
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	2.59
σ_φ	1.82

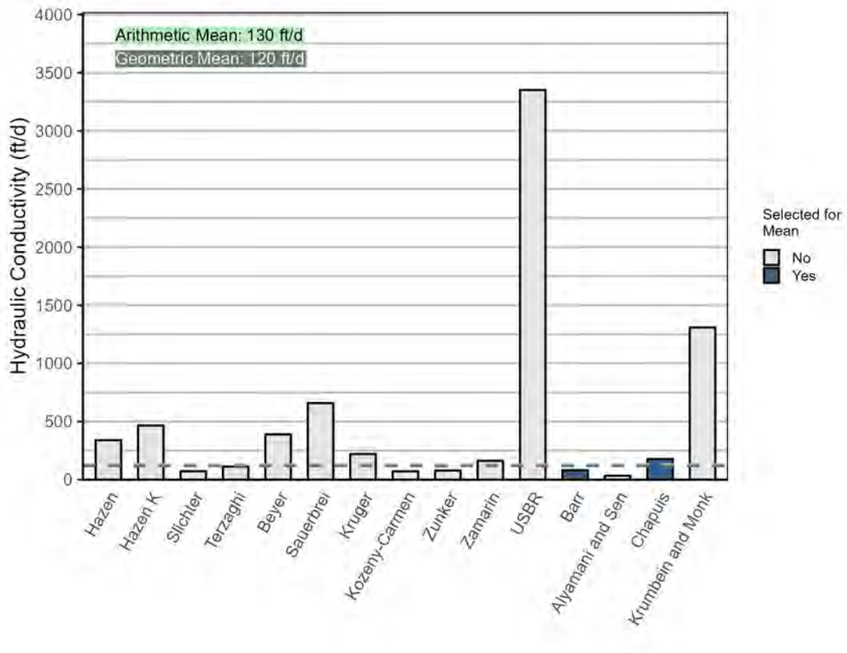
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	1.20E-01	3.94E-03	3.40E+02	No
Hazen K (cm/s) = d_{10} (mm)	1.64E-01	5.39E-03	4.65E+02	No
Slichter	2.56E-02	8.40E-04	7.26E+01	No
Terzaghi	3.98E-02	1.31E-03	1.13E+02	No
Beyer	1.38E-01	4.51E-03	3.90E+02	No
Sauerbrei	2.32E-01	7.62E-03	6.58E+02	No
Kruger	7.77E-02	2.55E-03	2.20E+02	No
Kozeny-Carmen	2.54E-02	8.33E-04	7.20E+01	No
Zunker	2.80E-02	9.17E-04	7.92E+01	No
Zamarin	5.71E-02	1.87E-03	1.62E+02	No
USBR	1.18E+00	3.88E-02	3.35E+03	No
Barr	2.88E-02	9.43E-04	8.15E+01	Yes
Alyamani and Sen	1.22E-02	4.00E-04	3.45E+01	No
Chapuis	6.28E-02	2.06E-03	1.78E+02	Yes
Krumbein and Monk	4.62E-01	1.51E-02	1.31E+03	No
Arithmetic Mean	**4.58E-02**	**1.50E-03**	**1.30E+02**	**Yes**
Geometric Mean	**4.25E-02**	**1.39E-03**	**1.20E+02**	**No**

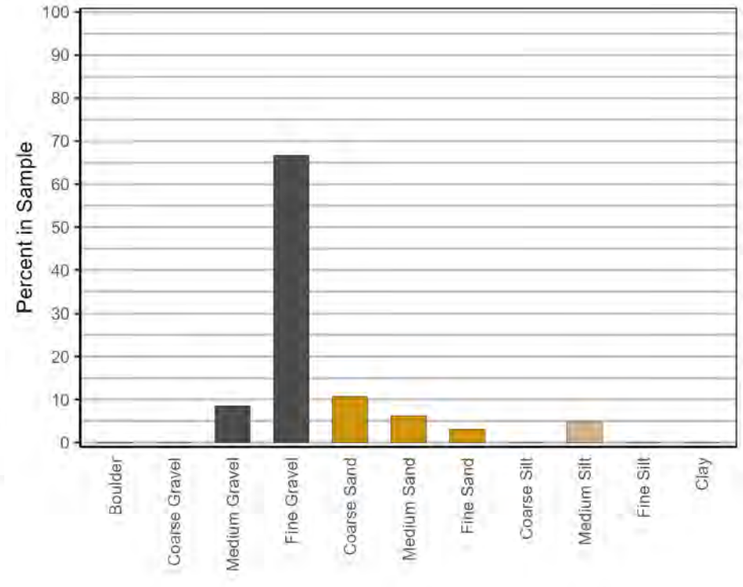
Note: Coefficient of variation of selected results (0.525) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE GRAVEL; LITTLE COARSE SAND; TRACE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	N/A
Medium Gravel (8-16 mm)	8.50
Fine Gravel (2-8 mm)	66.7
Coarse Sand (0.5-2 mm)	10.7
Medium Sand (0.25-0.5 mm)	6.20
Fine Sand (0.063-0.25 mm)	3.10
Coarse Silt (0.016-0.063 mm)	N/A
Medium Silt (0.008-0.016 mm)	4.80
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
10

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.64	50.0	0	0	100
5.25	38.1	27.6	0.276	72.4
4.66	25.4	11.7	0.117	60.7
4.25	19.1	4.50	0.0450	56.2
3.66	12.7	8.90	0.0890	47.3
3.25	9.51	5.80	0.0580	41.5
2.25	4.76	13.9	0.139	27.6
0.999	2.00	8.80	0.0880	18.8
-0.234	0.850	3.50	0.0350	15.3
-1.25	0.420	3.40	0.0340	11.9
-2.0	0.250	6.30	0.0630	5.60
-2.74	0.149	2.80	0.0280	2.80
-3.24	0.106	0.600	0.00600	2.20
-3.75	0.0740	0.400	0.00400	1.80
-6.08	0.0147	1.80	0.0180	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.369
d_{17}	1.41
d_{20}	2.38
d_{50}	14.6
d_{60}	24.4
de (Kruger)	1.03
de (Kozeny)	0.743
de (Zunker)	0.831
de (Zamarin)	0.933
Io (Alyameni)	0

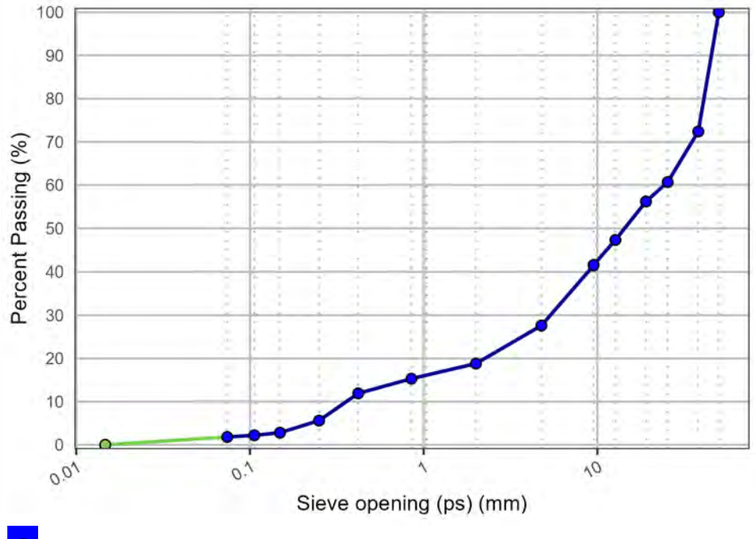
Other Useful Parameters	
Uniformity Coefficient	66.2
n computed	0.255
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	8.35
σ_φ	2.50

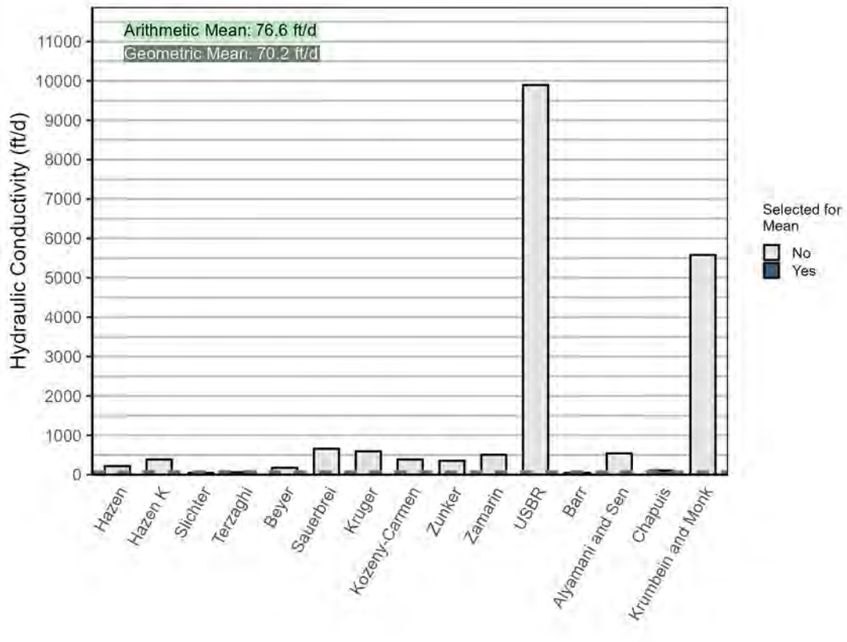
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	7.70E-02	2.53E-03	2.18E+02	No
Hazen K (cm/s) = d_{10} (mm)	1.36E-01	4.46E-03	3.85E+02	No
Slichter	1.51E-02	4.96E-04	4.29E+01	No
Terzaghi	2.16E-02	7.08E-04	6.11E+01	No
Beyer	6.17E-02	2.02E-03	1.75E+02	No
Sauerbrei	2.32E-01	7.63E-03	6.59E+02	No
Kruger	2.10E-01	6.89E-03	5.95E+02	No
Kozeny-Carmen	1.36E-01	4.46E-03	3.85E+02	No
Zunker	1.24E-01	4.08E-03	3.53E+02	No
Zamarin	1.78E-01	5.84E-03	5.05E+02	No
USBR	3.49E+00	1.15E-01	9.89E+03	No
Barr	1.62E-02	5.32E-04	4.60E+01	Yes
Alyamani and Sen	1.91E-01	6.27E-03	5.42E+02	No
Chapuis	3.78E-02	1.24E-03	1.07E+02	Yes
Krumbein and Monk	1.97E+00	6.46E-02	5.58E+03	No
Arithmetic Mean	**2.70E-02**	**8.86E-04**	**7.66E+01**	**Yes**
Geometric Mean	**2.48E-02**	**8.12E-04**	**7.02E+01**	**No**

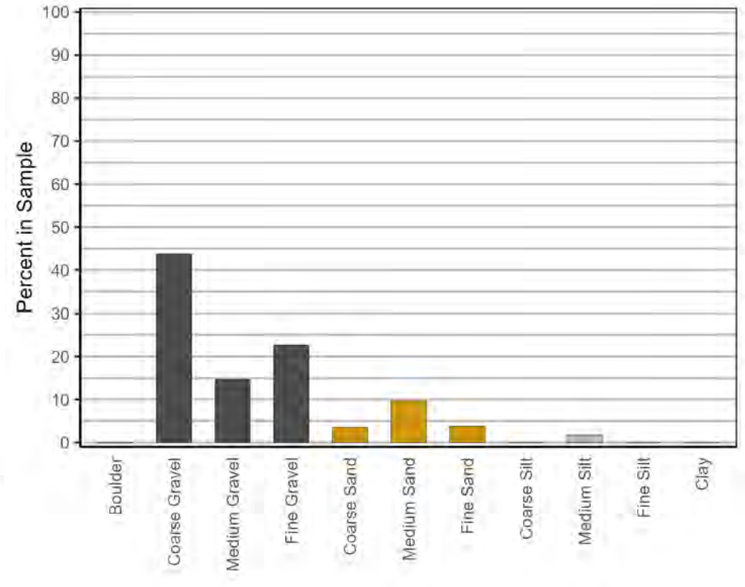
Note: Coefficient of variation of selected results (0.565) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	43.8
Medium Gravel (8-16 mm)	14.7
Fine Gravel (2-8 mm)	22.7
Coarse Sand (0.5-2 mm)	3.50
Medium Sand (0.25-0.5 mm)	9.70
Fine Sand (0.063-0.25 mm)	3.80
Coarse Silt (0.016-0.063 mm)	N/A
Medium Silt (0.008-0.016 mm)	1.80
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 11

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
4.66	25.4	0	0	100
4.25	19.1	6.80	0.0680	93.2
3.66	12.7	0	0	93.2
3.25	9.51	0	0	93.2
2.25	4.76	2.30	0.0230	90.9
0.999	2.00	1.00	0.0100	89.9
-3.75	0.0740	84.1	0.841	5.80
-4.79	0.0361	0.980	0.00980	4.82
-5.44	0.0229	0.368	0.00368	4.45
-6.22	0.0134	1.10	0.0110	3.35
-6.67	0.00980	0.736	0.00736	2.61
-7.22	0.00670	0.368	0.00368	2.24
-7.64	0.00500	0.368	0.00368	1.88
-8.24	0.00330	0.368	0.00368	1.51
-9.58	0.00130	0.212	0.00212	1.30
-17.8	0.00000442	1.30	0.0130	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.170
d_{17}	0.330
d_{20}	0.399
d_{50}	1.09
d_{60}	1.32
de (Kruger)	0.0398
de (Kozeny)	0.000675
de (Zunker)	0.00191
de (Zamarin)	0.0159
Io (Alyameni)	0

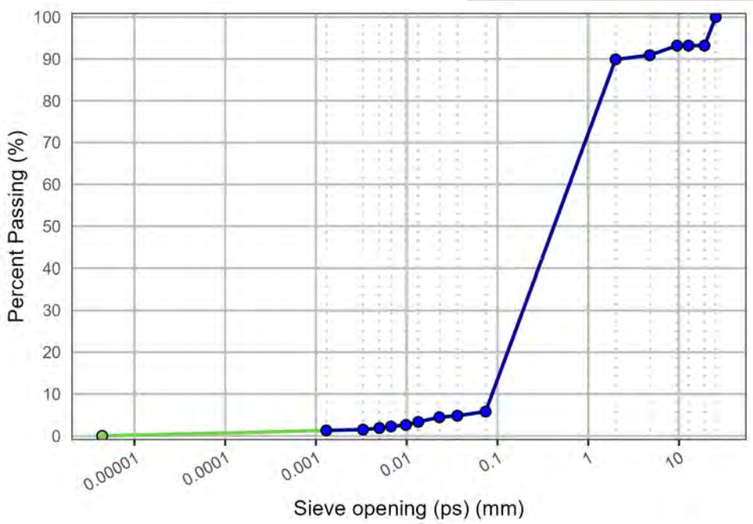
Other Useful Parameters	
Uniformity Coefficient	7.73
n computed	0.315
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	0.427
σ_φ	2.00

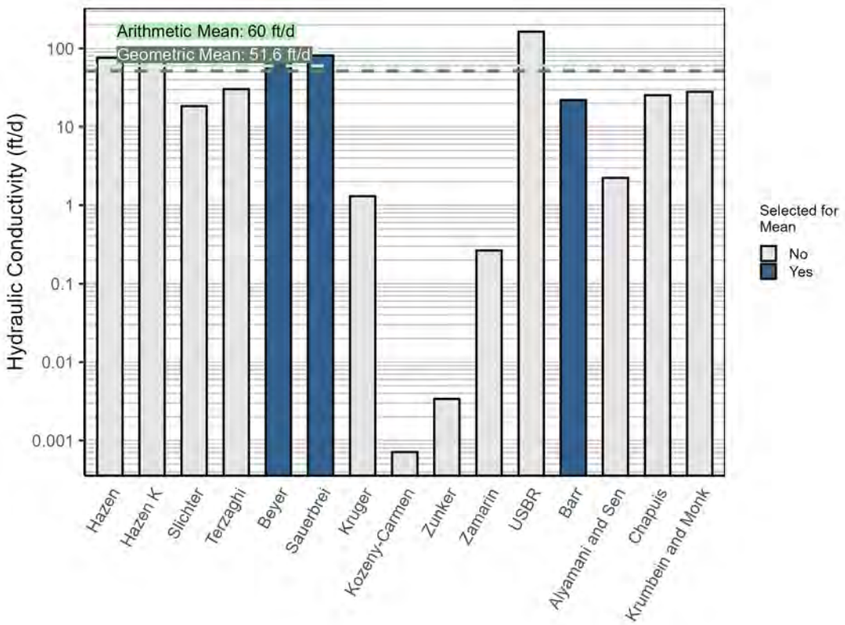
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	2.68E-02	8.80E-04	7.60E+01	No
Hazen K (cm/s) = d_{10} (mm)	2.90E-02	9.50E-04	8.21E+01	No
Slichter	6.48E-03	2.13E-04	1.84E+01	No
Terzaghi	1.07E-02	3.51E-04	3.03E+01	No
Beyer	2.71E-02	8.89E-04	7.68E+01	Yes
Sauerbrei	2.87E-02	9.41E-04	8.13E+01	Yes
Kruger	4.60E-04	1.51E-05	1.31E+00	No
Kozeny-Carmen	2.51E-07	8.24E-09	7.12E-04	No
Zunker	1.20E-06	3.93E-08	3.40E-03	No
Zamarin	9.36E-05	3.07E-06	2.65E-01	No
USBR	5.77E-02	1.89E-03	1.64E+02	No
Barr	7.74E-03	2.54E-04	2.19E+01	Yes
Alyamani and Sen	7.89E-04	2.59E-05	2.24E+00	No
Chapuis	8.94E-03	2.93E-04	2.53E+01	No
Krumbein and Monk	9.89E-03	3.24E-04	2.80E+01	No
Arithmetic Mean	**2.12E-02**	**6.95E-04**	**6.00E+01**	**Yes**
Geometric Mean	**1.82E-02**	**5.97E-04**	**5.16E+01**	**No**

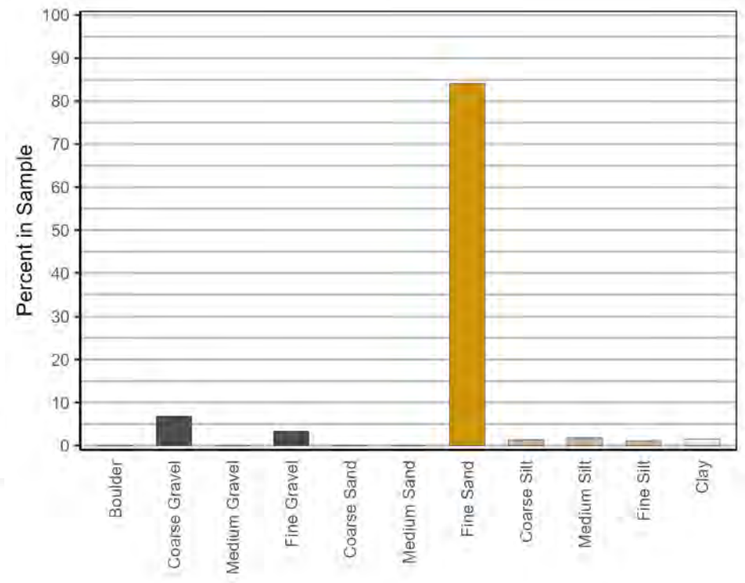
Note: Coefficient of variation of selected results (0.551) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; TRACE COARSE GRAVEL; TRACE FINE GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	6.80
Medium Gravel (8-16 mm)	0
Fine Gravel (2-8 mm)	3.30
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	84.1
Coarse Silt (0.016-0.063 mm)	1.35
Medium Silt (0.008-0.016 mm)	1.84
Fine Silt (0.002-0.008 mm)	1.10
Clay (<0.002 mm)	1.51







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
12

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
4.25	19.1	0	0	100
3.66	12.7	0.200	0.00200	99.8
3.25	9.51	1.80	0.0180	98.0
2.25	4.76	5.50	0.0550	92.5
0.999	2.00	6.50	0.0650	86.0
-3.75	0.0740	77.3	0.773	8.70
-4.79	0.0361	2.51	0.0251	6.19
-5.44	0.0229	0	0	6.19
-6.22	0.0134	0.769	0.00769	5.42
-6.67	0.00980	1.54	0.0154	3.88
-7.22	0.00670	0.769	0.00769	3.11
-7.64	0.00500	0.769	0.00769	2.35
-8.24	0.00330	0.384	0.00384	1.96
-9.58	0.00130	0.606	0.00606	1.35
-12.6	0.000162	1.35	0.0135	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.106
d_{17}	0.281
d_{20}	0.356
d_{50}	1.10
d_{60}	1.35
de (Kruger)	0.0366
de (Kozeny)	0.0163
de (Zunker)	0.0214
de (Zamarin)	0.0291
Io (Alyameni)	0

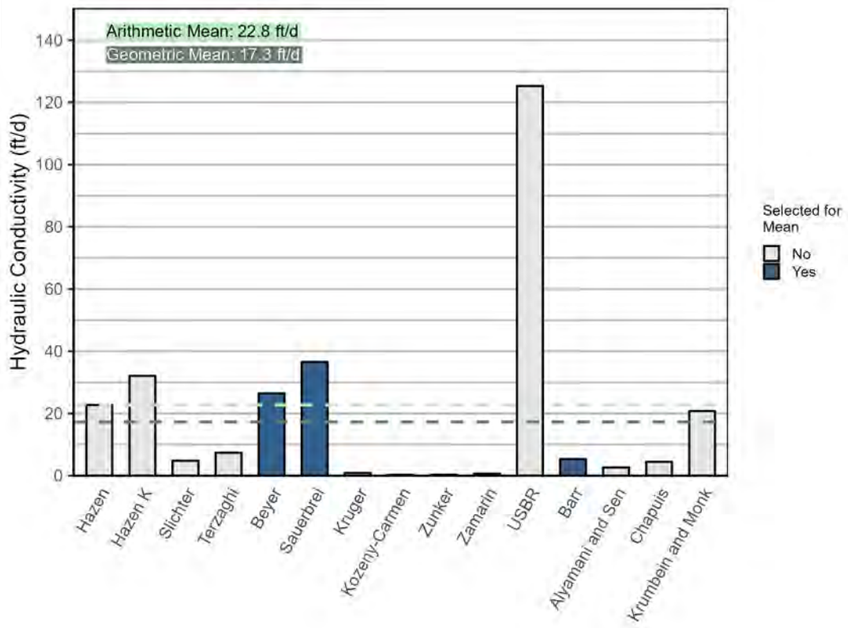
Other Useful Parameters	
Uniformity Coefficient	12.7
n computed	0.279
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	0.396
σ_φ	2.11

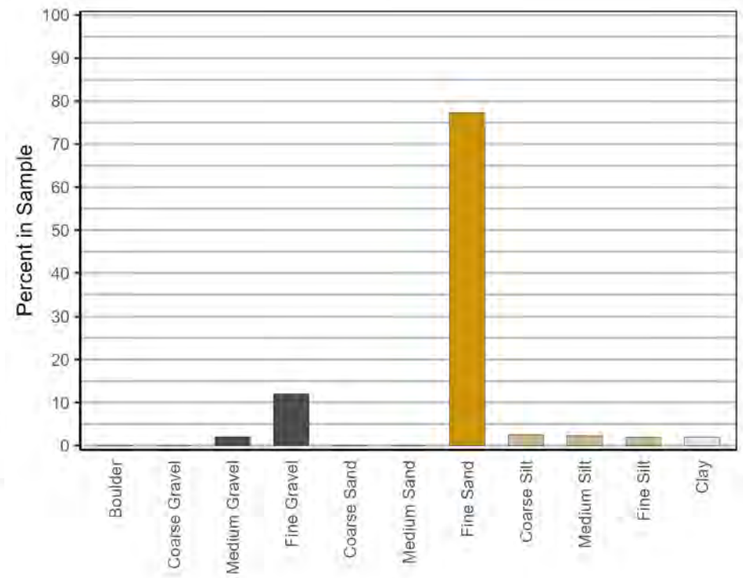
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	8.02E-03	2.63E-04	2.27E+01	No
Hazen K (cm/s) = d_{10} (mm)	1.13E-02	3.71E-04	3.21E+01	No
Slichter	1.69E-03	5.55E-05	4.79E+00	No
Terzaghi	2.60E-03	8.54E-05	7.38E+00	No
Beyer	9.32E-03	3.06E-04	2.64E+01	Yes
Sauerbrei	1.29E-02	4.23E-04	3.66E+01	Yes
Kruger	3.10E-04	1.02E-05	8.80E-01	No
Kozeny-Carmen	9.16E-05	3.01E-06	2.60E-01	No
Zunker	1.05E-04	3.45E-06	2.98E-01	No
Zamarin	2.22E-04	7.29E-06	6.30E-01	No
USBR	4.42E-02	1.45E-03	1.25E+02	No
Barr	1.89E-03	6.18E-05	5.34E+00	Yes
Alyamani and Sen	9.34E-04	3.06E-05	2.65E+00	No
Chapuis	1.57E-03	5.14E-05	4.44E+00	No
Krumbein and Monk	7.33E-03	2.41E-04	2.08E+01	No
Arithmetic Mean	**8.04E-03**	**2.64E-04**	**2.28E+01**	**Yes**
Geometric Mean	**6.10E-03**	**2.00E-04**	**1.73E+01**	**No**

Note: Coefficient of variation of selected results (0.699) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; LITTLE FINE GRAVEL; TRACE COARSE SILT

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	0
Medium Gravel (8-16 mm)	2.00
Fine Gravel (2-8 mm)	12.0
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	77.3
Coarse Silt (0.016-0.063 mm)	2.51
Medium Silt (0.008-0.016 mm)	2.31
Fine Silt (0.002-0.008 mm)	1.92
Clay (<0.002 mm)	1.96





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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
13

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	29.2	0.292	70.8
4.25	19.1	9.50	0.0950	61.3
3.66	12.7	8.00	0.0800	53.3
3.25	9.51	7.00	0.0700	46.3
2.25	4.76	10.0	0.100	36.3
0.999	2.00	8.30	0.0830	28.0
-0.234	0.850	5.10	0.0510	22.9
-1.25	0.420	11.4	0.114	11.5
-2.0	0.250	5.80	0.0580	5.70
-2.74	0.149	3.50	0.0350	2.20
-3.24	0.106	0.600	0.00600	1.60
-3.75	0.0740	0.400	0.00400	1.20
-5.31	0.0252	1.20	0.0120	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.376
d_{17}	0.627
d_{20}	0.741
d_{50}	11.2
d_{60}	18.0
de (Kruger)	1.04
de (Kozeny)	0.907
de (Zunker)	0.950
de (Zamarin)	0.996
Io (Alyameni)	0

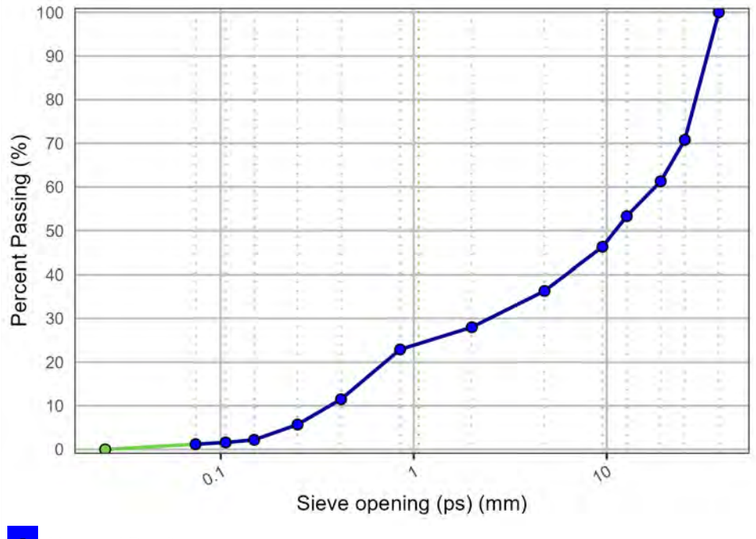
Other Useful Parameters	
Uniformity Coefficient	47.9
n computed	0.255
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	5.70
σ_φ	2.53

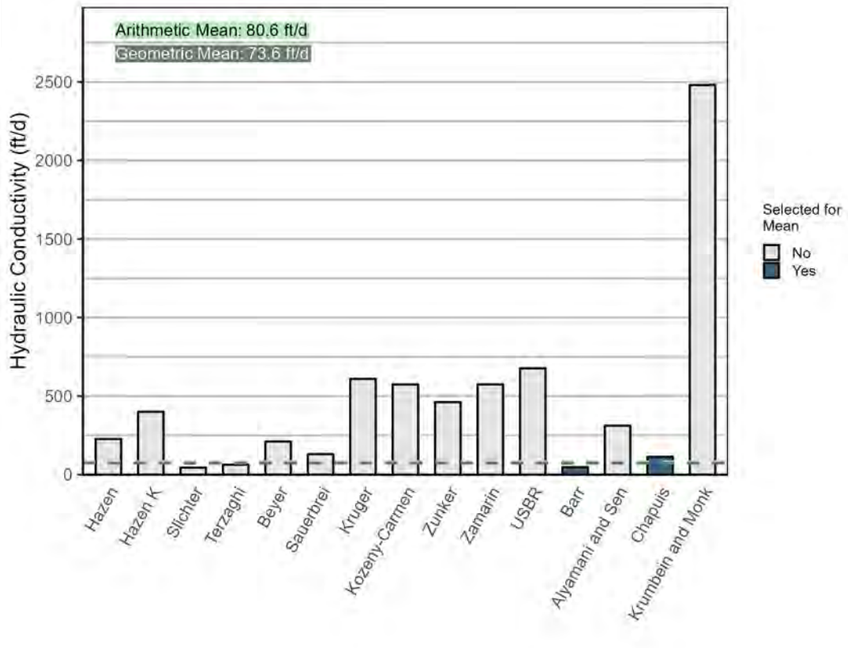
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	8.01E-02	2.63E-03	2.27E+02	No
Hazen K (cm/s) = d_{10} (mm)	1.41E-01	4.64E-03	4.01E+02	No
Slichter	1.57E-02	5.16E-04	4.46E+01	No
Terzaghi	2.24E-02	7.36E-04	6.36E+01	No
Beyer	7.44E-02	2.44E-03	2.11E+02	No
Sauerbrei	4.62E-02	1.51E-03	1.31E+02	No
Kruger	2.15E-01	7.06E-03	6.10E+02	No
Kozeny-Carmen	2.03E-01	6.65E-03	5.75E+02	No
Zunker	1.63E-01	5.34E-03	4.61E+02	No
Zamarin	2.03E-01	6.65E-03	5.75E+02	No
USBR	2.39E-01	7.84E-03	6.77E+02	No
Barr	1.69E-02	5.54E-04	4.78E+01	Yes
Alyamani and Sen	1.10E-01	3.61E-03	3.12E+02	No
Chapuis	4.00E-02	1.31E-03	1.13E+02	Yes
Krumbein and Monk	8.75E-01	2.87E-02	2.48E+03	No
Arithmetic Mean	**2.84E-02**	**9.32E-04**	**8.06E+01**	**Yes**
Geometric Mean	**2.60E-02**	**8.52E-04**	**7.36E+01**	**No**

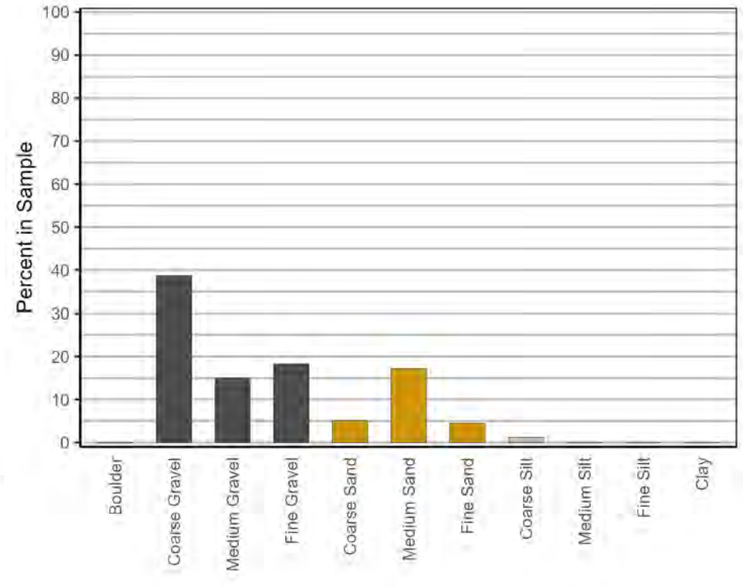
Note: Coefficient of variation of selected results (0.574) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; LITTLE FINE GRAVEL; LITTLE MEDIUM SAND

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	38.7
Medium Gravel (8-16 mm)	15.0
Fine Gravel (2-8 mm)	18.3
Coarse Sand (0.5-2 mm)	5.10
Medium Sand (0.25-0.5 mm)	17.2
Fine Sand (0.063-0.25 mm)	4.50
Coarse Silt (0.016-0.063 mm)	1.20
Medium Silt (0.008-0.016 mm)	N/A
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
14

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
4.66	25.4	0	0	100
4.25	19.1	6.60	0.0660	93.4
3.66	12.7	2.80	0.0280	90.6
3.25	9.51	4.50	0.0450	86.1
2.25	4.76	7.50	0.0750	78.6
0.999	2.00	8.50	0.0850	70.1
-3.75	0.0740	47	0.470	23.1
-4.79	0.0361	6.98	0.0698	16.1
-5.44	0.0229	1.75	0.0175	14.4
-6.22	0.0134	3.50	0.0350	10.9
-6.67	0.00980	2.45	0.0245	8.43
-7.22	0.00670	2.10	0.0210	6.33
-7.64	0.00500	2.10	0.0210	4.23
-8.24	0.00330	1.05	0.0105	3.18
-9.58	0.00130	1.25	0.0125	1.93
-11.7	0.000308	1.93	0.0193	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.0121
d_{17}	0.0409
d_{20}	0.0572
d_{50}	1.18
d_{60}	1.59
de (Kruger)	0.0225
de (Kozeny)	0.0156
de (Zunker)	0.0177
de (Zamarin)	0.0202
Io (Alyameni)	0

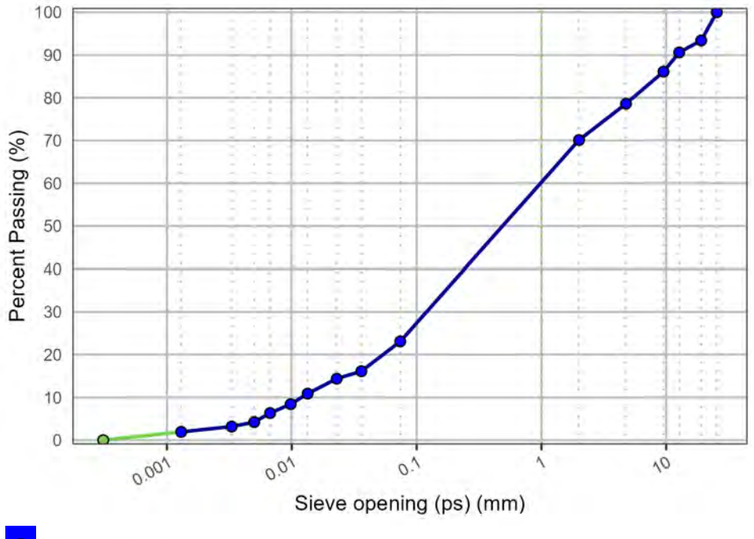
Other Useful Parameters	
Uniformity Coefficient	131
n computed	0.255
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	0.437
σ_φ	3.76

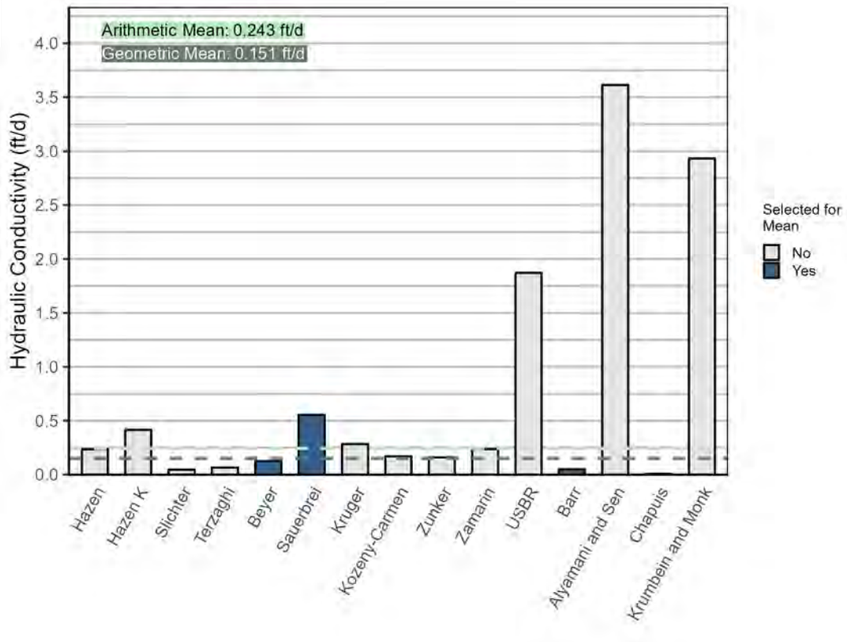
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	8.30E-05	2.72E-06	2.35E-01	No
Hazen K (cm/s) = d_{10} (mm)	1.47E-04	4.81E-06	4.16E-01	No
Slichter	1.63E-05	5.35E-07	4.63E-02	No
Terzaghi	2.33E-05	7.63E-07	6.60E-02	No
Beyer	4.41E-05	1.45E-06	1.25E-01	Yes
Sauerbrei	1.96E-04	6.42E-06	5.55E-01	Yes
Kruger	1.00E-04	3.29E-06	2.84E-01	No
Kozeny-Carmen	6.01E-05	1.97E-06	1.70E-01	No
Zunker	5.68E-05	1.86E-06	1.61E-01	No
Zamarin	8.35E-05	2.74E-06	2.37E-01	No
USBR	6.60E-04	2.17E-05	1.87E+00	No
Barr	1.75E-05	5.74E-07	4.96E-02	Yes
Alyamani and Sen	1.27E-03	4.18E-05	3.61E+00	No
Chapuis	2.50E-06	8.20E-08	7.08E-03	No
Krumbein and Monk	1.03E-03	3.39E-05	2.93E+00	No
Arithmetic Mean	**8.58E-05**	**2.81E-06**	**2.43E-01**	**No**
Geometric Mean	**5.32E-05**	**1.75E-06**	**1.51E-01**	**Yes**

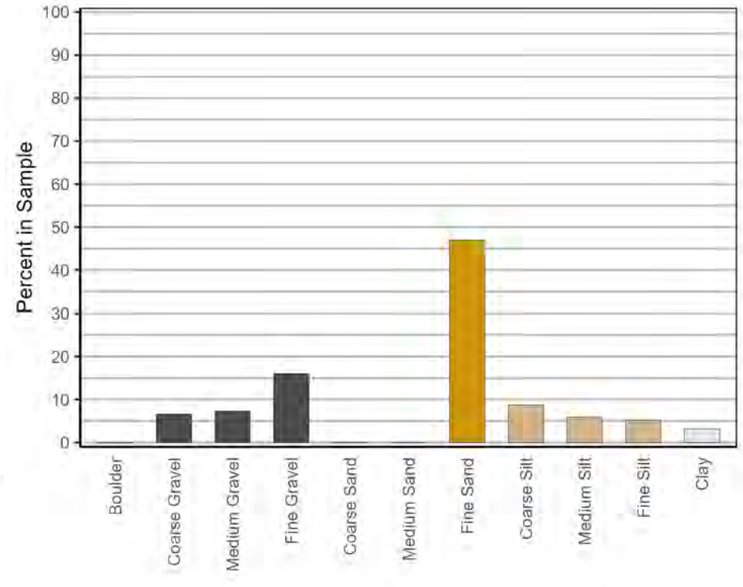
Note: Coefficient of variation of selected results (1.12) > 1, geometric mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; LITTLE FINE GRAVEL; TRACE COARSE SILT

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	6.60
Medium Gravel (8-16 mm)	7.30
Fine Gravel (2-8 mm)	16.0
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	47.0
Coarse Silt (0.016-0.063 mm)	8.73
Medium Silt (0.008-0.016 mm)	5.95
Fine Silt (0.002-0.008 mm)	5.25
Clay (<0.002 mm)	3.18







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
15

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	14.5	0.145	85.5
4.25	19.1	0	0	85.5
3.66	12.7	20.7	0.207	64.8
3.25	9.51	15.4	0.154	49.4
2.25	4.76	20.0	0.200	29.4
0.999	2.00	11.3	0.113	18.1
-0.234	0.850	5.40	0.0540	12.7
-1.25	0.420	3.30	0.0330	9.40
-2.0	0.250	3.50	0.0350	5.90
-2.74	0.149	1.80	0.0180	4.10
-3.24	0.106	0.700	0.00700	3.40
-3.75	0.0740	0.600	0.00600	2.80
-6.17	0.0138	2.80	0.0280	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.498
d_{17}	1.77
d_{20}	2.46
d_{50}	9.63
d_{60}	11.7
de (Kruger)	0.880
de (Kozeny)	0.574
de (Zunker)	0.663
de (Zamarin)	0.773
Io (Alyameni)	0

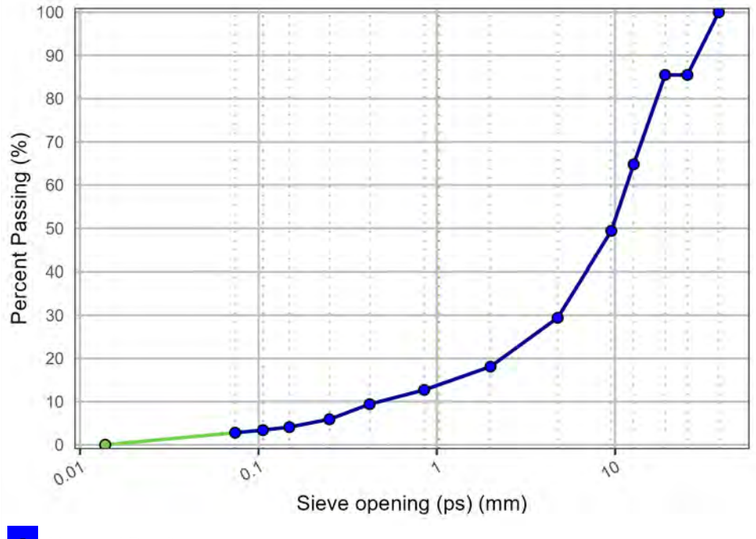
Other Useful Parameters	
Uniformity Coefficient	23.5
n computed	0.258
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	5.74
σ_φ	2.02

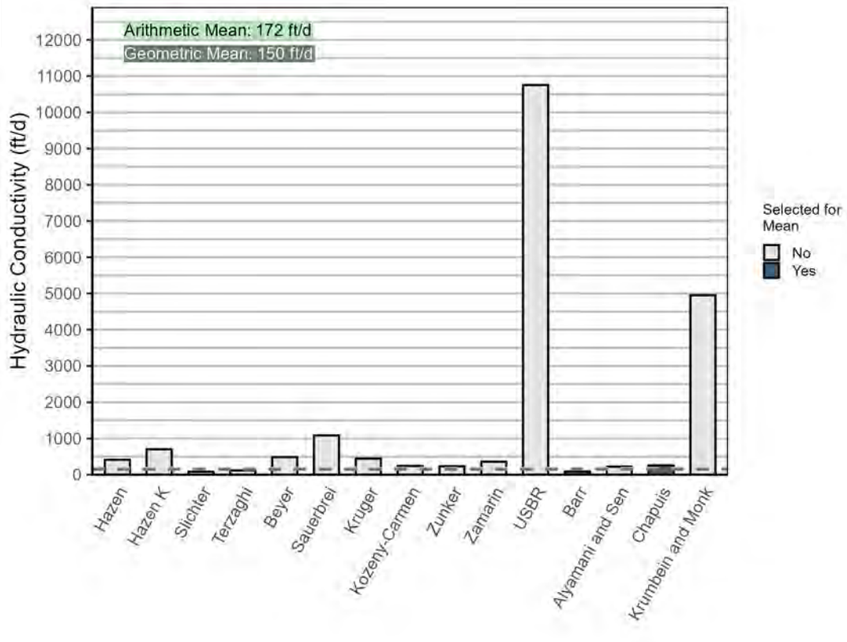
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	1.45E-01	4.77E-03	4.12E+02	No
Hazen K (cm/s) = d_{10} (mm)	2.48E-01	8.14E-03	7.04E+02	No
Slichter	2.88E-02	9.44E-04	8.16E+01	No
Terzaghi	4.15E-02	1.36E-03	1.18E+02	No
Beyer	1.70E-01	5.58E-03	4.83E+02	No
Sauerbrei	3.83E-01	1.26E-02	1.08E+03	No
Kruger	1.57E-01	5.15E-03	4.45E+02	No
Kozeny-Carmen	8.49E-02	2.79E-03	2.41E+02	No
Zunker	8.20E-02	2.69E-03	2.32E+02	No
Zamarin	1.27E-01	4.16E-03	3.59E+02	No
USBR	3.79E+00	1.24E-01	1.08E+04	No
Barr	3.10E-02	1.02E-03	8.79E+01	Yes
Alyamani and Sen	7.85E-02	2.58E-03	2.23E+02	No
Chapuis	9.05E-02	2.97E-03	2.56E+02	Yes
Krumbein and Monk	1.75E+00	5.73E-02	4.95E+03	No
Arithmetic Mean	**6.07E-02**	**1.99E-03**	**1.72E+02**	**Yes**
Geometric Mean	**5.30E-02**	**1.74E-03**	**1.50E+02**	**No**

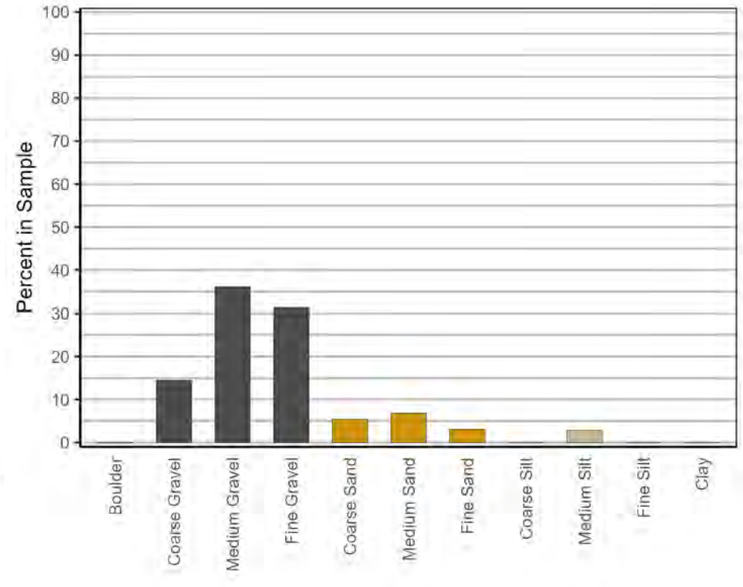
Note: Coefficient of variation of selected results (0.692) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
MEDIUM GRAVEL; SOME FINE GRAVEL; LITTLE COARSE GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	14.5
Medium Gravel (8-16 mm)	36.1
Fine Gravel (2-8 mm)	31.3
Coarse Sand (0.5-2 mm)	5.40
Medium Sand (0.25-0.5 mm)	6.80
Fine Sand (0.063-0.25 mm)	3.10
Coarse Silt (0.016-0.063 mm)	N/A
Medium Silt (0.008-0.016 mm)	2.80
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 16

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.64	50.0	0	0	100
5.25	38.1	26.8	0.268	73.2
4.66	25.4	20.1	0.201	53.1
4.25	19.1	15.3	0.153	37.8
3.66	12.7	11.2	0.112	26.6
3.25	9.51	3.70	0.0370	22.9
2.25	4.76	10.5	0.105	12.4
0.999	2.00	4.50	0.0450	7.90
-0.234	0.850	1.30	0.0130	6.60
-1.25	0.420	1.10	0.0110	5.50
-2.0	0.250	1.90	0.0190	3.60
-2.74	0.149	1.90	0.0190	1.70
-3.24	0.106	0.400	0.00400	1.30
-3.75	0.0740	0.300	0.00300	1.00
-5.48	0.0223	1.00	0.0100	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	3.29
d_{17}	6.84
d_{20}	8.20
d_{50}	24.1
d_{60}	29.8
de (Kruger)	1.97
de (Kozeny)	1.63
de (Zunker)	1.74
de (Zamarin)	1.85
Io (Alyameni)	0

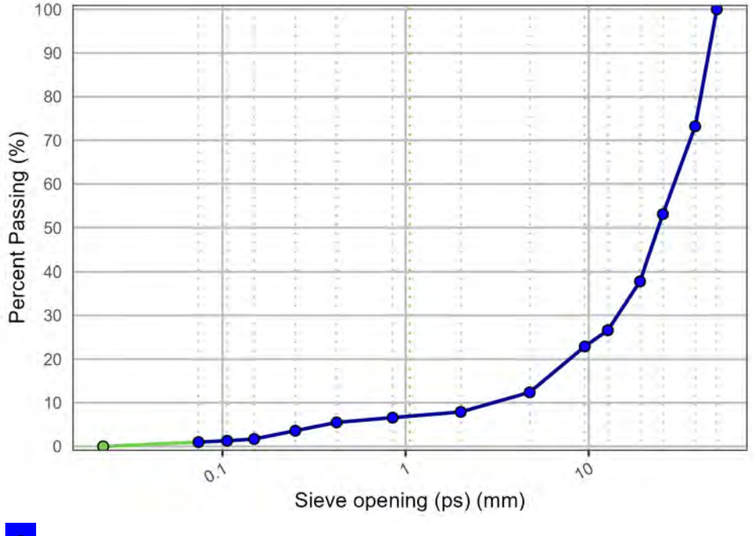
Other Useful Parameters	
Uniformity Coefficient	9.05
n computed	0.302
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	15.2
σ_φ	1.75

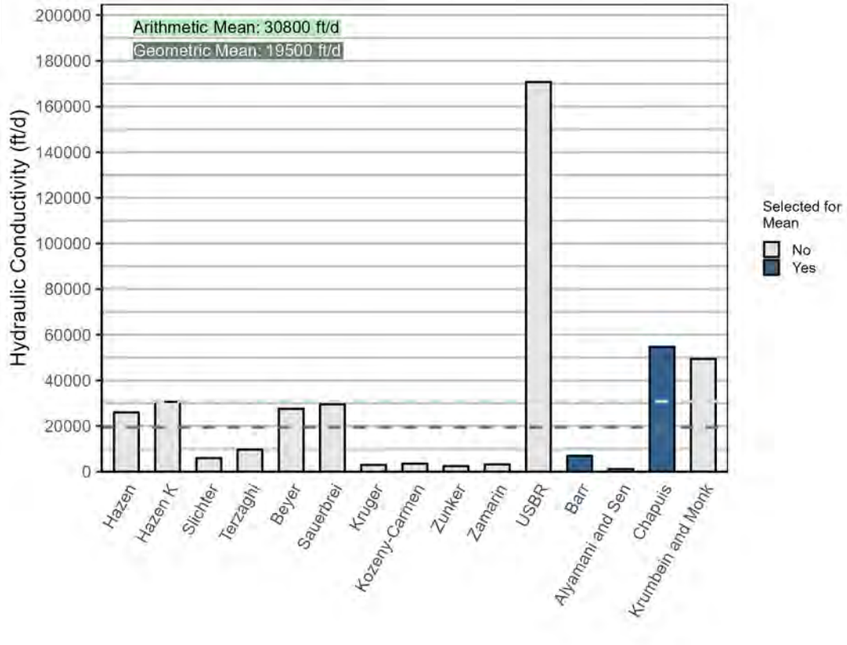
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	9.16E+00	3.01E-01	2.60E+04	No
Hazen K (cm/s) = d_{10} (mm)	1.08E+01	3.55E-01	3.06E+04	No
Slichter	2.10E+00	6.90E-02	5.96E+03	No
Terzaghi	3.40E+00	1.12E-01	9.64E+03	No
Beyer	9.73E+00	3.19E-01	2.76E+04	No
Sauerbrei	1.04E+01	3.41E-01	2.95E+04	No
Kruger	1.04E+00	3.40E-02	2.94E+03	No
Kozeny-Carmen	1.24E+00	4.07E-02	3.51E+03	No
Zunker	8.70E-01	2.85E-02	2.47E+03	No
Zamarin	1.13E+00	3.70E-02	3.20E+03	No
USBR	6.02E+01	1.98E+00	1.71E+05	No
Barr	2.45E+00	8.03E-02	6.94E+03	Yes
Alyamani and Sen	4.08E-01	1.34E-02	1.16E+03	No
Chapuis	1.93E+01	6.33E-01	5.47E+04	Yes
Krumbein and Monk	1.74E+01	5.72E-01	4.94E+04	No
Arithmetic Mean	**1.09E+01**	**3.57E-01**	**3.08E+04**	**No**
Geometric Mean	**6.87E+00**	**2.25E-01**	**1.95E+04**	**Yes**

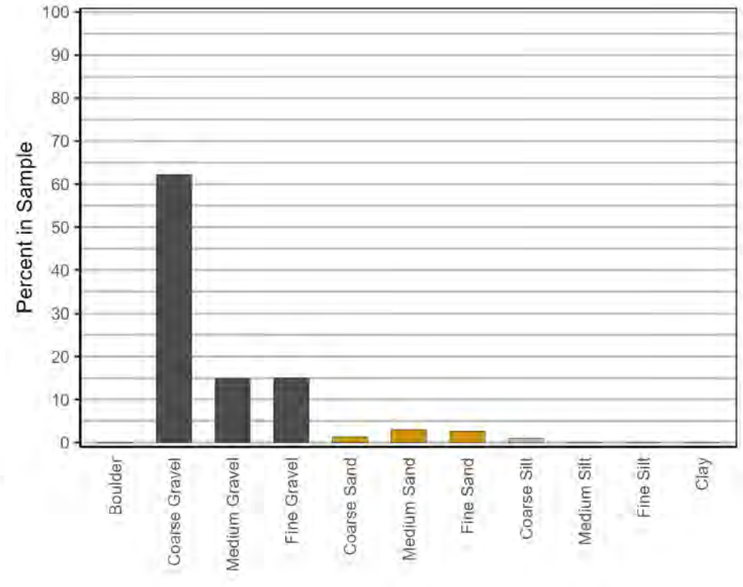
Note: Coefficient of variation of selected results (1.1) > 1, geometric mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; LITTLE FINE GRAVEL; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	62.2
Medium Gravel (8-16 mm)	14.9
Fine Gravel (2-8 mm)	15.0
Coarse Sand (0.5-2 mm)	1.30
Medium Sand (0.25-0.5 mm)	3.00
Fine Sand (0.063-0.25 mm)	2.60
Coarse Silt (0.016-0.063 mm)	1.00
Medium Silt (0.008-0.016 mm)	N/A
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
17

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	14.9	0.149	85.1
4.25	19.1	18.7	0.187	66.4
3.66	12.7	16.6	0.166	49.8
3.25	9.51	5.60	0.0560	44.2
2.25	4.76	18.3	0.183	25.9
0.999	2.00	11.3	0.113	14.6
-0.234	0.850	4.80	0.0480	9.80
-1.25	0.420	2.00	0.0200	7.80
-2.0	0.250	2.50	0.0250	5.30
-2.74	0.149	1.90	0.0190	3.40
-3.24	0.106	0.600	0.00600	2.80
-3.75	0.0740	0.400	0.00400	2.40
-6.86	0.00857	2.40	0.0240	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.898
d_{17}	2.59
d_{20}	3.32
d_{50}	12.8
d_{60}	16.6
de (Kruger)	1.00
de (Kozeny)	0.497
de (Zunker)	0.630
de (Zamarin)	0.822
Io (Alyameni)	0

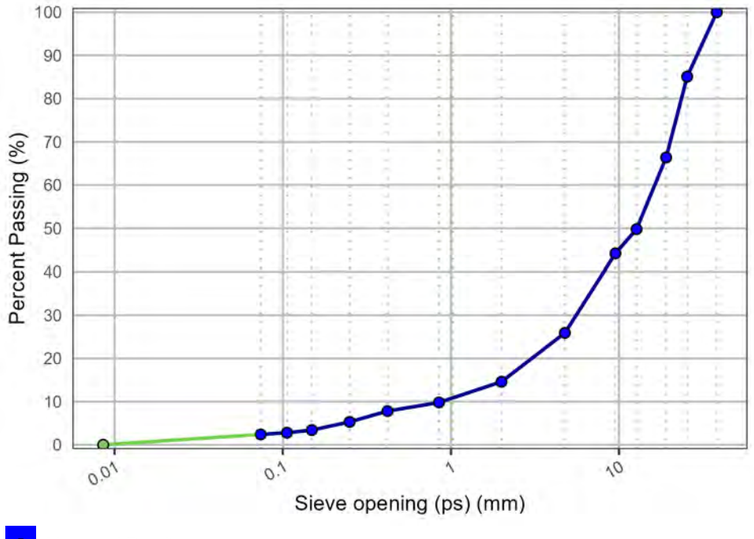
Other Useful Parameters	
Uniformity Coefficient	18.5
n computed	0.263
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	7.31
σ_φ	1.94

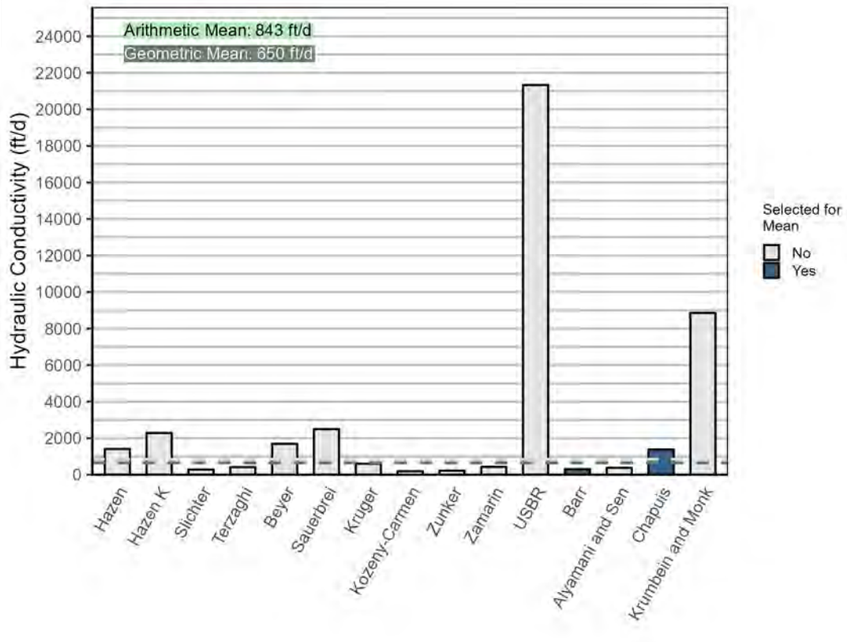
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	4.96E-01	1.63E-02	1.40E+03	No
Hazen K (cm/s) = d_{10} (mm)	8.06E-01	2.65E-02	2.29E+03	No
Slichter	9.95E-02	3.26E-03	2.82E+02	No
Terzaghi	1.46E-01	4.80E-03	4.14E+02	No
Beyer	5.96E-01	1.96E-02	1.69E+03	No
Sauerbrei	8.80E-01	2.89E-02	2.50E+03	No
Kruger	2.11E-01	6.93E-03	5.99E+02	No
Kozeny-Carmen	6.83E-02	2.24E-03	1.93E+02	No
Zunker	7.80E-02	2.56E-03	2.21E+02	No
Zamarin	1.51E-01	4.95E-03	4.28E+02	No
USBR	7.53E+00	2.47E-01	2.13E+04	No
Barr	1.08E-01	3.54E-03	3.06E+02	Yes
Alyamani and Sen	1.33E-01	4.35E-03	3.76E+02	No
Chapuis	4.86E-01	1.60E-02	1.38E+03	Yes
Krumbein and Monk	3.12E+00	1.03E-01	8.86E+03	No
Arithmetic Mean	**2.97E-01**	**9.75E-03**	**8.43E+02**	**Yes**
Geometric Mean	**2.29E-01**	**7.52E-03**	**6.50E+02**	**No**

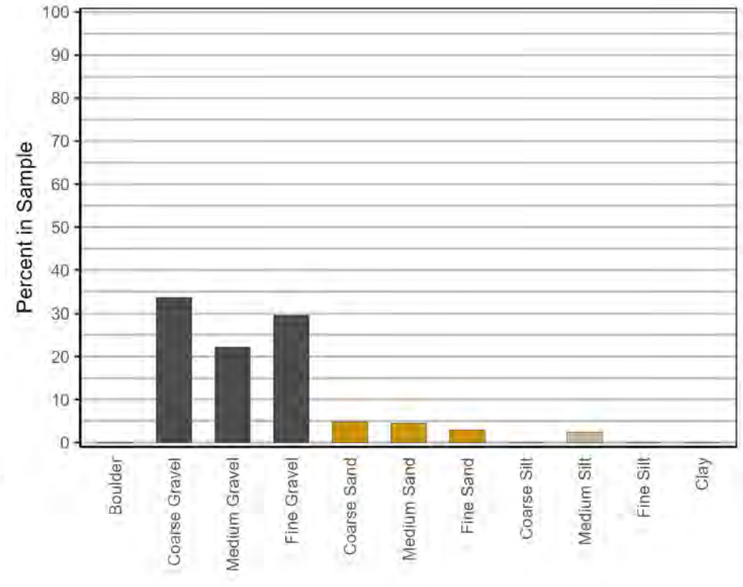
Note: Coefficient of variation of selected results (0.9) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME FINE GRAVEL; SOME MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	33.6
Medium Gravel (8-16 mm)	22.2
Fine Gravel (2-8 mm)	29.6
Coarse Sand (0.5-2 mm)	4.80
Medium Sand (0.25-0.5 mm)	4.50
Fine Sand (0.063-0.25 mm)	2.90
Coarse Silt (0.016-0.063 mm)	N/A
Medium Silt (0.008-0.016 mm)	2.40
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
18

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.64	50.0	0	0	100
5.25	38.1	16.6	0.166	83.4
4.66	25.4	6.80	0.0680	76.6
4.25	19.1	6.60	0.0660	70.0
3.66	12.7	12.9	0.129	57.1
3.25	9.51	5.90	0.0590	51.2
2.25	4.76	15.2	0.152	36.0
0.999	2.00	10.1	0.101	25.9
-0.234	0.850	6.10	0.0610	19.8
-1.25	0.420	4.40	0.0440	15.4
-2.0	0.250	4.50	0.0450	10.9
-2.74	0.149	3.10	0.0310	7.80
-3.24	0.106	1.10	0.0110	6.70
-3.75	0.0740	0.600	0.00600	6.10
-9.02	0.00192	6.10	0.0610	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.221
d_{17}	0.576
d_{20}	0.888
d_{50}	9.13
d_{60}	14.1
de (Kruger)	0.447
de (Kozeny)	0.0588
de (Zunker)	0.109
de (Zamarin)	0.268
lo (Alyameni)	0

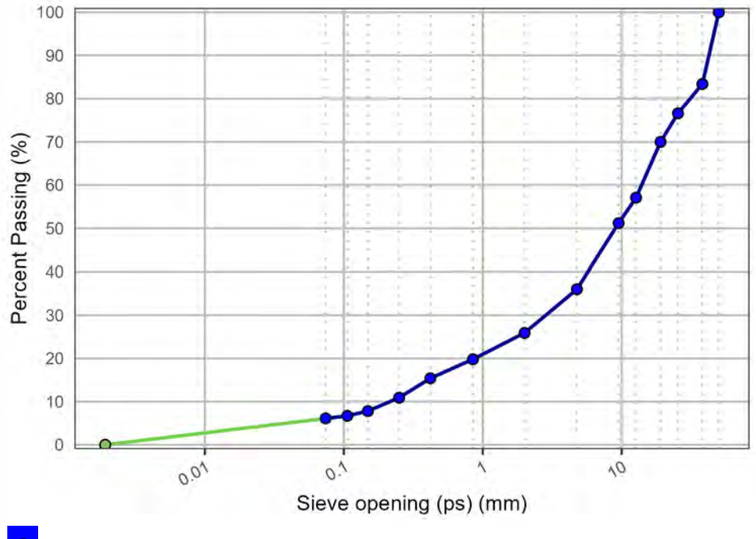
Other Useful Parameters	
Uniformity Coefficient	64.0
n computed	0.255
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	4.70
σ_φ	3.03

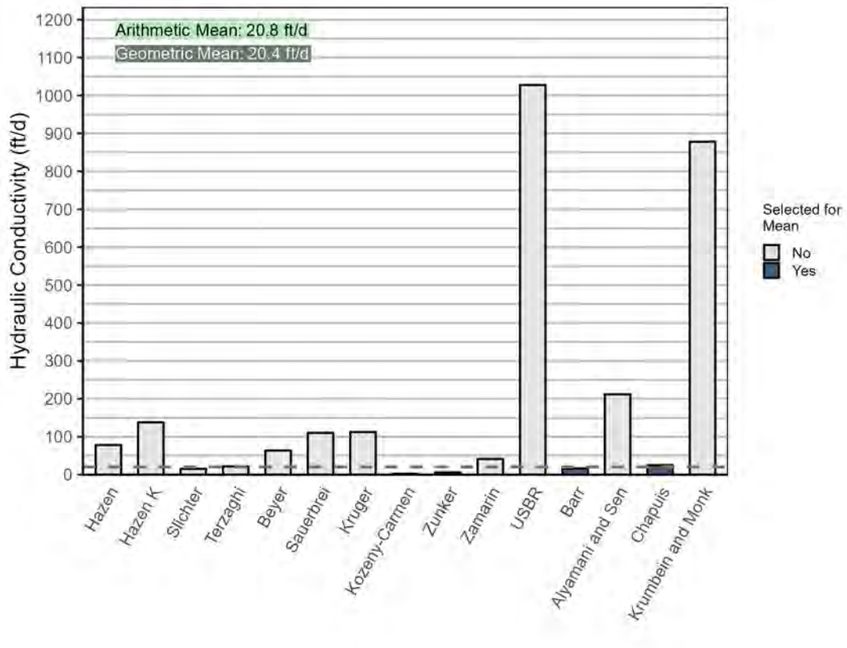
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	2.76E-02	9.05E-04	7.82E+01	No
Hazen K (cm/s) = d_{10} (mm)	4.87E-02	1.60E-03	1.38E+02	No
Slichter	5.42E-03	1.78E-04	1.54E+01	No
Terzaghi	7.73E-03	2.53E-04	2.19E+01	No
Beyer	2.25E-02	7.37E-04	6.36E+01	No
Sauerbrei	3.89E-02	1.28E-03	1.10E+02	No
Kruger	3.97E-02	1.30E-03	1.13E+02	No
Kozeny-Carmen	8.52E-04	2.79E-05	2.41E+00	No
Zunker	2.16E-03	7.07E-05	6.11E+00	No
Zamarin	1.46E-02	4.80E-04	4.15E+01	No
USBR	3.63E-01	1.19E-02	1.03E+03	No
Barr	5.81E-03	1.91E-04	1.65E+01	Yes
Alyamani and Sen	7.47E-02	2.45E-03	2.12E+02	No
Chapuis	8.90E-03	2.92E-04	2.52E+01	Yes
Krumbein and Monk	3.10E-01	1.02E-02	8.78E+02	No
Arithmetic Mean	**7.35E-03**	**2.41E-04**	**2.08E+01**	**Yes**
Geometric Mean	**7.19E-03**	**2.36E-04**	**2.04E+01**	**No**

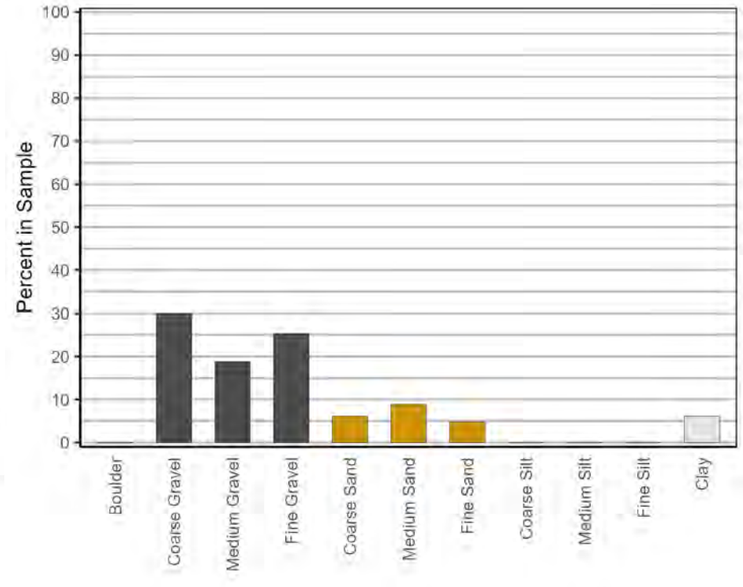
Note: Coefficient of variation of selected results (0.297) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	30.0
Medium Gravel (8-16 mm)	18.8
Fine Gravel (2-8 mm)	25.3
Coarse Sand (0.5-2 mm)	6.10
Medium Sand (0.25-0.5 mm)	8.90
Fine Sand (0.063-0.25 mm)	4.80
Coarse Silt (0.016-0.063 mm)	N/A
Medium Silt (0.008-0.016 mm)	N/A
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	6.10







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
19

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	15.3	0.153	84.7
4.25	19.1	13.7	0.137	71.0
3.66	12.7	12.1	0.121	58.9
3.25	9.51	3.90	0.0390	55.0
2.25	4.76	10.3	0.103	44.7
0.999	2.00	9.40	0.0940	35.3
-3.75	0.0740	33.2	0.332	2.10
-4.79	0.0361	0.273	0.00273	1.83
-5.44	0.0229	0.151	0.00151	1.68
-6.22	0.0134	0.453	0.00453	1.22
-6.67	0.00980	0.302	0.00302	0.921
-7.22	0.00670	0	0	0.921
-7.64	0.00500	0.151	0.00151	0.770
-8.24	0.00330	0	0	0.770
-9.58	0.00130	0.238	0.00238	0.532
-13.2	0.000102	0.532	0.00532	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.532
d_{17}	0.938
d_{20}	1.11
d_{50}	7.20
d_{60}	13.3
de (Kruger)	0.101
de (Kozeny)	0.0306
de (Zunker)	0.0447
de (Zamarin)	0.0718
Io (Alyameni)	0

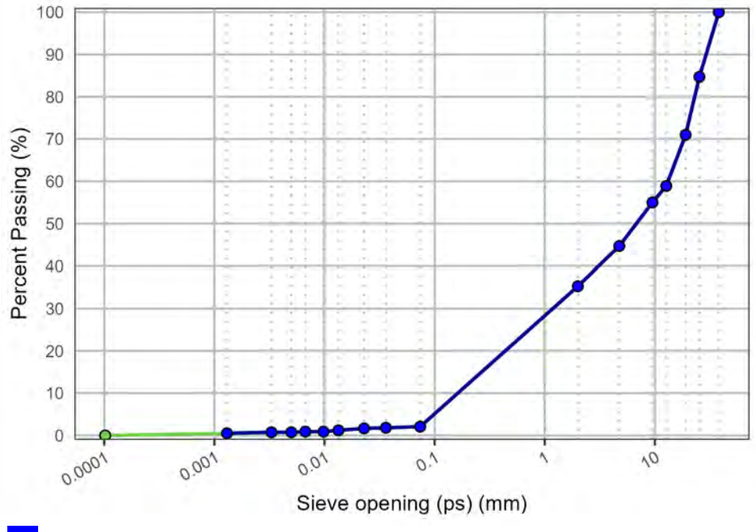
Other Useful Parameters	
Uniformity Coefficient	24.9
n computed	0.257
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	3.49
σ_φ	2.29

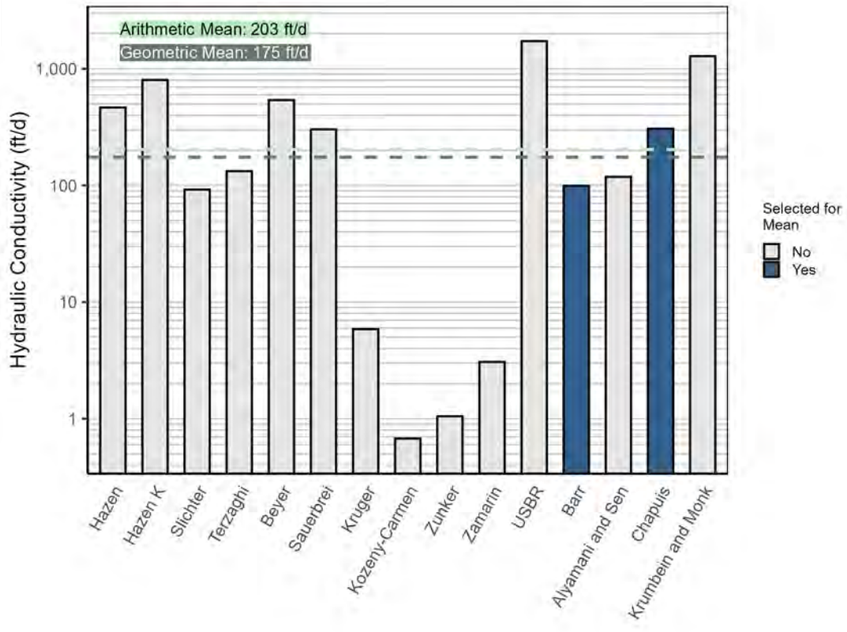
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	1.65E-01	5.40E-03	4.66E+02	No
Hazen K (cm/s) = d_{10} (mm)	2.83E-01	9.30E-03	8.03E+02	No
Slichter	3.25E-02	1.07E-03	9.22E+01	No
Terzaghi	4.68E-02	1.54E-03	1.33E+02	No
Beyer	1.91E-01	6.25E-03	5.40E+02	No
Sauerbrei	1.07E-01	3.51E-03	3.03E+02	No
Kruger	2.07E-03	6.78E-05	5.86E+00	No
Kozeny-Carmen	2.38E-04	7.82E-06	6.76E-01	No
Zunker	3.70E-04	1.21E-05	1.05E+00	No
Zamarin	1.08E-03	3.55E-05	3.07E+00	No
USBR	6.09E-01	2.00E-02	1.73E+03	No
Barr	3.50E-02	1.15E-03	9.92E+01	Yes
Alyamani and Sen	4.19E-02	1.37E-03	1.19E+02	No
Chapuis	1.08E-01	3.55E-03	3.07E+02	Yes
Krumbein and Monk	4.53E-01	1.49E-02	1.28E+03	No
Arithmetic Mean	**7.17E-02**	**2.35E-03**	**2.03E+02**	**Yes**
Geometric Mean	**6.16E-02**	**2.02E-03**	**1.75E+02**	**No**

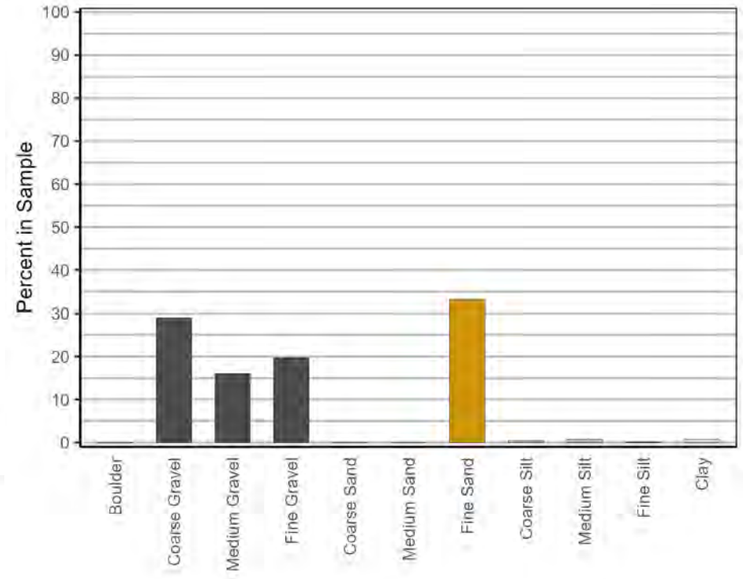
Note: Coefficient of variation of selected results (0.723) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; SOME COARSE GRAVEL; LITTLE FINE GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	29.0
Medium Gravel (8-16 mm)	16.0
Fine Gravel (2-8 mm)	19.7
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	33.2
Coarse Silt (0.016-0.063 mm)	0.424
Medium Silt (0.008-0.016 mm)	0.755
Fine Silt (0.002-0.008 mm)	0.151
Clay (<0.002 mm)	0.770







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 20

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
4.66	25.4	0	0	100
4.25	19.1	9.00	0.0900	91.0
3.66	12.7	9.70	0.0970	81.3
3.25	9.51	3.90	0.0390	77.4
2.25	4.76	14.4	0.144	63.0
0.999	2.00	11.9	0.119	51.1
-3.75	0.0740	47.7	0.477	3.40
-4.79	0.0361	0.817	0.00817	2.58
-5.44	0.0229	0.233	0.00233	2.35
-6.22	0.0134	0	0	2.35
-6.67	0.00980	0.698	0.00698	1.65
-7.22	0.00670	0.233	0.00233	1.42
-7.64	0.00500	0.233	0.00233	1.19
-8.24	0.00330	0	0	1.19
-9.58	0.00130	0.367	0.00367	0.820
-13.2	0.000102	0.820	0.00820	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.340
d_{17}	0.623
d_{20}	0.744
d_{50}	1.96
d_{60}	4.06
de (Kruger)	0.0652
de (Kozeny)	0.0199
de (Zunker)	0.0290
de (Zamarin)	0.0464
lo (Alyameni)	0

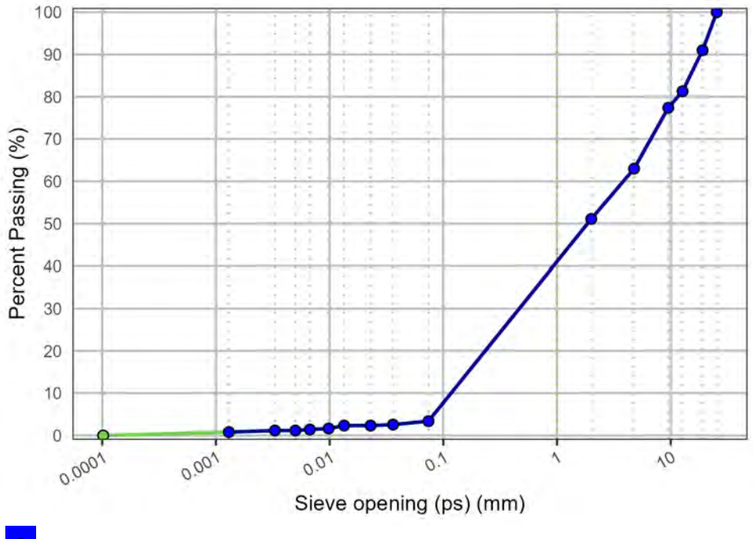
Other Useful Parameters	
Uniformity Coefficient	11.9
n computed	0.283
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	1.52
σ_φ	2.26

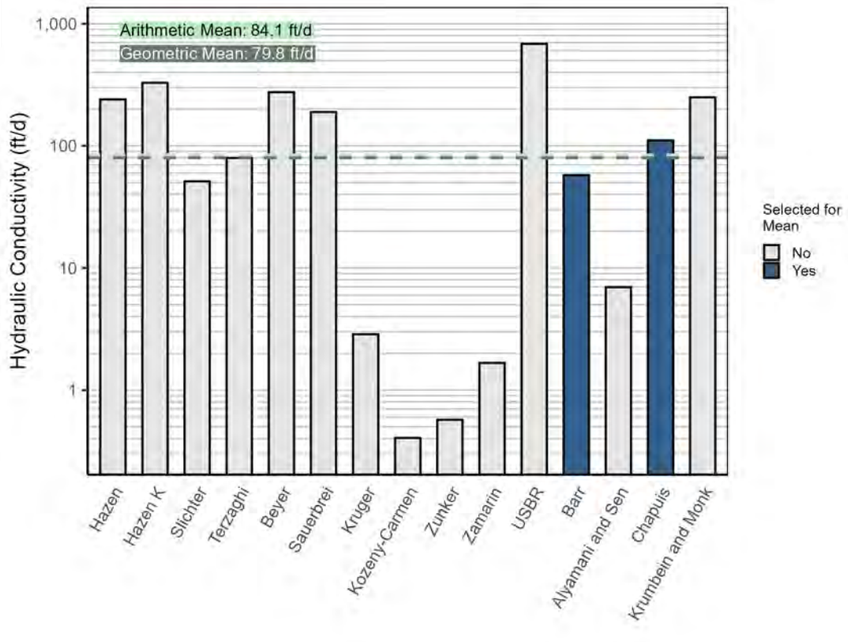
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	8.47E-02	2.78E-03	2.40E+02	No
Hazen K (cm/s) = d_{10} (mm)	1.16E-01	3.80E-03	3.29E+02	No
Slichter	1.81E-02	5.93E-04	5.12E+01	No
Terzaghi	2.81E-02	9.22E-04	7.97E+01	No
Beyer	9.71E-02	3.19E-03	2.75E+02	No
Sauerbrei	6.68E-02	2.19E-03	1.89E+02	No
Kruger	1.01E-03	3.31E-05	2.86E+00	No
Kozeny-Carmen	1.43E-04	4.69E-06	4.05E-01	No
Zunker	2.01E-04	6.60E-06	5.71E-01	No
Zamarin	5.88E-04	1.93E-05	1.67E+00	No
USBR	2.42E-01	7.93E-03	6.85E+02	No
Barr	2.03E-02	6.66E-04	5.75E+01	Yes
Alyamani and Sen	2.45E-03	8.05E-05	6.95E+00	No
Chapuis	3.91E-02	1.28E-03	1.11E+02	Yes
Krumbein and Monk	8.82E-02	2.89E-03	2.50E+02	No
Arithmetic Mean	**2.97E-02**	**9.74E-04**	**8.41E+01**	**Yes**
Geometric Mean	**2.82E-02**	**9.24E-04**	**7.98E+01**	**No**

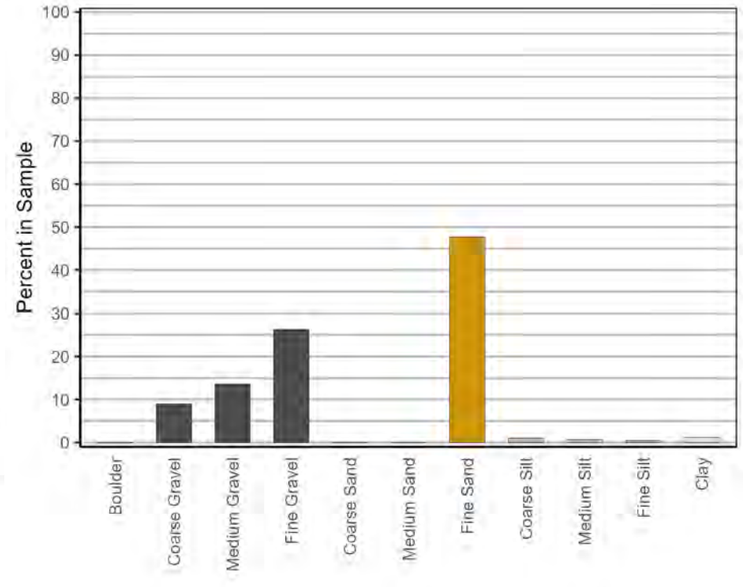
Note: Coefficient of variation of selected results (0.447) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	9.00
Medium Gravel (8-16 mm)	13.6
Fine Gravel (2-8 mm)	26.3
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	47.7
Coarse Silt (0.016-0.063 mm)	1.05
Medium Silt (0.008-0.016 mm)	0.698
Fine Silt (0.002-0.008 mm)	0.465
Clay (<0.002 mm)	1.19







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
21

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
4.66	25.4	0	0	100
4.25	19.1	11.7	0.117	88.3
3.66	12.7	1.70	0.0170	86.6
3.25	9.51	0	0	86.6
2.25	4.76	2.70	0.0270	83.9
0.999	2.00	2.40	0.0240	81.5
-3.75	0.0740	77.4	0.774	4.10
-4.79	0.0361	0.346	0.00346	3.75
-5.44	0.0229	0.372	0.00372	3.38
-6.22	0.0134	0.743	0.00743	2.64
-6.67	0.00980	0.743	0.00743	1.90
-7.22	0.00670	0	0	1.90
-7.64	0.00500	0	0	1.90
-8.24	0.00330	0	0	1.90
-9.58	0.00130	0.586	0.00586	1.31
-14.4	0.0000472	1.31	0.0131	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.221
d_{17}	0.395
d_{20}	0.470
d_{50}	1.22
d_{60}	1.46
de (Kruger)	0.0417
de (Kozeny)	0.00650
de (Zunker)	0.0114
de (Zamarin)	0.0250
Io (Alyameni)	0

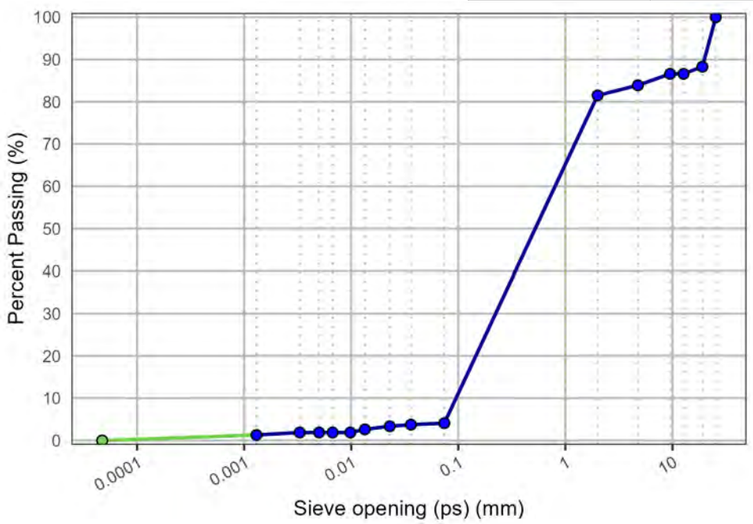
Other Useful Parameters	
Uniformity Coefficient	6.63
n computed	0.329
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	0.616
σ_φ	2.13

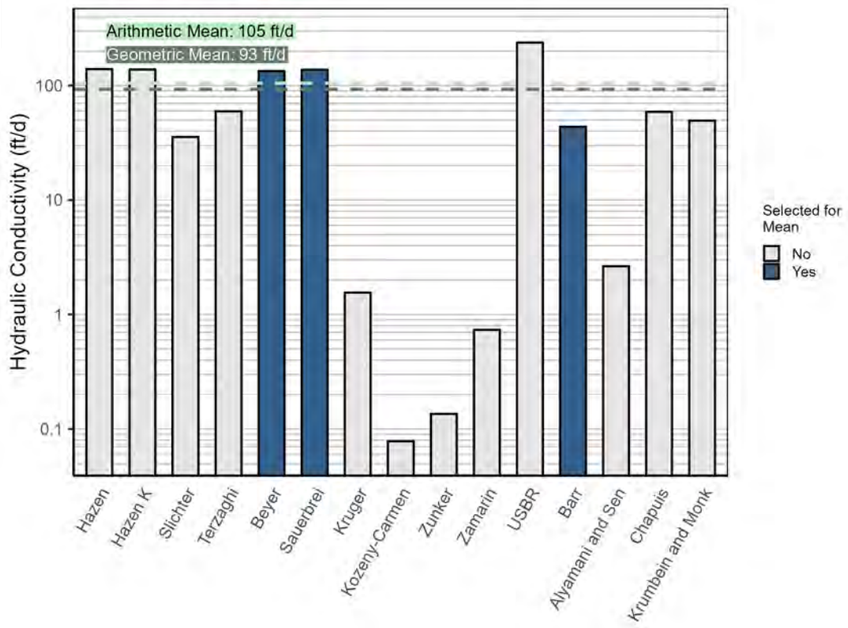
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	4.91E-02	1.61E-03	1.39E+02	No
Hazen K (cm/s) = d_{10} (mm)	4.88E-02	1.60E-03	1.38E+02	No
Slichter	1.25E-02	4.12E-04	3.56E+01	No
Terzaghi	2.10E-02	6.90E-04	5.96E+01	No
Beyer	4.73E-02	1.55E-03	1.34E+02	Yes
Sauerbrei	4.84E-02	1.59E-03	1.37E+02	Yes
Kruger	5.49E-04	1.80E-05	1.56E+00	No
Kozeny-Carmen	2.76E-05	9.06E-07	7.83E-02	No
Zunker	4.79E-05	1.57E-06	1.36E-01	No
Zamarin	2.60E-04	8.52E-06	7.36E-01	No
USBR	8.38E-02	2.75E-03	2.38E+02	No
Barr	1.54E-02	5.06E-04	4.37E+01	Yes
Alyamani and Sen	9.32E-04	3.06E-05	2.64E+00	No
Chapuis	2.08E-02	6.82E-04	5.89E+01	No
Krumbein and Monk	1.74E-02	5.71E-04	4.94E+01	No
Arithmetic Mean	**3.70E-02**	**1.22E-03**	**1.05E+02**	**Yes**
Geometric Mean	**3.28E-02**	**1.08E-03**	**9.30E+01**	**No**

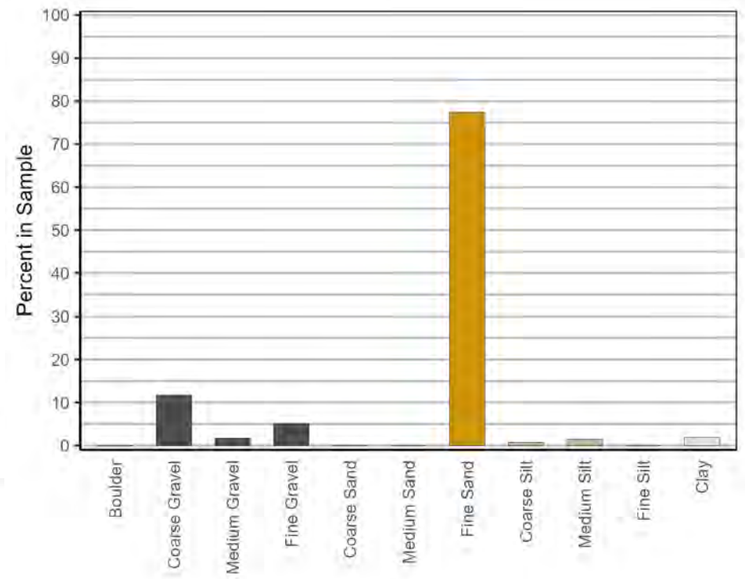
Note: Coefficient of variation of selected results (0.506) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; LITTLE COARSE GRAVEL; TRACE FINE GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	11.7
Medium Gravel (8-16 mm)	1.70
Fine Gravel (2-8 mm)	5.10
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	77.4
Coarse Silt (0.016-0.063 mm)	0.718
Medium Silt (0.008-0.016 mm)	1.49
Fine Silt (0.002-0.008 mm)	0
Clay (<0.002 mm)	1.90







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
22

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.64	50.0	0	0	100
5.25	38.1	21.0	0.210	79.0
4.66	25.4	18.9	0.189	60.1
4.25	19.1	5.60	0.0560	54.5
3.66	12.7	9.20	0.0920	45.3
3.25	9.51	6.00	0.0600	39.3
2.25	4.76	10.2	0.102	29.1
0.999	2.00	9.30	0.0930	19.8
-0.234	0.850	7.20	0.0720	12.6
-1.25	0.420	4.90	0.0490	7.70
-2.0	0.250	3.40	0.0340	4.30
-2.74	0.149	1.50	0.0150	2.80
-3.24	0.106	0.500	0.00500	2.30
-3.75	0.0740	0.400	0.00400	1.90
-6.21	0.0134	1.90	0.0190	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.622
d_{17}	1.55
d_{20}	2.06
d_{50}	15.9
d_{60}	25.3
de (Kruger)	1.12
de (Kozeny)	0.750
de (Zunker)	0.861
de (Zamarin)	0.997
lo (Alyameni)	0

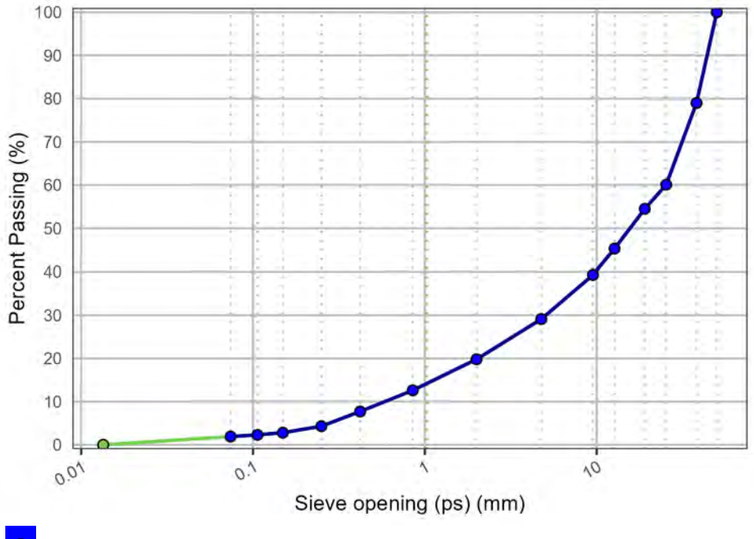
Other Useful Parameters	
Uniformity Coefficient	40.7
n computed	0.255
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	8.64
σ_φ	2.34

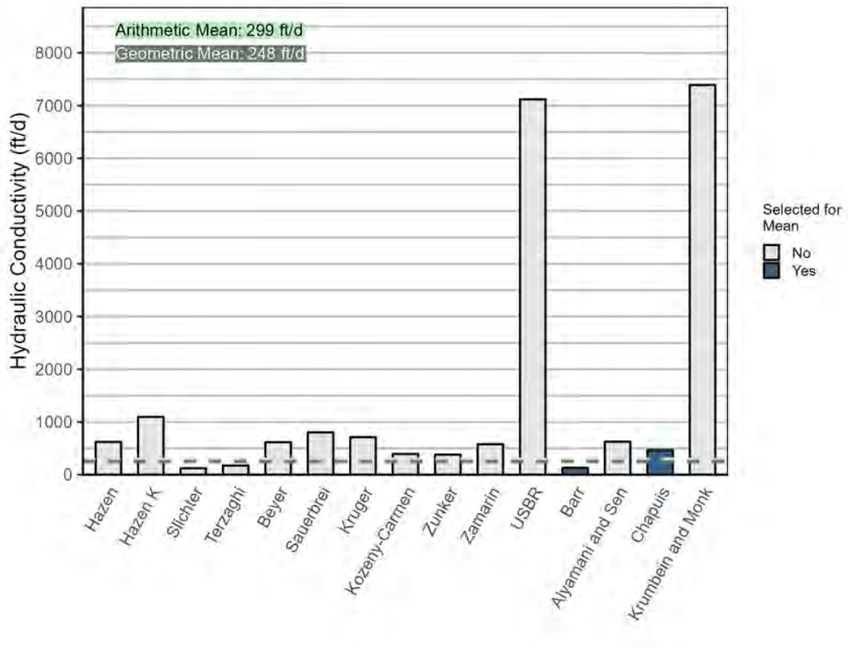
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	2.19E-01	7.19E-03	6.21E+02	No
Hazen K (cm/s) = d_{10} (mm)	3.87E-01	1.27E-02	1.10E+03	No
Slichter	4.31E-02	1.41E-03	1.22E+02	No
Terzaghi	6.15E-02	2.02E-03	1.74E+02	No
Beyer	2.18E-01	7.14E-03	6.17E+02	No
Sauerbrei	2.83E-01	9.29E-03	8.02E+02	No
Kruger	2.51E-01	8.25E-03	7.13E+02	No
Kozeny-Carmen	1.39E-01	4.56E-03	3.94E+02	No
Zunker	1.34E-01	4.40E-03	3.80E+02	No
Zamarin	2.03E-01	6.67E-03	5.77E+02	No
USBR	2.51E+00	8.24E-02	7.12E+03	No
Barr	4.62E-02	1.52E-03	1.31E+02	Yes
Alyamani and Sen	2.21E-01	7.24E-03	6.26E+02	No
Chapuis	1.65E-01	5.41E-03	4.68E+02	Yes
Krumbein and Monk	2.61E+00	8.55E-02	7.39E+03	No
Arithmetic Mean	**1.06E-01**	**3.46E-03**	**2.99E+02**	**Yes**
Geometric Mean	**8.73E-02**	**2.86E-03**	**2.48E+02**	**No**

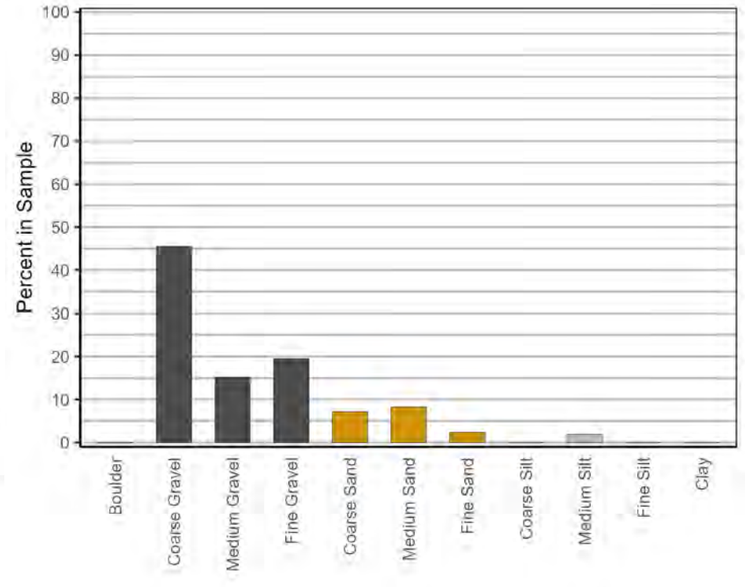
Note: Coefficient of variation of selected results (0.795) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; LITTLE FINE GRAVEL; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	45.5
Medium Gravel (8-16 mm)	15.2
Fine Gravel (2-8 mm)	19.5
Coarse Sand (0.5-2 mm)	7.20
Medium Sand (0.25-0.5 mm)	8.30
Fine Sand (0.063-0.25 mm)	2.40
Coarse Silt (0.016-0.063 mm)	N/A
Medium Silt (0.008-0.016 mm)	1.90
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
23

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	17.0	0.170	83.0
4.25	19.1	26.0	0.260	57.0
3.66	12.7	16.4	0.164	40.6
3.25	9.51	9.40	0.0940	31.2
2.25	4.76	14.6	0.146	16.6
0.999	2.00	7.10	0.0710	9.50
-0.234	0.850	2.40	0.0240	7.10
-1.25	0.420	1.70	0.0170	5.40
-2.0	0.250	2.60	0.0260	2.80
-2.74	0.149	1.40	0.0140	1.40
-3.24	0.106	0.400	0.00400	1.00
-3.75	0.0740	0.200	0.00200	0.800
-5.83	0.0176	0.800	0.00800	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	2.19
d_{17}	4.89
d_{20}	5.87
d_{50}	16.3
d_{60}	19.8
de (Kruger)	2.01
de (Kozeny)	1.59
de (Zunker)	1.72
de (Zamarin)	1.87
Io (Alyameni)	0

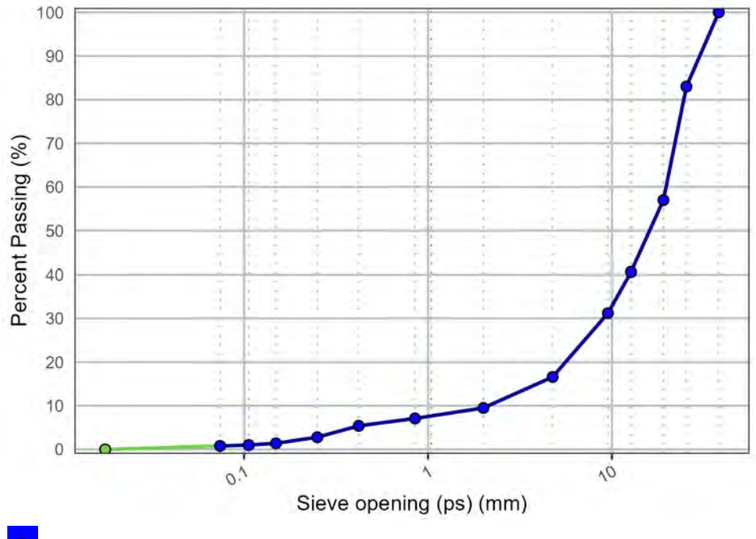
Other Useful Parameters	
Uniformity Coefficient	9.02
n computed	0.303
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	10.2
σ_φ	1.61

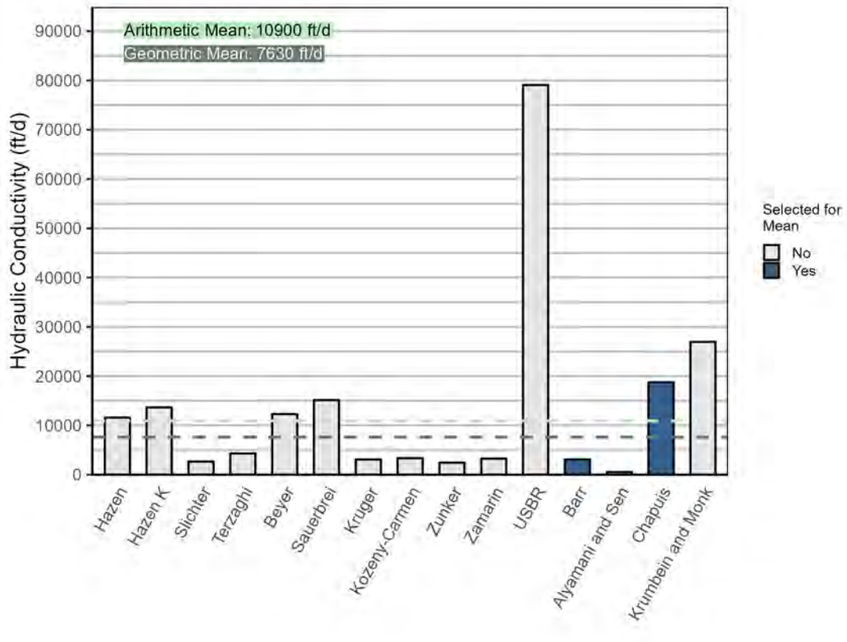
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	4.09E+00	1.34E-01	1.16E+04	No
Hazen K (cm/s) = d_{10} (mm)	4.82E+00	1.58E-01	1.36E+04	No
Slichter	9.40E-01	3.08E-02	2.66E+03	No
Terzaghi	1.52E+00	4.99E-02	4.31E+03	No
Beyer	4.34E+00	1.42E-01	1.23E+04	No
Sauerbrei	5.34E+00	1.75E-01	1.51E+04	No
Kruger	1.09E+00	3.57E-02	3.08E+03	No
Kozeny-Carmen	1.18E+00	3.88E-02	3.35E+03	No
Zunker	8.58E-01	2.81E-02	2.43E+03	No
Zamarin	1.15E+00	3.79E-02	3.27E+03	No
USBR	2.79E+01	9.15E-01	7.91E+04	No
Barr	1.09E+00	3.59E-02	3.10E+03	Yes
Alyamani and Sen	1.88E-01	6.17E-03	5.33E+02	No
Chapuis	6.61E+00	2.17E-01	1.87E+04	Yes
Krumbein and Monk	9.51E+00	3.12E-01	2.69E+04	No
Arithmetic Mean	**3.85E+00**	**1.26E-01**	**1.09E+04**	**No**
Geometric Mean	**2.69E+00**	**8.83E-02**	**7.63E+03**	**Yes**

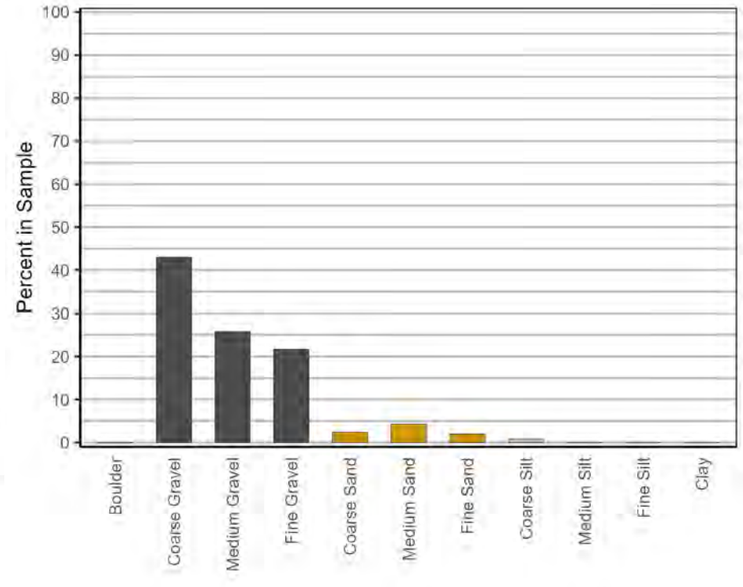
Note: Coefficient of variation of selected results (1.01) > 1, geometric mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME MEDIUM GRAVEL; SOME FINE GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	43.0
Medium Gravel (8-16 mm)	25.8
Fine Gravel (2-8 mm)	21.7
Coarse Sand (0.5-2 mm)	2.40
Medium Sand (0.25-0.5 mm)	4.30
Fine Sand (0.063-0.25 mm)	2.00
Coarse Silt (0.016-0.063 mm)	0.800
Medium Silt (0.008-0.016 mm)	N/A
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
24

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.64	50.0	0	0	100
5.25	38.1	11.6	0.116	88.4
4.66	25.4	6.10	0.0610	82.3
4.25	19.1	23.0	0.230	59.3
3.66	12.7	13.4	0.134	45.9
3.25	9.51	8.10	0.0810	37.8
2.25	4.76	16.3	0.163	21.5
0.999	2.00	10.8	0.108	10.7
-0.234	0.850	3.70	0.0370	7.00
-1.25	0.420	1.70	0.0170	5.30
-2.0	0.250	1.30	0.0130	4.00
-2.74	0.149	1.10	0.0110	2.90
-3.24	0.106	0.600	0.00600	2.30
-3.75	0.0740	0.400	0.00400	1.90
-6.21	0.0134	1.90	0.0190	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	1.78
d_{17}	3.61
d_{20}	4.38
d_{50}	14.6
d_{60}	19.2
de (Kruger)	1.32
de (Kozeny)	0.842
de (Zunker)	0.980
de (Zamarin)	1.15
lo (Alyameni)	0

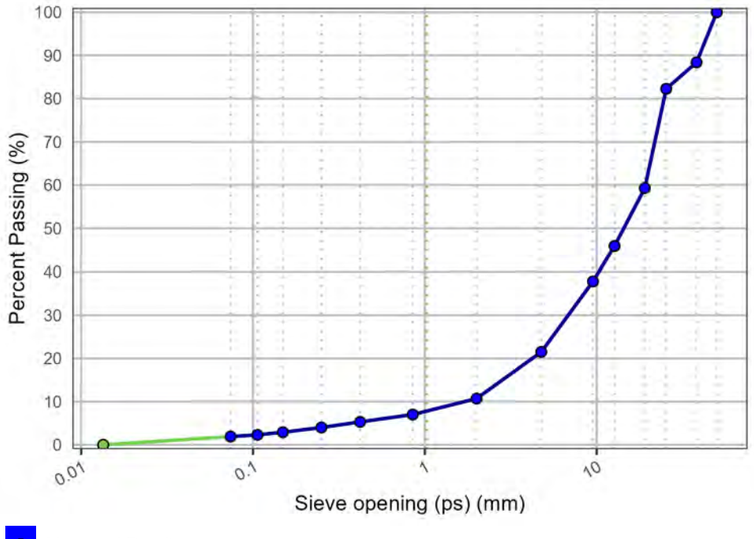
Other Useful Parameters	
Uniformity Coefficient	10.8
n computed	0.289
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	9.33
σ_φ	1.82

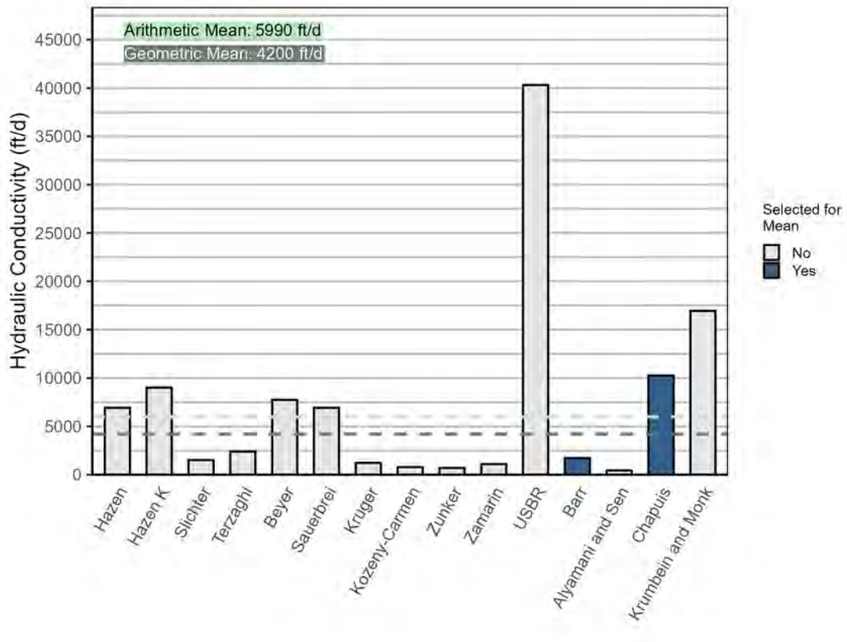
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	2.44E+00	8.02E-02	6.93E+03	No
Hazen K (cm/s) = d_{10} (mm)	3.18E+00	1.04E-01	9.01E+03	No
Slichter	5.34E-01	1.75E-02	1.51E+03	No
Terzaghi	8.43E-01	2.76E-02	2.39E+03	No
Beyer	2.73E+00	8.97E-02	7.75E+03	No
Sauerbrei	2.44E+00	8.02E-02	6.93E+03	No
Kruger	4.30E-01	1.41E-02	1.22E+03	No
Kozeny-Carmen	2.80E-01	9.17E-03	7.92E+02	No
Zunker	2.44E-01	8.02E-03	6.93E+02	No
Zamarin	3.86E-01	1.27E-02	1.09E+03	No
USBR	1.42E+01	4.67E-01	4.03E+04	No
Barr	6.07E-01	1.99E-02	1.72E+03	Yes
Alyamani and Sen	1.56E-01	5.10E-03	4.41E+02	No
Chapuis	3.62E+00	1.19E-01	1.03E+04	Yes
Krumbein and Monk	5.98E+00	1.96E-01	1.70E+04	No
Arithmetic Mean	**2.11E+00**	**6.93E-02**	**5.99E+03**	**No**
Geometric Mean	**1.48E+00**	**4.86E-02**	**4.20E+03**	**Yes**

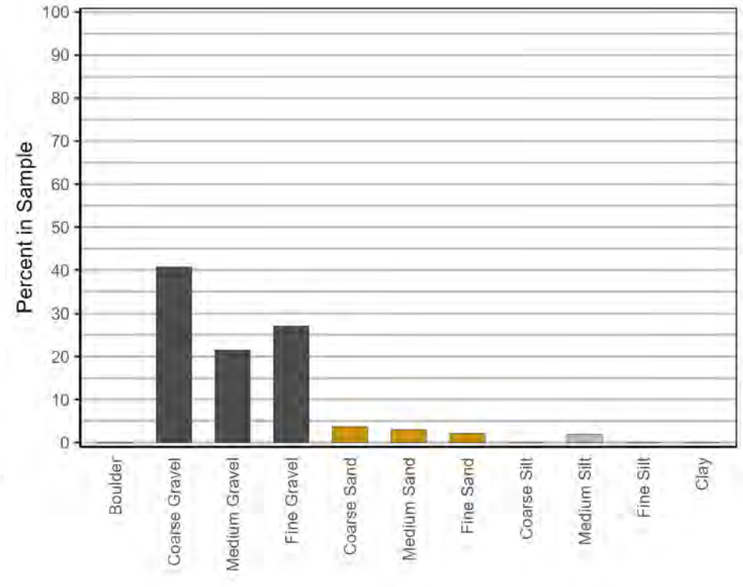
Note: Coefficient of variation of selected results (1.01) > 1, geometric mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME FINE GRAVEL; SOME MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	40.7
Medium Gravel (8-16 mm)	21.5
Fine Gravel (2-8 mm)	27.1
Coarse Sand (0.5-2 mm)	3.70
Medium Sand (0.25-0.5 mm)	3.00
Fine Sand (0.063-0.25 mm)	2.10
Coarse Silt (0.016-0.063 mm)	N/A
Medium Silt (0.008-0.016 mm)	1.90
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
25

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.64	50.0	0	0	100
5.25	38.1	18.8	0.188	81.2
4.66	25.4	0	0	81.2
4.25	19.1	18.8	0.188	62.4
3.66	12.7	9.70	0.0970	52.7
3.25	9.51	9.10	0.0910	43.6
2.25	4.76	17.2	0.172	26.4
0.999	2.00	10.5	0.105	15.9
-0.234	0.850	3.30	0.0330	12.6
-1.25	0.420	3.00	0.0300	9.60
-2.0	0.250	5.00	0.0500	4.60
-2.74	0.149	2.0	0.0200	2.60
-3.24	0.106	0.600	0.00600	2.00
-3.75	0.0740	0.300	0.00300	1.70
-6.69	0.00966	1.70	0.0170	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.477
d_{17}	2.29
d_{20}	3.08
d_{50}	11.8
d_{60}	17.5
de (Kruger)	1.12
de (Kozeny)	0.659
de (Zunker)	0.793
de (Zamarin)	0.968
Io (Alyameni)	0

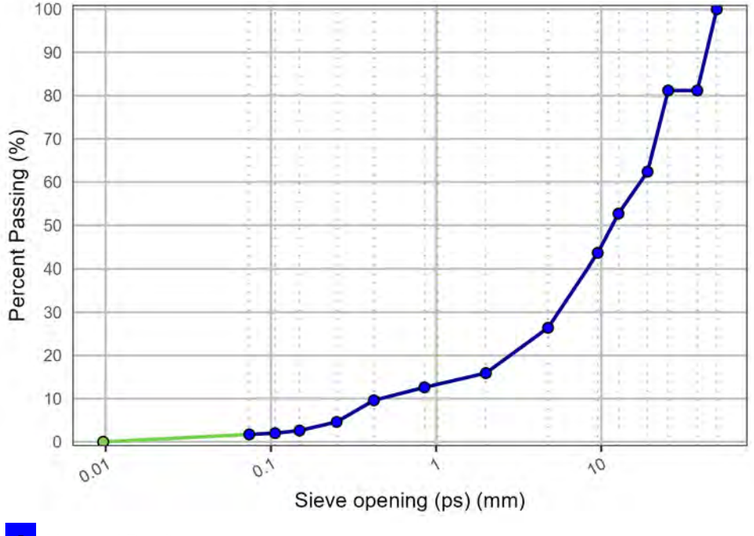
Other Useful Parameters	
Uniformity Coefficient	36.6
n computed	0.255
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	7.72
σ_φ	2.21

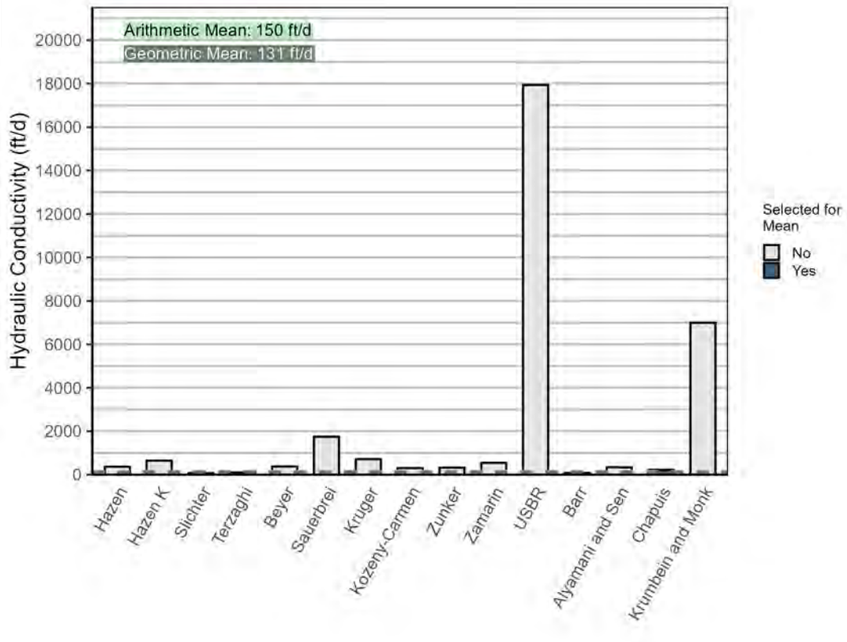
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	1.29E-01	4.24E-03	3.67E+02	No
Hazen K (cm/s) = d_{10} (mm)	2.28E-01	7.48E-03	6.46E+02	No
Slichter	2.54E-02	8.35E-04	7.21E+01	No
Terzaghi	3.63E-02	1.19E-03	1.03E+02	No
Beyer	1.34E-01	4.38E-03	3.79E+02	No
Sauerbrei	6.16E-01	2.02E-02	1.75E+03	No
Kruger	2.52E-01	8.26E-03	7.13E+02	No
Kozeny-Carmen	1.07E-01	3.52E-03	3.04E+02	No
Zunker	1.14E-01	3.74E-03	3.23E+02	No
Zamarin	1.92E-01	6.30E-03	5.44E+02	No
USBR	6.33E+00	2.08E-01	1.79E+04	No
Barr	2.73E-02	8.95E-04	7.74E+01	Yes
Alyamani and Sen	1.20E-01	3.92E-03	3.39E+02	No
Chapuis	7.84E-02	2.57E-03	2.22E+02	Yes
Krumbein and Monk	2.47E+00	8.10E-02	6.99E+03	No
Arithmetic Mean	**5.29E-02**	**1.73E-03**	**1.50E+02**	**Yes**
Geometric Mean	**4.63E-02**	**1.52E-03**	**1.31E+02**	**No**

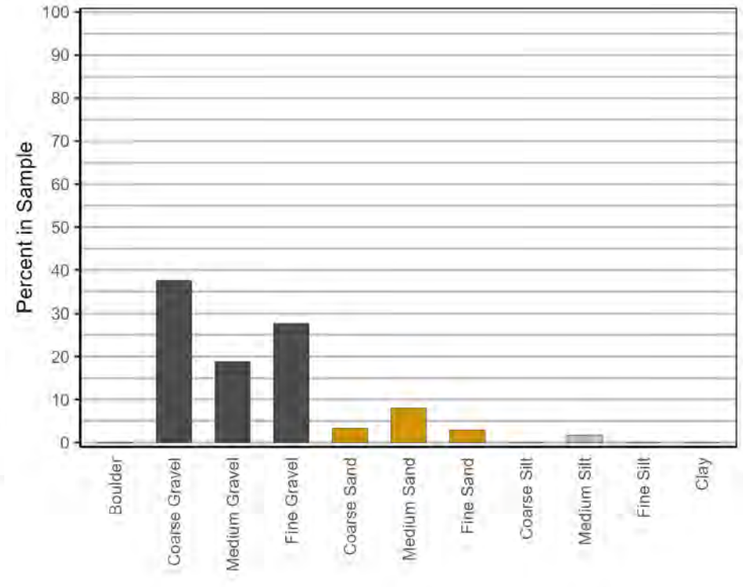
Note: Coefficient of variation of selected results (0.684) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	37.6
Medium Gravel (8-16 mm)	18.8
Fine Gravel (2-8 mm)	27.7
Coarse Sand (0.5-2 mm)	3.30
Medium Sand (0.25-0.5 mm)	8.00
Fine Sand (0.063-0.25 mm)	2.90
Coarse Silt (0.016-0.063 mm)	N/A
Medium Silt (0.008-0.016 mm)	1.70
Fine Silt (0.002-0.008 mm)	N/A
Clay (<0.002 mm)	N/A







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
26

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	24.7	0.247	75.3
4.25	19.1	7.50	0.0750	67.8
3.66	12.7	10.7	0.107	57.1
3.25	9.51	5.50	0.0550	51.6
2.25	4.76	16.4	0.164	35.2
0.999	2.00	8.60	0.0860	26.6
-3.75	0.0740	24.6	0.246	2.00
-4.79	0.0361	0.548	0.00548	1.45
-5.44	0.0229	0.0307	0.000307	1.42
-6.22	0.0134	0.422	0.00422	1.00
-6.67	0.00980	0.266	0.00266	0.734
-7.22	0.00670	0.133	0.00133	0.601
-7.64	0.00500	0.194	0.00194	0.407
-8.24	0.00330	0.0153	0.000153	0.392
-9.58	0.00130	0.0691	0.000691	0.322
-15.8	0.0000168	0.322	0.00322	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.700
d_{17}	1.25
d_{20}	1.48
d_{50}	9.05
d_{60}	14.4
de (Kruger)	0.151
de (Kozeny)	0.00995
de (Zunker)	0.0217
de (Zamarin)	0.0777
Io (Alyameni)	0

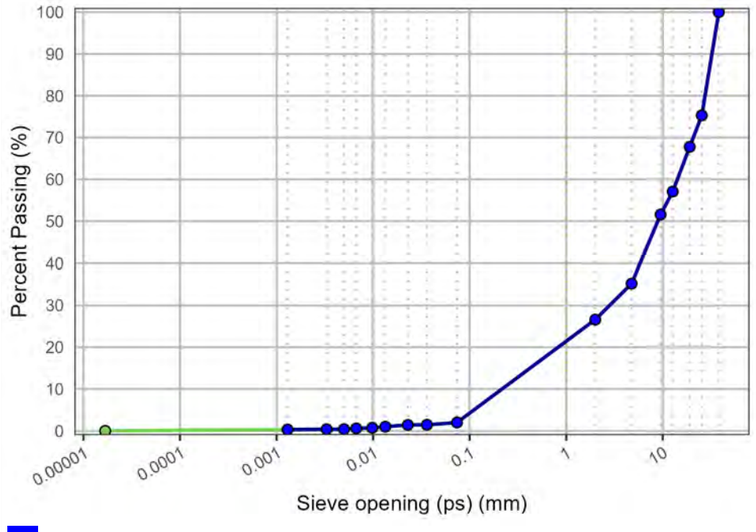
Other Useful Parameters	
Uniformity Coefficient	20.6
n computed	0.260
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	4.88
σ_φ	2.21

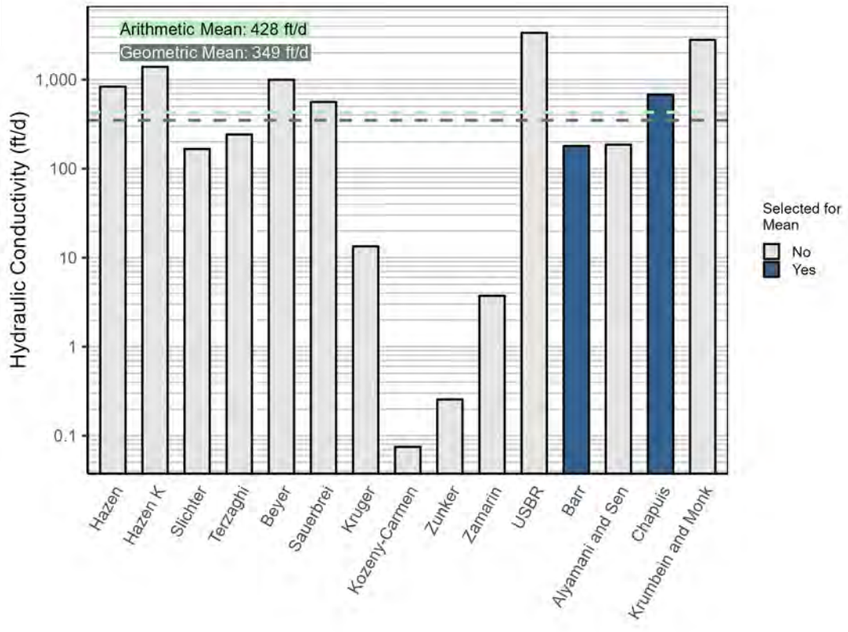
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	2.94E-01	9.64E-03	8.33E+02	No
Hazen K (cm/s) = d_{10} (mm)	4.90E-01	1.61E-02	1.39E+03	No
Slichter	5.85E-02	1.92E-03	1.66E+02	No
Terzaghi	8.52E-02	2.80E-03	2.42E+02	No
Beyer	3.51E-01	1.15E-02	9.95E+02	No
Sauerbrei	1.98E-01	6.48E-03	5.60E+02	No
Kruger	4.71E-03	1.55E-04	1.34E+01	No
Kozeny-Carmen	2.64E-05	8.65E-07	7.47E-02	No
Zunker	8.99E-05	2.95E-06	2.55E-01	No
Zamarin	1.31E-03	4.31E-05	3.72E+00	No
USBR	1.18E+00	3.87E-02	3.35E+03	No
Barr	6.33E-02	2.08E-03	1.79E+02	Yes
Alyamani and Sen	6.55E-02	2.15E-03	1.86E+02	No
Chapuis	2.39E-01	7.84E-03	6.77E+02	Yes
Krumbein and Monk	9.86E-01	3.23E-02	2.79E+03	No
Arithmetic Mean	**1.51E-01**	**4.96E-03**	**4.28E+02**	**Yes**
Geometric Mean	**1.23E-01**	**4.04E-03**	**3.49E+02**	**No**

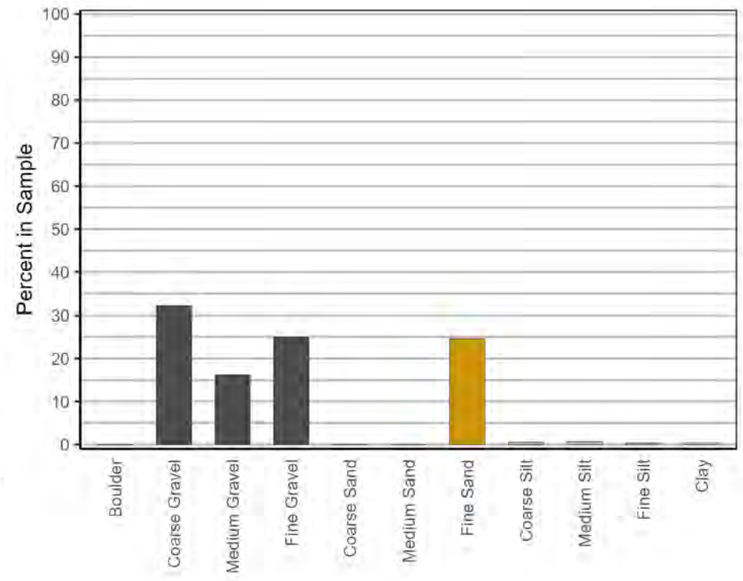
Note: Coefficient of variation of selected results (0.822) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME FINE GRAVEL; SOME FINE SAND

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	32.2
Medium Gravel (8-16 mm)	16.2
Fine Gravel (2-8 mm)	25.0
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	24.6
Coarse Silt (0.016-0.063 mm)	0.579
Medium Silt (0.008-0.016 mm)	0.687
Fine Silt (0.002-0.008 mm)	0.342
Clay (<0.002 mm)	0.392







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE 27

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
4.25	19.1	0	0	100
3.66	12.7	3.00	0.0300	97.0
3.25	9.51	2.50	0.0250	94.5
2.25	4.76	7.70	0.0770	86.8
0.999	2.00	11.7	0.117	75.1
-3.75	0.0740	73.5	0.735	1.60
-4.79	0.0361	0.120	0.00120	1.48
-5.44	0.0229	0.245	0.00245	1.23
-6.22	0.0134	0.0217	0.000217	1.21
-6.67	0.00980	0.108	0.00108	1.10
-7.22	0.00670	0	0	1.10
-7.64	0.00500	0.0433	0.000433	1.06
-8.24	0.00330	0.418	0.00418	0.643
-9.58	0.00130	0.130	0.00130	0.513
-14.9	0.0000328	0.513	0.00513	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.294
d_{17}	0.478
d_{20}	0.556
d_{50}	1.34
d_{60}	1.60
de (Kruger)	0.0969
de (Kozeny)	0.0114
de (Zunker)	0.0215
de (Zamarin)	0.0551
Io (Alyameni)	0.0321

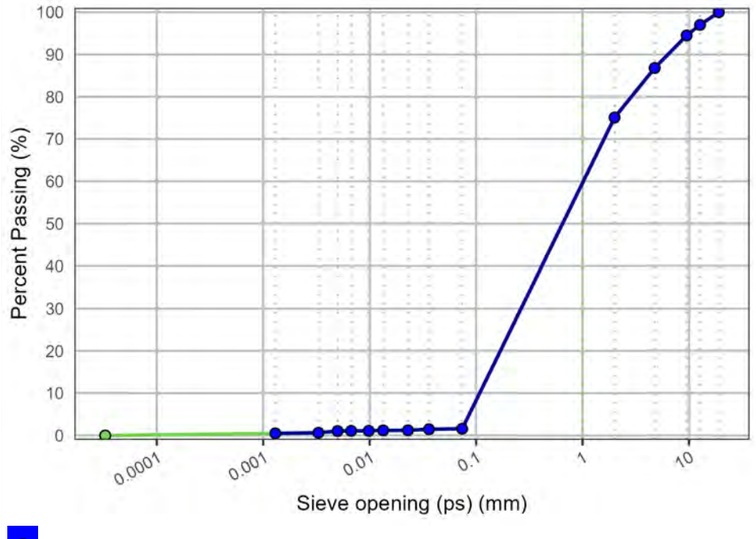
Other Useful Parameters	
Uniformity Coefficient	5.45
n computed	0.347
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	0.687
σ_φ	1.70

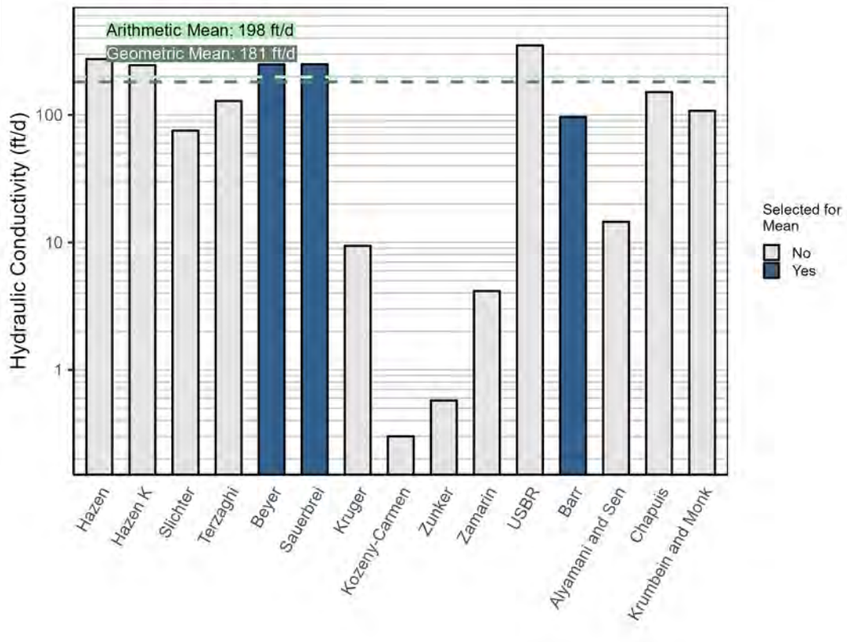
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	9.66E-02	3.17E-03	2.74E+02	No
Hazen K (cm/s) = d_{10} (mm)	8.65E-02	2.84E-03	2.45E+02	No
Slichter	2.66E-02	8.72E-04	7.53E+01	No
Terzaghi	4.53E-02	1.49E-03	1.28E+02	No
Beyer	8.77E-02	2.88E-03	2.49E+02	Yes
Sauerbrei	8.79E-02	2.89E-03	2.49E+02	Yes
Kruger	3.31E-03	1.09E-04	9.38E+00	No
Kozeny-Carmen	1.06E-04	3.47E-06	3.00E-01	No
Zunker	2.02E-04	6.64E-06	5.74E-01	No
Zamarin	1.46E-03	4.79E-05	4.14E+00	No
USBR	1.24E-01	4.06E-03	3.51E+02	No
Barr	3.40E-02	1.11E-03	9.63E+01	Yes
Alyamani and Sen	5.11E-03	1.68E-04	1.45E+01	No
Chapuis	5.32E-02	1.75E-03	1.51E+02	No
Krumbein and Monk	3.79E-02	1.24E-03	1.08E+02	No
Arithmetic Mean	**6.99E-02**	**2.29E-03**	**1.98E+02**	**Yes**
Geometric Mean	**6.40E-02**	**2.10E-03**	**1.81E+02**	**No**

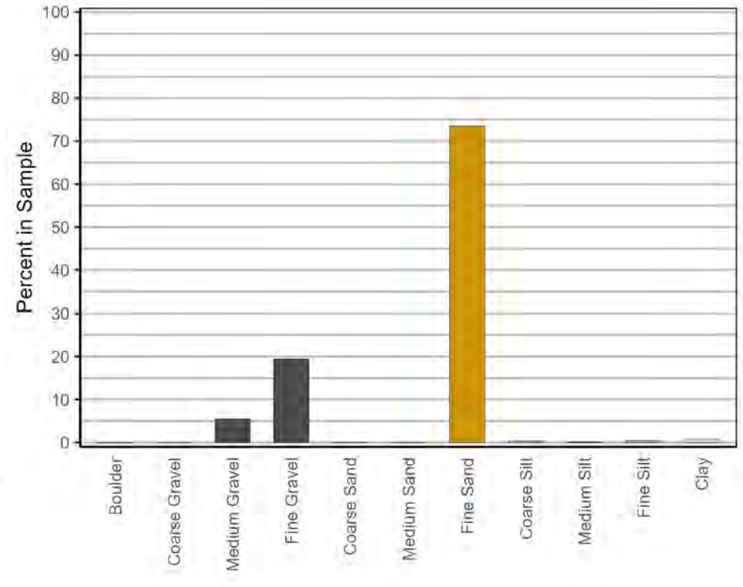
Note: Coefficient of variation of selected results (0.445) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; LITTLE FINE GRAVEL; TRACE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	0
Medium Gravel (8-16 mm)	5.50
Fine Gravel (2-8 mm)	19.4
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	73.5
Coarse Silt (0.016-0.063 mm)	0.365
Medium Silt (0.008-0.016 mm)	0.130
Fine Silt (0.002-0.008 mm)	0.462
Clay (<0.002 mm)	0.643







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GRAIN SIZE ANALYSIS REPORT

ARCADIS

FIGURE
28

Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
4.66	25.4	0	0	100
4.25	19.1	3.20	0.0320	96.8
3.66	12.7	14.1	0.141	82.7
3.25	9.51	4.80	0.0480	77.9
2.25	4.76	13.8	0.138	64.1
0.999	2.00	11.3	0.113	52.8
-3.75	0.0740	49.2	0.492	3.60
-4.79	0.0361	0.840	0.00840	2.76
-5.44	0.0229	0.309	0.00309	2.45
-6.22	0.0134	0.543	0.00543	1.91
-6.67	0.00980	0.527	0.00527	1.38
-7.22	0.00670	0.107	0.00107	1.27
-7.64	0.00500	0.0152	0.000152	1.26
-8.24	0.00330	0.543	0.00543	0.716
-9.58	0.00130	0.0914	0.000914	0.625
-18.8	0.00000223	0.625	0.00625	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

Effective Grain Diameters (mm)	
d_{10}	0.325
d_{17}	0.599
d_{20}	0.716
d_{50}	1.89
d_{60}	3.76
de (Kruger)	0.0769
de (Kozeny)	0.000709
de (Zunker)	0.00225
de (Zamarin)	0.0290
Io (Alyameni)	0

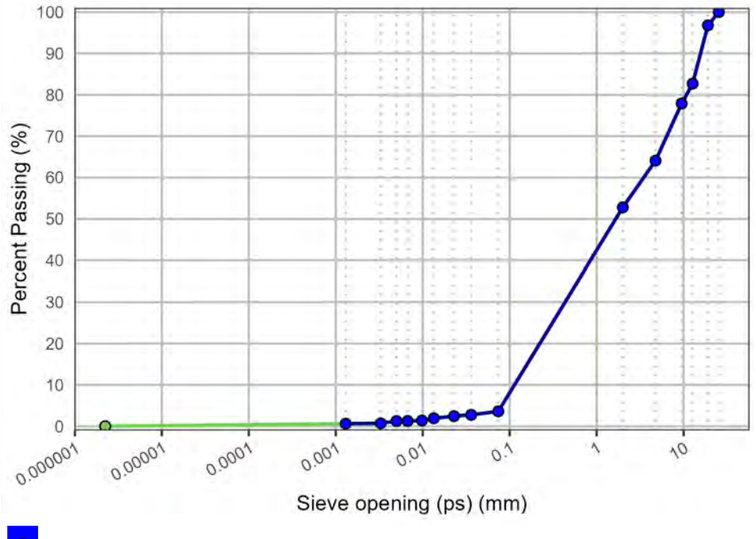
Other Useful Parameters	
Uniformity Coefficient	11.6
n computed	0.284
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	1.40
σ_φ	2.23

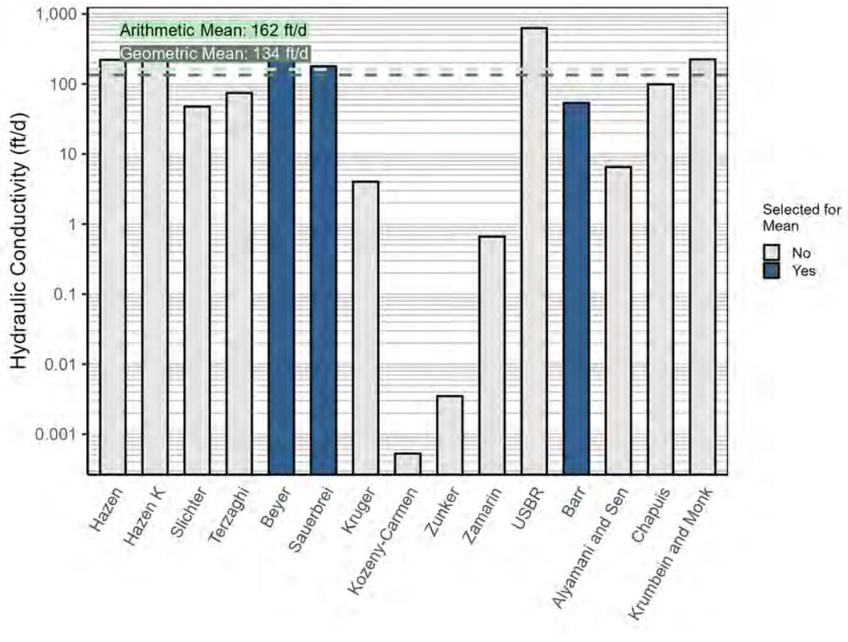
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	7.81E-02	2.56E-03	2.21E+02	No
Hazen K (cm/s) = d_{10} (mm)	1.05E-01	3.46E-03	2.99E+02	No
Slichter	1.68E-02	5.51E-04	4.76E+01	No
Terzaghi	2.62E-02	8.60E-04	7.43E+01	No
Beyer	8.90E-02	2.92E-03	2.52E+02	Yes
Sauerbrei	6.32E-02	2.07E-03	1.79E+02	Yes
Kruger	1.42E-03	4.65E-05	4.02E+00	No
Kozeny-Carmen	1.87E-07	6.12E-09	5.29E-04	No
Zunker	1.23E-06	4.05E-08	3.50E-03	No
Zamarin	2.33E-04	7.66E-06	6.62E-01	No
USBR	2.21E-01	7.25E-03	6.27E+02	No
Barr	1.89E-02	6.20E-04	5.36E+01	Yes
Alyamani and Sen	2.31E-03	7.56E-05	6.54E+00	No
Chapuis	3.49E-02	1.15E-03	9.90E+01	No
Krumbein and Monk	7.93E-02	2.60E-03	2.25E+02	No
Arithmetic Mean	**5.70E-02**	**1.87E-03**	**1.62E+02**	**Yes**
Geometric Mean	**4.74E-02**	**1.55E-03**	**1.34E+02**	**No**

Note: Coefficient of variation of selected results (0.621) ≤ 1, arithmetic mean recommended as the central tendency.

SAMPLE DESCRIPTION:
FINE SAND; SOME FINE GRAVEL; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	3.20
Medium Gravel (8-16 mm)	18.9
Fine Gravel (2-8 mm)	25.1
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	49.2
Coarse Silt (0.016-0.063 mm)	1.15
Medium Silt (0.008-0.016 mm)	1.07
Fine Silt (0.002-0.008 mm)	0.665
Clay (<0.002 mm)	0.716





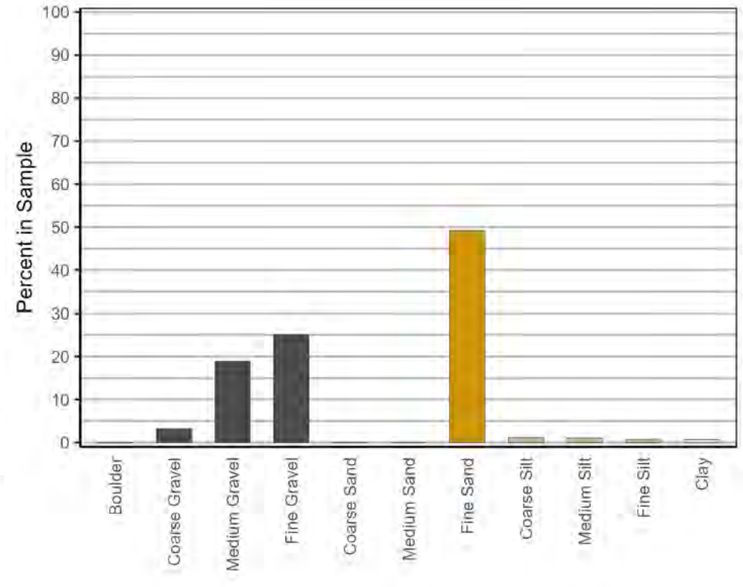


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FIGURE
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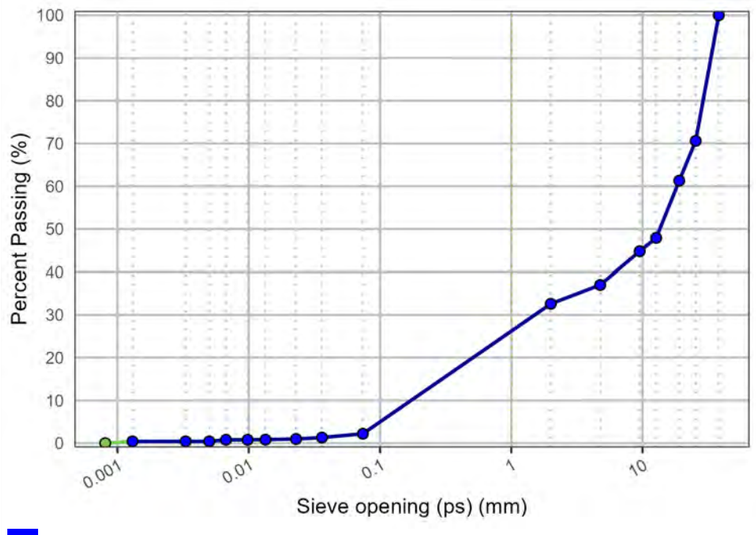
Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	29.4	0.294	70.6
4.25	19.1	9.30	0.0930	61.3
3.66	12.7	13.4	0.134	47.9
3.25	9.51	3.10	0.0310	44.8
2.25	4.76	7.80	0.0780	37.0
0.999	2.00	4.40	0.0440	32.6
-3.75	0.0740	30.4	0.304	2.20
-4.79	0.0361	0.893	0.00893	1.31
-5.44	0.0229	0.329	0.00329	0.978
-6.22	0.0134	0.155	0.00155	0.823
-6.67	0.00980	0.0359	0.000359	0.787
-7.22	0.00670	0	0	0.787
-7.64	0.00500	0.365	0.00365	0.422
-8.24	0.00330	0	0	0.422
-9.58	0.00130	0	0	0.422
-10.3	0.000805	0.422	0.00422	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

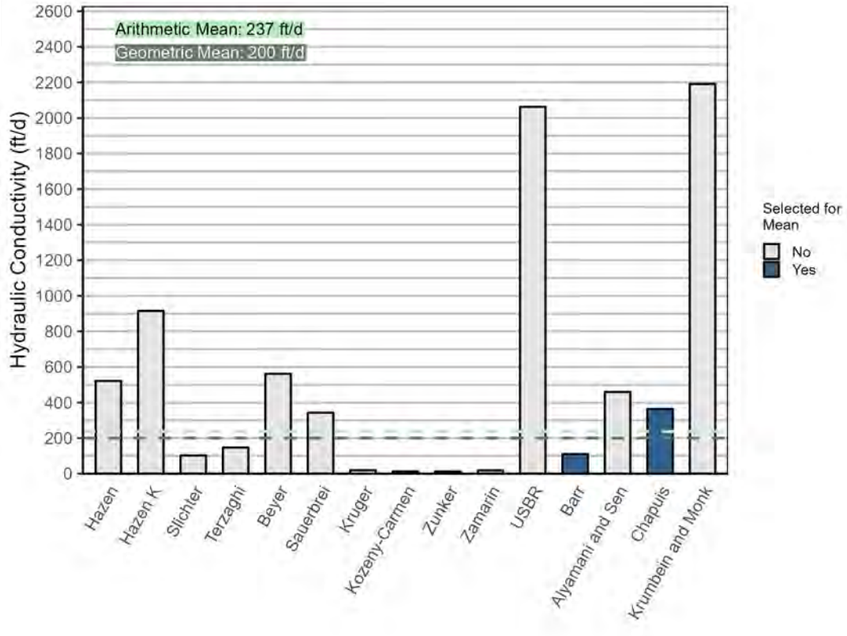
Effective Grain Diameters (mm)	
d_{10}	0.568
d_{17}	1.01
d_{20}	1.20
d_{50}	13.7
d_{60}	18.4
de (Kruger)	0.186
de (Kozeny)	0.134
de (Zunker)	0.155
de (Zamarin)	0.176
Io (Alyameni)	0

Other Useful Parameters	
Uniformity Coefficient	32.4
n computed	0.256
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	4.73
σ_φ	2.34



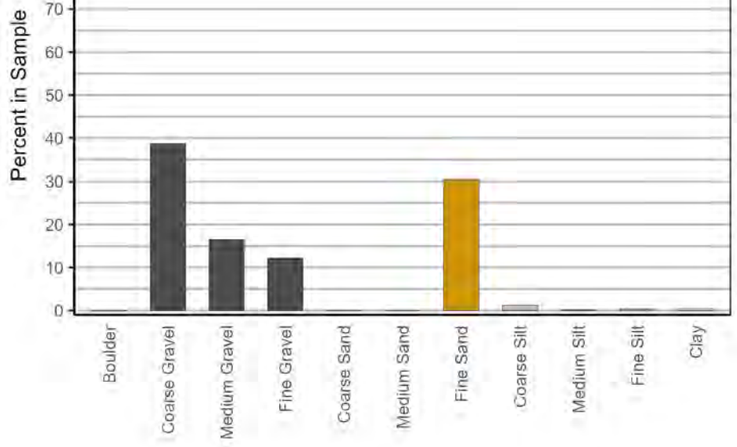
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	1.84E-01	6.03E-03	5.21E+02	No
Hazen K (cm/s) = d_{10} (mm)	3.23E-01	1.06E-02	9.15E+02	No
Slichter	3.62E-02	1.19E-03	1.03E+02	No
Terzaghi	5.17E-02	1.70E-03	1.47E+02	No
Beyer	1.98E-01	6.50E-03	5.61E+02	No
Sauerbrei	1.21E-01	3.97E-03	3.43E+02	No
Kruger	6.93E-03	2.27E-04	1.96E+01	No
Kozeny-Carmen	4.43E-03	1.45E-04	1.26E+01	No
Zunker	4.35E-03	1.43E-04	1.23E+01	No
Zamarin	6.37E-03	2.09E-04	1.81E+01	No
USBR	7.28E-01	2.39E-02	2.06E+03	No
Barr	3.88E-02	1.27E-03	1.10E+02	Yes
Alyamani and Sen	1.62E-01	5.32E-03	4.59E+02	No
Chapuis	1.28E-01	4.21E-03	3.64E+02	Yes
Krumbein and Monk	7.73E-01	2.54E-02	2.19E+03	No
Arithmetic Mean	**8.36E-02**	**2.74E-03**	**2.37E+02**	**Yes**
Geometric Mean	**7.06E-02**	**2.32E-03**	**2.00E+02**	**No**

Note: Coefficient of variation of selected results (0.757) ≤ 1, arithmetic mean recommended as the central tendency.



SAMPLE DESCRIPTION:
COARSE GRAVEL; SOME FINE SAND; LITTLE MEDIUM GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	38.7
Medium Gravel (8-16 mm)	16.5
Fine Gravel (2-8 mm)	12.2
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	30.4
Coarse Silt (0.016-0.063 mm)	1.22
Medium Silt (0.008-0.016 mm)	0.191
Fine Silt (0.002-0.008 mm)	0.365
Clay (<0.002 mm)	0.422



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GRAIN SIZE ANALYSIS REPORT

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FIGURE
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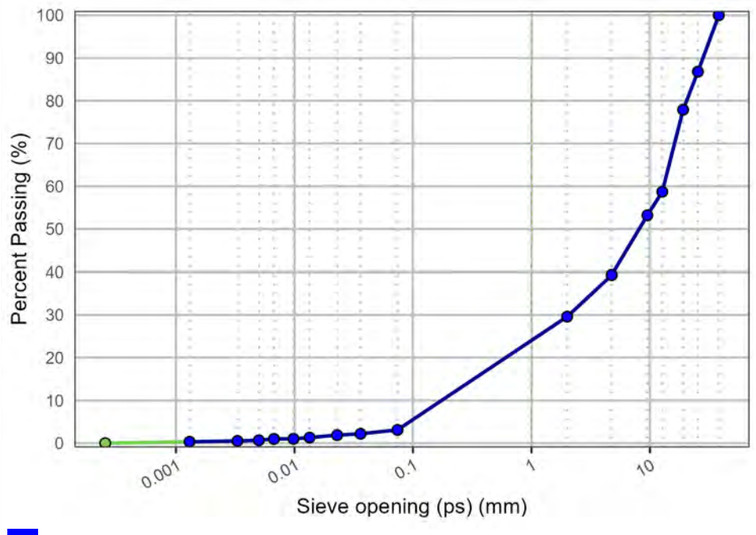
Sieve Opening d_i (φ)	Sieve Opening d_i (mm)	Mass Retained (g)	Mass Fraction (unitless)	Percent Passing
5.25	38.1	0	0	100
4.66	25.4	13.2	0.132	86.8
4.25	19.1	8.90	0.0890	77.9
3.66	12.7	19.2	0.192	58.7
3.25	9.51	5.50	0.0550	53.2
2.25	4.76	13.9	0.139	39.3
0.999	2.00	9.70	0.0970	29.6
-3.75	0.0740	26.5	0.265	3.10
-4.79	0.0361	0.908	0.00908	2.19
-5.44	0.0229	0.315	0.00315	1.88
-6.22	0.0134	0.573	0.00573	1.30
-6.67	0.00980	0.282	0.00282	1.02
-7.22	0.00670	0.0408	0.000408	0.981
-7.64	0.00500	0.307	0.00307	0.674
-8.24	0.00330	0.149	0.00149	0.525
-9.58	0.00130	0.190	0.00190	0.334
-11.9	0.000252	0.334	0.00334	0

Note: Zero percent passing estimated using monotone piecewise cubic interpolation.

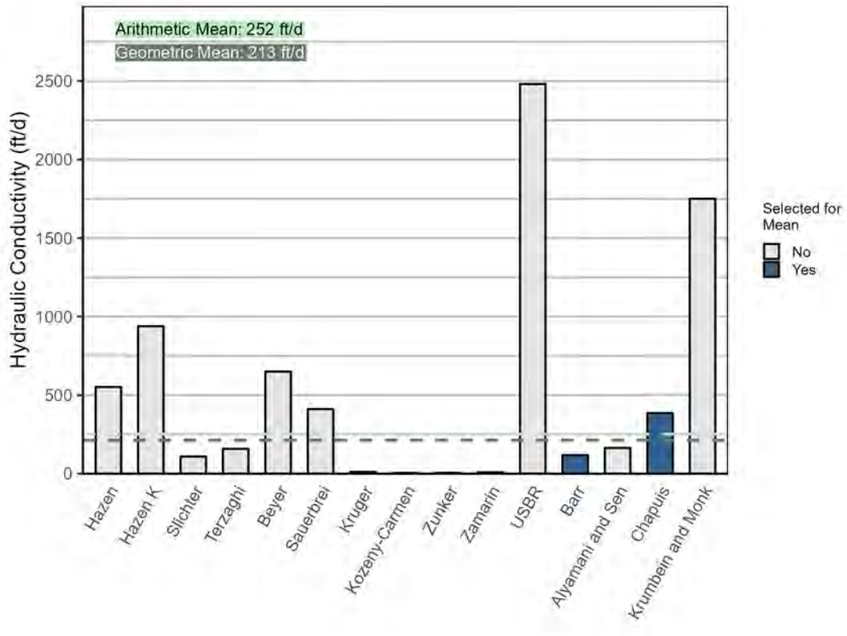
Effective Grain Diameters (mm)	
d_{10}	0.575
d_{17}	1.08
d_{20}	1.30
d_{50}	8.42
d_{60}	13.1
de (Kruger)	0.138
de (Kozeny)	0.0786
de (Zunker)	0.0960
de (Zamarin)	0.118
Io (Alyameni)	0

Other Useful Parameters	
Uniformity Coefficient	22.8
n computed	0.259
g (cm/s^2)	980
ρ (g/cm^3)	0.998
μ (g/cm s)	0.00985
ρg/μ (1/cm s)	99,327
τ (Sauerbrei)	1.05
$d_{geometric\ mean}$	3.94
σ_φ	2.24



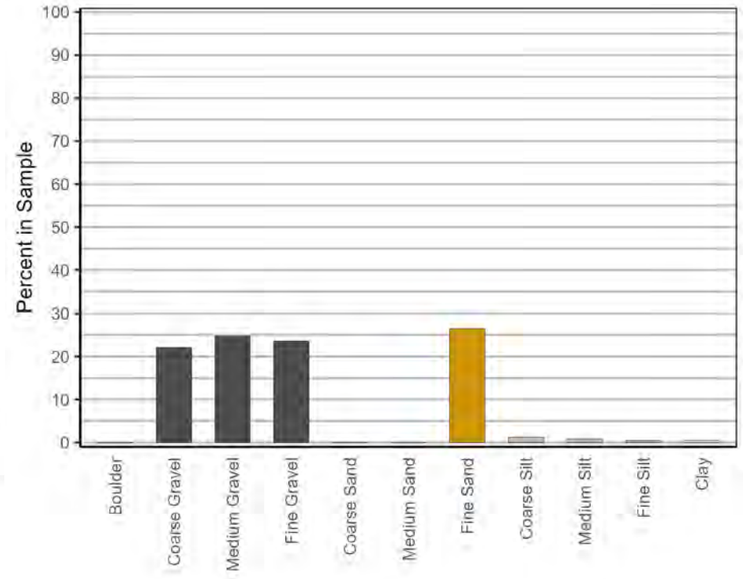
Estimation of Hydraulic Conductivity	cm/s	ft/s	ft/d	Selected for Mean
Hazen	1.95E-01	6.39E-03	5.52E+02	No
Hazen K (cm/s) = d_{10} (mm)	3.31E-01	1.09E-02	9.39E+02	No
Slichter	3.86E-02	1.27E-03	1.09E+02	No
Terzaghi	5.58E-02	1.83E-03	1.58E+02	No
Beyer	2.29E-01	7.52E-03	6.50E+02	No
Sauerbrei	1.45E-01	4.76E-03	4.11E+02	No
Kruger	3.89E-03	1.28E-04	1.10E+01	No
Kozeny-Carmen	1.60E-03	5.26E-05	4.55E+00	No
Zunker	1.73E-03	5.67E-05	4.90E+00	No
Zamarin	2.99E-03	9.80E-05	8.47E+00	No
USBR	8.75E-01	2.87E-02	2.48E+03	No
Barr	4.16E-02	1.37E-03	1.18E+02	Yes
Alyamani and Sen	5.78E-02	1.90E-03	1.64E+02	No
Chapuis	1.36E-01	4.46E-03	3.86E+02	Yes
Krumbein and Monk	6.17E-01	2.03E-02	1.75E+03	No
Arithmetic Mean	**8.88E-02**	**2.91E-03**	**2.52E+02**	**Yes**
Geometric Mean	**7.53E-02**	**2.47E-03**	**2.13E+02**	**No**

Note: Coefficient of variation of selected results (0.752) ≤ 1, arithmetic mean recommended as the central tendency.



SAMPLE DESCRIPTION:
FINE SAND; SOME MEDIUM GRAVEL; SOME FINE GRAVEL

Grain Diameters	% in Sample
Boulder (>64 mm)	N/A
Coarse Gravel (16-64 mm)	22.1
Medium Gravel (8-16 mm)	24.7
Fine Gravel (2-8 mm)	23.6
Coarse Sand (0.5-2 mm)	N/A
Medium Sand (0.25-0.5 mm)	N/A
Fine Sand (0.063-0.25 mm)	26.5
Coarse Silt (0.016-0.063 mm)	1.22
Medium Silt (0.008-0.016 mm)	0.855
Fine Silt (0.002-0.008 mm)	0.497
Clay (<0.002 mm)	0.525



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GRAIN SIZE ANALYSIS REPORT

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FIGURE
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Appendix G

Data Quality Assessments and Data Validation Checklists

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250 Cushman St. Suite 3D
Fairbanks, AK 99701
907-457-3147

Date:	10/2/2024
Project name:	Arcadis Eielson Data Gaps Investigation – Soil
Laboratory:	Pace Analytical Services, LLC, Columbia, SC (Pace Columbia)
Sample delivery groups:	ZF20024, ZF28037
ADS Project Number:	D24007
Reviewed by:	Rodney Guritz, Principal Chemist Leslie Brooks, Environmental Scientist
Approved by:	Rodney Guritz, Principal Chemist
To:	Mr. Timothy Bellis Arcadis U.S., Inc 630 Plaza Drive, Suite 200 Highlands Ranch, CO 80129

Data Quality Assessment

This letter summarizes the findings of a data quality assessment (DQA) conducted by Arctic Data Services, LLC (ADS) for the above-referenced project data on behalf of Arcadis U.S., Inc. Precision, accuracy, sensitivity, representativeness, comparability, and completeness of the data was evaluated by reviewing laboratory-supplied quality assurance/quality control (QA/QC) information as well as conducting independent QA/QC checks on the data. A Stage 2B data validation was performed on 100% of project sample data relating to analysis of per- and polyfluoroalkyl substances (PFAS) in general accordance with the Department of Defense (DoD) *General Data Validation Guidelines* (2019), the DoD *Data Validation Guidelines Module 6: Data Validation Procedures for Per- and Polyfluoroalkyl Substances Analysis by QSM Table B-24* (2022), and the *Uniform Federal Policy – Quality Assurance Project Plan, Data Gap Investigation & Groundwater Pilot Study Construction in Support of the Groundwater Response Action for PFAS Treatment at Site FT009P* (Ahtna Solutions-Arcadis 8(a) Joint Venture, LLC, 2024). Stage 2B validation includes reviewing sample handling, custody, sample-batch level QC information, and instrument-level QC data; applying data qualifiers to sample results affected by anomalies and QC failures; and summarizing the impacts to data quality. This validation meets the requirements of the Alaska Department of Environmental Conservation (ADEC) *Technical Memorandum 22-001, Guidelines for Data Reporting* (August 2022). Additionally, Stage 4 data validation was performed on 10% of the project sample data relating to analysis of PFAS as described in the Stage 4 Validation section below; Stage 4 data validation includes Stage 3 recalculation of field and QC sample results.

Laboratory QC-sample recoveries and relative percent differences (RPDs) were compared to measurement quality objectives (MQOs) specified in the UFP-QAPP, EPA Draft Method 1633, and/or laboratory control limits. Field-duplicate RPDs were compared to MQOs defined in Worksheet #12 of the UFP-QAPP for the applicable matrix. Limits of quantitation (LOQs) and limits of detection (LODs) were compared to project screening levels (PSLs) listed in Worksheet #15 of the 2024 UFP-QAPP to evaluate analytical sensitivity.

ADEC laboratory data review checklists (attached) were completed for each laboratory work order and summarize Stage 2A data validation findings. Separate checklists were prepared summarizing Stage 2B data validation findings and are also attached. Table 1 (attached) provides a list of qualified results. Table 2 lists the samples that were randomly selected for Stage 3/4 validation. Tables 3 through 5 summarize results recalculated in the course of Stage 3 data validation. The following sections provide a summary of data validation findings for each QA/QC element reviewed; failures or anomalies that had no impact to data quality are discussed in the checklists and are not further described herein.

Sample Analysis Summary

A total of 35 soil samples (including field duplicates) were collected and submitted in two sample delivery groups (SDGs) to Pace Columbia for analysis of the following:

- Per- and polyfluoroalkyl substances (PFAS) by EPA Draft Method 1633

Stage 2A Data Validation

The following sections summarize the findings of Stage 2A data validation, which includes review of preparatory-batch-level QC information. Only failures affecting project-sample data quality are discussed here; for more information, refer to the attached ADEC laboratory data review checklists.

Sample Preservation, Handling, Custody, and Holding Times

Sample receipt forms were reviewed to check that samples were received in good condition, properly preserved, and within the required temperature range. Chain of custody forms were reviewed to confirm that custody was not breached during sample handling. Dates of sample collection, preparation, and analysis were compared to check that method holding times were not exceeded.

There were no handling, custody, or holding time failures determined to affect project-sample data quality; see checklists for details.

Method Blanks

The laboratories analyzed and reported a method blank (MB) sample for each preparatory batch, to check for laboratory-based sample contamination. If and where analytes were detected in an MB, corresponding project-sample results were compared to the MB concentration and were considered potentially affected if detected within 5 times the MB concentration. Affected results above the LOD are qualified with 'J+' flags indicating the results are estimated with a high bias and results below the LOD were qualified with 'UB' flags as false-positives and are considered non-detect up to the LOD. This flagging criteria is in accordance with the *Data Validation*

Guidelines Modules 1, 3, 3, and 4 Revised Table for Sample Qualification in the Presence of Blank Contamination (DoD, 2022).

The following method blank detections were determined to affect project-sample data quality:

- **ZF20024.** There were three method blank detections below the LOQ and LOD but above the DL. One PFOS result for CACMW-003-160-158.5-061724-P was affected; refer to the checklist and Table 1 for details.

Laboratory Control Samples and Duplicates

The laboratory analyzed and reported a laboratory control sample (LCS) for each preparatory batch, to assess laboratory extraction efficiency and analytical accuracy. In some cases, LCS duplicates (LCSDs) were used to assess analytical precision. LCS/LCSD recovery information and LCSD RPD information (where available) were reviewed.

There were no LCS/LCSD recovery or LCSD RPD failures that affected project-sample data quality; see checklists for details.

Matrix Spike Samples

Matrix spikes (MS) and MS duplicates (MSD) were analyzed for select organic batches, to evaluate potential matrix interference affecting accuracy and/or precision. Each SDG included at least one sample with additional volume submitted for project-specific MS/MSD analysis. MS/MSD recovery and RPDs were evaluated only if the parent sample (the sample spiked for the MS/MSD) was in the project-sample set. Additionally, MS/MSD recovery was only evaluated if the spiking concentration was greater than one-fourth the native analyte concentration, as a low spiking ratio (compared to native analyte concentration in the parent sample) does not yield useful recovery information.

There were no MS/MSD recovery or MS/MSD RPD failures determined to affect project-sample data quality.

Extracted Internal Standard Recoveries

Samples submitted for PFAS analysis were spiked with radio-labelled extracted internal standards (EIS; also referred to as isotope dilution analytes) to evaluate accuracy, check for matrix interference on a sample-specific basis, and to quantify the associated target analyte. Due to the nature of isotope dilution, a direction of bias is not inferred for EIS recovery failures; the results are quantitated using the EIS as an analyte-specific internal standard, thereby correcting for low or high bias.

There were no EIS recovery failures affecting project-sample data quality; refer to the checklists for details.

Field Duplicates

Field duplicate samples were collected and submitted blind to the laboratory at the required frequency (one per 10 primary samples). RPDs between field-duplicate results were calculated; where analytes were not detected, the LOD was used in the calculation. RPDs were compared to a MQO of 50% for soil.

There were no field duplicate RPD failures considered to affect project-sample data quality.

Equipment and Field Blanks

Samples CACMW-EB01-062624, CACMW-FB01-062124, and CACMW-FB02-062524 were collected as an equipment blank (EB) and field blanks (FBs) and were submitted with soil samples in SDG ZF28037; the EB and FBs were conservatively assumed to correspond to all soil samples in both SDGs. The EBs were used to check for potential cross-contamination of samples from the reusable sampling equipment (drill tooling). The FBs were used to check for potential cross-contamination of samples from sample handling processes. Where analytes were detected in the blanks, professional judgement was used to determine if data quality was affected for individual results, depending upon relative collection times and concentrations of associated samples. Affected results above the LOD are qualified with 'J+' flags indicating the results are estimated with a high bias and results below the LOD were qualified with 'UB' flags as false-positives and are considered non-detect up to the LOD.

The following EB and FB detections were considered to affect project-sample data quality:

- **ZF20024**. PFOS and PFBA were detected in CACMW-EB01-062624 and CACMW-FB02-062524. All PFOS results were considered affected; see checklist and Table 1 for details.
- **ZF28037**. PFOS and PFBA were detected in CACMW-EB01-062624 and CACMW-FB02-062524. All PFOS results were considered affected; see checklist and Table 1 for details.

Stage 2B Data Validation

The following sections summarize findings of a Stage 2B data validation, which includes review of instrument-level QC information. Only failures affecting project-sample data quality are discussed here; for more information, refer to the attached Stage 2B data validation checklists.

Additional Stage 2A 1633 PFAS Checks

Additional Stage 2A checks for the PFAS analysis are included in the Stage 2B data validation checklists and summarized here, as they are method-specific and are not covered by the standard ADEC Laboratory Data Review Checklist. For EPA Draft Method 1633, in accordance with the DoD Data Validation Guidelines Module 6, additional Stage 2A checks include ion ratios, non-extracted internal standards (NIS), low-level laboratory control samples (LLCS), bile salt interference, and qualitative identification standards compared to method or QSM criteria.

The following additional Stage 2A check failures were determined to affect project-sample data quality:

- **ZF28037**. PFHxS in samples CACMW-004-160-142.75-062424-P and CACMW-005-160-121.75-061824-P and PFOS in sample CACMW-006-160-137.5-061924-P had ion ratios outside laboratory limits. Affected results were qualified 'J' as estimated; see checklist and Table 1 for details.

Tuning & Instrument Performance

For LC-MS/MS methods, MS tune checks were evaluated against method-specific criteria. Instrument performance checks, such as mass calibration and mass peak, were reviewed where reported and compared to method or QSM criteria. There were no tuning or instrument performance anomalies affecting project-sample data quality.

Initial Calibration and Verification

The initial calibration for each analysis was reviewed, to check for compliance with method and/or QSM requirements. This included checking that an appropriate number of standards (calibration points) were used, the frequency of calibrations met method and/or project-specific QC requirements, and that the calibration curve met method requirements (e.g. an $r^2 \geq 0.99$). Initial calibrations were acceptable for each analysis.

ICV samples were verified to be from a second source and were reviewed to verify the accuracy of the initial calibration. ICV recoveries were within control limits for each calibration.

Continuing Calibration Verification and Instrument Sensitivity Check

Laboratory batch summaries and/or run logs were reviewed to check that all project samples were bracketed by CCVs, and that CCV percent recoveries were within control limits for target analytes. CCV analysis frequency and percent recoveries were acceptable.

The laboratory analyzed and reported instrument sensitivity checks (ISCs) to check instrument detection capabilities at the required reporting limits. Laboratory batch summaries and/or run logs were reviewed to check that an ISC was performed at least once daily prior to sample and analysis, and that ISC percent recoveries were within control limits. ISC performance and percent recoveries were acceptable.

Instrument Blanks

Laboratory batch summaries and/or run logs were reviewed to check that instrument blanks (IBs) were performed immediately following the highest standard analyzed, daily prior to analyzing standards, after each CCV, and immediately following samples with PFAS concentrations exceeding the quantitation range. Each IB analysis was

reviewed to check that IB target analyte concentrations were below one half of the LOQ. IB performance and target analyte concentrations were acceptable.

Stage 3 and 4 Data Validation

The following sections summarize findings of the 10% Stage 3 and Stage 4 data validation, which includes recalculation of select results (Stage 3) and qualitative review of analyte identification and quantitation (Stage 4). A random selection of 10% of project field samples per SDG were selected for recalculation. All instrument QC samples related to field sample analysis were recalculated. Associated preparatory-batch QC samples (MB, LCS/LCSD, MS/MSD) were recalculated. Only target analytes that were detected in one or more field samples were recalculated. For all selected samples, EIS recoveries were recalculated and compared to reported recoveries. Standards traceability was also reviewed.

For Stage 4 validation, target compound identification and manual integrations were reviewed as described below; there were no tentatively identified compounds reported for this project.

Instrument Calibration, Performance, and Instrument QC Samples

Initial calibrations were recalculated using raw instrument responses from the quantitation reports for calibration standards. The laboratory used an average response factor (RF) calibration for most methods and analytes, though linear regressions were used in some cases. Concentrations were calculated based on associated internal standards.

Initial calibration verification (ICV) and bracketing CCV percent recoveries were recalculated and verified against reported recoveries. As noted in the relevant Stage 2B section above, CCV recovery failures did not affect project-sample data quality. ICB and CCBs were recalculated and verified below 1/2 LOQ.

Field Samples and Field/Lab QC Samples

A random selection of 10% of field samples for each SDG were selected for Stage 3 recalculation; see Table 2 for a list of selected samples. For the selected field samples, all detected target analyte results were recalculated and compared to the reported results. Additionally, all EIS recoveries were recalculated and verified against reported percent recoveries.

At least one MB, LCS/LCSD, and MS/MSD per method and SDG were recalculated. When detections were reported in an associated blank (MB, FB, or EB), the sample was selected for recalculation. Overall, recalculated results matched reported results, with occasional slight differences likely due to rounding. For recalculations, no rounding was performed until the very end; the laboratory may have rounded intermediate values, accounting for the slight differences.

No anomalies were identified during recalculation of project field sample and field and lab QC sample results that could not be attributed to rounding differences.

Standards Traceability

Laboratory reports were reviewed to verify the certificates of analysis were included for all stock standard solutions, and that the standards used in the ICV were from a secondary source. Standards preparation logs were reviewed to check that stock standards were diluted properly into working standards for the ICAL and spiking solutions. Standards preparation logs appeared complete and there were no anomalies identified.

Target Compound Identification

Target compound identification was evaluated by qualitatively reviewing signal to noise ratios and relative retention times for target analyte peaks, and presence of valid spectra with passing mass/ion ratios (for MS methods). This evaluation was performed for roughly 10% of positive detections within the randomly selected samples; no anomalies were identified.

Manual Integrations

Manual integrations were noted in the case narratives and with "M" flags on associated results. There was an unusually high frequency of manual integrations in both work orders, for laboratory instrument QC samples, batch QC samples, and field samples, including nearly all detections in field samples. In each case, the justification listed was "incorrect auto integration." A representative selection of manual integrations was reviewed, comparing the chromatograms before and after manual integration. In general, manual integrations were consistently performed across all field and QC samples and appeared appropriate. However, justification for manual integrations could have been more descriptive (e.g. base-line correction, split peak, etc.).

Summary of Data Quality Indicators

The following sections summarize the findings of the above review with respect to the six data quality indicators: sensitivity, precision, accuracy, representativeness, comparability, and completeness.

Sensitivity

Sensitivity describes the ability of the sampling and analytical methodology to meet detection and/or quantitation limit objectives. Analytical sensitivity was evaluated by checking that LODs for non-detect results were below relevant PSLs. A non-detect result is considered to be adequately sensitive if the LOD is below the PSL.

All non-detect results had LODs below relevant PSLs. Overall analytical sensitivity is deemed acceptable for the purposes of this project.

Precision

Precision is a measure of the reproducibility of repetitive measurements. Precision was evaluated based on laboratory QC-sample RPDs and field-duplicate RPDs. No sample results were affected by MSD or field duplicate RPD failures. Overall precision is deemed acceptable for the purposes of this project.

Accuracy

Accuracy is a measure of the correctness, or the closeness, between the true value and the quantity detected. Accuracy was evaluated based on target-analyte recoveries for laboratory batch-level and instrument-level QC samples, and surrogate recoveries for project samples. Accuracy also may be affected by sample contamination identified in blank samples, or by sample handling, preservation, or holding time anomalies.

No results were affected by LCS/LCSD, MS/MSD, or EIS recovery failures. A total of 36 results were affected by sample contamination identified in blank samples (MB, EB, and/or FB). Three results were affected by ion ratio failures. Impact to data usability was generally minor. Target analyte and/or EIS recoveries for laboratory QC samples and select field samples were verified through Stage 3 recalculations, with no significant discrepancies identified that would impact project-sample data quality. Overall accuracy is deemed acceptable for the purposes of this project.

Representativeness

Representativeness describes the degree to which data accurately and precisely represent site characteristics. Representativeness is affected by factors such as sample frequency and matrix or contaminant heterogeneity, as well as analytical performance (including sensitivity, accuracy, and precision), sample preservation, handling, and holding times, and sample cross-contamination.

Samples were collected in accordance with an approved work plan, and MQOs defined in the UFP-QAPP were generally met. Sensitivity, precision, and accuracy were acceptable for the purposes of this project. Results qualified due to QC anomalies affecting precision and accuracy are usable as qualified but are not wholly representative of site conditions. Overall, results were considered adequately representative of environmental conditions for the purposes of this project.

Comparability

Comparability describes whether two data sets can be considered equivalent with respect to project goals. Comparability is affected by factors such as sampling methodology and analytical performance (including sensitivity, accuracy, and precision). Comparability was evaluated by checking that standard analytical methods were employed, and analytical performance was acceptable.

Data review findings generally support that the dataset is comparable. Overall comparability should be evaluated by the project team considering sample collection methodology and historic results alongside data quality and analytical methodology.

Completeness

Completeness describes the amount of valid data obtained from the sampling event(s). It is calculated as the percentage of usable measurements compared to the total number of measurements. No results were recommended for rejection in this review. The dataset is 100% complete.

Conclusions

Sensitivity, precision, accuracy, representativeness, comparability, and completeness were deemed acceptable, and the data are usable for the purposes of this project. Stage 3/4 validation confirmed target analytes were appropriately identified and quantitated and that results were appropriately calculated. There was an unusual frequency of manual integrations, however in general they appeared to have been appropriately and consistently performed. A total of 38 results were qualified due to QC anomalies and no results were recommended for rejection. Qualified results are listed in Table 1.

Limitations

This review was based solely on information provided by the analytical laboratory in the laboratory reports and staged electronic data deliverables for the SDGs reviewed. A data quality assessment reduces the risk of reliance on data of compromised quality; however, it does not eliminate that risk.

Attachments:

Table 1 – Summary of Qualified Data
Table 2 – Selected 10% of Field Samples
Tables 3 – 1633 Calibration Recalculations
Tables 4a–4b – 1633 Instrument QC Summary
Tables 5a–5b – 1633 Recalculation Summary
ADEC Laboratory Data Review Checklists
Stage 2B Data Validation Checklists

Table 1 - Summary of Qualified Data

Arctic Data Services, LLC

Lab	SDG	Client Sample ID	Lab Sample ID	Matrix	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	QC Flags	Note	Final QC Flag	Final Qualified Result	PSL
PACE	ZF20024	CACMW-003-160-158.5-061724-P	ZF20024-008	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.03	BJM-03	UB, UB	MB, FB	UB M	0.03 [0.074] UB M	3.0
PACE	ZF20024	CACMW-001-160-116.5-061124-P	ZF20024-001	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.052	JM-03	UB	FB	UB M	0.052 [0.074] UB M	3.0
PACE	ZF20024	CACMW-001-160-16.5-061124-P	ZF20024-002	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.22	M-03	J+	FB	J+ M	0.22 [0.074] J+ M	3.0
PACE	ZF20024	CACMW-001-160-66.5-061124-P	ZF20024-003	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.28	M-03	J+	FB	J+ M	0.28 [0.074] J+ M	3.0
PACE	ZF20024	CACMW-002-160-132.25-061424-P	ZF20024-004	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.076	JM-03	J+	FB	J+ M	0.076 [0.074] J+ M	3.0
PACE	ZF20024	CACMW-002-160-32.25-061524-P	ZF20024-005	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.39	M-03	J+	FB	J+ M	0.39 [0.074] J+ M	3.0
PACE	ZF20024	CACMW-002-160-82.25-061524-P	ZF20024-006	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	9.1	BM-03	J+	FB	J+ M	9.1 [0.074] J+ M	3.0
PACE	ZF20024	CACMW-003-160-108.5-061724-P	ZF20024-007	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.28	B	J+	FB	J+	0.28 [0.074] J+	3.0
PACE	ZF20024	CACMW-003-160-58.5-061724-P	ZF20024-009	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.47	BM-03	J+	FB	J+ M	0.47 [0.074] J+ M	3.0
PACE	ZF20024	CACMW-SO-FD01-061724	ZF20024-010	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.24	BM-03	J+	FB	J+ M	0.24 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-004-160-142.75-062424-P	ZF28037-001	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.079	JM-03	J+	FB	J+ M	0.079 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-004-160-42.75-062424-P	ZF28037-002	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.29	M-03	J+	FB	J+ M	0.29 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-004-160-92.75-062424-P	ZF28037-003	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.33	M-03	J+	FB	J+ M	0.33 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-005-160-121.75-061824-P	ZF28037-004	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.079	JM-03	J+	FB	J+ M	0.079 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-005-160-135-061824-P	ZF28037-005	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.084	JM-03	J+	FB	J+ M	0.084 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-005-160-21.75-061824-P	ZF28037-006	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.63	M-03	J+	FB	J+ M	0.63 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-005-160-45-061824-P	ZF28037-007	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.22	M-03	J+	FB	J+ M	0.22 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-005-160-71.75-061824-P	ZF28037-008	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.4	M-03	J+	FB	J+ M	0.4 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-005-160-85-061824-P	ZF28037-009	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.25	M-03	J+	FB	J+ M	0.25 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-006-160-137.5-061924-P	ZF28037-010	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.075	JM-03	J+, J	FB, Ion_ratio	J M	0.075 [0.074] J M	3.0
PACE	ZF28037	CACMW-006-160-148-061924-P	ZF28037-011	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.056	JM-03	UB	FB	UB M	0.056 [0.074] UB M	3.0
PACE	ZF28037	CACMW-006-160-37.5-061924-P	ZF28037-012	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.19	JM-03	J+	FB	J+ M	0.19 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-006-160-48-061924-P	ZF28037-013	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.23	M-03	J+	FB	J+ M	0.23 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-006-160-87.5-061924-P	ZF28037-014	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.2		J+	FB	J+	0.2 [0.074] J+	3.0
PACE	ZF28037	CACMW-006-160-98-061924-P	ZF28037-015	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.42	M-03	J+	FB	J+ M	0.42 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-007-160-103.25-062024-P	ZF28037-016	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.36		J+	FB	J+	0.36 [0.074] J+	3.0
PACE	ZF28037	CACMW-007-160-153.25-062024-P	ZF28037-017	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.03	JM-03	UB	FB	UB M	0.03 [0.074] UB M	3.0
PACE	ZF28037	CACMW-007-160-33-062024-P	ZF28037-018	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.16	JM-03	J+	FB	J+ M	0.16 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-007-160-53.25-062024-P	ZF28037-019	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.53	M-03	J+	FB	J+ M	0.53 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-007-160-93-062024-P	ZF28037-020	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.47	M-03	J+	FB	J+ M	0.47 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-008-160-127-062124-P	ZF28037-021	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.039	JM-03	UB	FB	UB M	0.039 [0.074] UB M	3.0
PACE	ZF28037	CACMW-008-160-27-062124-P	ZF28037-022	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.33	M-03	J+	FB	J+ M	0.33 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-008-160-77-062124-P	ZF28037-023	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.41	M-03	J+	FB	J+ M	0.41 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-SO-FD02-062024	ZF28037-027	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.43	M-03	J+	FB	J+ M	0.43 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-SO-FD03-062124	ZF28037-028	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.054	JM-03	UB	FB	UB M	0.054 [0.074] UB M	3.0
PACE	ZF28037	CACMW-SO-FD04-062424	ZF28037-029	Soil	1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/g	0.02	0.074	0.2	0.08	JM-03	J+	FB	J+ M	0.08 [0.074] J+ M	3.0
PACE	ZF28037	CACMW-004-160-142.75-062424-P	ZF28037-001	Soil	1633	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/g	0.02	0.073	0.2	0.032	JM-03	J	Ion_ratio	J M	0.032 [0.073] J M	130
PACE	ZF28037	CACMW-005-160-121.75-061824-P	ZF28037-029	Soil	1633	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/g	0.02	0.073	0.2	0.023	JM-03	J	Ion_ratio	J M	0.023 [0.073] J M	130

Definitions:

ng/g	nanograms per gram
SDG	sample delivery group
CAS	Chemical Abstract Service registry number
DL	detection limit
LOD	limit of detection
LOQ	limit of quantitiation
QC	quality control

Notes:

FB	Field or equipment blank detection
Ion_ratio	Ion ratio failure
MB	Method blank detection

Flags:

J+	The result is estimated with a high bias.
UB	The result is considered not detected (less than the listed reporting limit) due to sample contamination identified in an associated blank sample.
J	The result is estimated with an unknown bias.
M	The manual integration laboratory qualifier has been preserved with the data as informational data for the end user; there was no impact on the data usability.

Lab Flags:

B	Detected in the method blank
J	Estimated result < LOQ and > DL
M	Manual integration

Table 2 - Selected 10% of Field Samples

SDG	Method	Client Sample ID	Lab Sample ID
ZG20024	1633	CACMW-002-160-82.25-0615	ZF20024-006
ZG20024	1633	CACMW-003-160-158.5-0617	ZF20024-008
ZF28037	1633	CACMW-FB01-062124	ZF28037-025
ZF28037	1633	CACMW-EB01-062624	ZF28037-024
ZF28037	1633	CACMW-FB02-062524	ZF28037-026
ZF28037	1633	CACMW-EB01-062624	ZF28037-024
ZF28037	1633	CACMW-004-160-92.75-0624	ZF28037-003
ZF28037	1633	CACMW-007-160-33-062024	ZF28037-018
ZF28037	1633	CACMW-007-160-93-062024	ZF28037-020
ZF28037	1633	CACMW-SO-FD02-062024	ZF28037-027

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Table 3 – 1633 Calibration Recalculations

Calibration: **072924-1633+ICAL.b**

	Level	1	2	3	4	5	6	7	8	9	10		Avg RF or			Calc.	Calc.	Match	Match
	Data File	072924009.d	072924010.d	072924011.d	072924012.d	072924013.d	072924014.d	072924015.d	072924016.d	072924017.d	072924018.d								
Analyte	**CAS**	**Calculated RF**										Fit	Linear	Constant	RSD/RSE	Avg RF	RSD	Avg RF	RSD
13C4-PFBA	SESI-0111	1.0968	1.2073	1.2377	1.1488	1.1235	1.1473	1.0555	1.0845	1.0947	1.1619	Avg	1.1358		5.0	1.1358	5.0	Yes	Yes
13C5-PFPeA	SESI-0112	0.8315	0.8828	0.9318	0.8561	0.8550	0.8555	0.7910	0.7563	0.7717	0.7946	Avg	0.83265		6.5	0.8326	6.5	Yes	Yes
13C2-4:2FTS	SESI-0104	0.1947	0.1956	0.2140	0.2052	0.1951	0.2023	0.1620	0.1803	0.1987	0.1988	Avg	0.194687		7.4	0.1947	7.4	Yes	Yes
13C5-PFHxA	SESI-0113	1.0508	1.1644	1.2386	1.1247	1.0989	1.1303	1.0028	0.9921	1.0392	1.0884	Avg	1.093021		6.9	1.0930	6.9	Yes	Yes
Perfluorohexanoic acid (PFHxA)	307-24-4	0.9302	0.8158	0.8347	0.8875	0.8733	0.8539	0.9581	0.9469	0.9419	0.9331	Avg	0.897522		5.7	0.8975	5.7	Yes	Yes
13C3-PFBS	SESI-0116	1.2359	1.3015	1.4492	1.3074	1.3073	1.3827	1.1649	1.2010	1.2957	1.3112	Avg	1.295673		6.4	1.2957	6.4	Yes	Yes
13C3-HFPO-DA	SESI-0121	0.1936	0.2231	0.2275	0.2041	0.2025	0.2026	0.1882	0.1832	0.1809	0.1821	Avg	0.198771		8.3	0.1988	8.3	Yes	Yes
13C4-PFHpA	SESI-0114	1.1353	1.2789	1.3981	1.2428	1.2141	1.2391	1.1544	1.1340	1.1041	1.2422	Avg	1.214304		7.2	1.2143	7.2	Yes	Yes
13C2-6:2FTS	SESI-0105	0.1978	0.2253	0.2436	0.2027	0.2083	0.2260	0.2050	0.2213	0.2208	0.2468	Avg	0.21977		7.6	0.2198	7.6	Yes	Yes
13C8-PFOA	SESI-0097	6.4495	7.6580	8.0751	7.2481	6.2945	6.8015	5.8890	6.5942	6.5649	6.7529	Avg	6.83278		9.6	6.8328	9.6	Yes	Yes
Perfluorooctanoic acid (PFOA)	335-67-1	0.8944	0.8521	0.8767	0.8409	0.8613	0.8163	0.9128	0.9399	0.9359	0.9189	Avg	0.884916		4.8	0.8849	4.8	Yes	Yes
13C3-PFHxS	SESI-0096	1.1437	1.1876	1.2285	1.2294	1.2087	1.2404	0.9984	1.0822	1.1499	1.1656	Avg	1.163436		6.5	1.1634	6.5	Yes	Yes
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1.0476	1.1348	1.1248	1.0594	1.0060	1.0458	1.3174	1.1859	1.2235	1.1820	Avg	1.132717		8.5	1.1327	8.5	Yes	Yes
13C9-PFNA	SESI-0099	0.9407	1.0242	1.0994	0.9987	0.9447	0.9743	0.8999	0.8716	1.0192	1.0792	Avg	0.985194		7.5	0.9852	7.5	Yes	Yes
Perfluorononanoic acid (PFNA)	375-95-1	0.7619	0.9037	0.8537	0.9104	0.8430	0.8214	0.8630	0.8800	0.8898	0.8931	Avg	0.861997		5.2	0.8620	5.2	Yes	Yes
13C2-8:2FTS	SESI-0106	0.2013	0.1907	0.2117	0.1940	0.1939	0.1948	0.1938	0.1985	0.2305	0.2350	Avg	0.204418		7.9	0.2044	7.9	Yes	Yes
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1.8225	1.9138	1.7849	1.7101	1.7485	1.8779	1.6113	1.5399	1.4533	1.4116	Avg	1.687379		10.4	1.6874	10.4	Yes	Yes
D3-NMeFOSAA	SESI-0102	0.4609	0.5125	0.5686	0.5216	0.5116	0.4972	0.4537	0.4639	0.4619	0.4907	Avg	0.49426		7.3	0.4943	7.3	Yes	Yes
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	0.9243	0.7504	0.8440	0.7960	0.8175	0.8144	0.8363	0.8521	0.8334	0.8618	Avg	0.833032		5.4	0.8330	5.4	Yes	Yes
13C6-PFDA	SESI-0115	1.0943	1.2530	1.4389	1.0447	1.1406	1.0729	1.0414	1.0743	1.0942	1.0540	Avg	1.130832		11.0	1.1308	11.0	Yes	Yes
D5-NEtFOSAA	SESI-0110	0.3631	0.4031	0.4503	0.3879	0.4142	0.3875	0.3518	0.3487	0.3103	0.3637	Avg	0.37805		10.4	0.3781	10.4	Yes	Yes
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1.1830	1.0271	1.0217	1.0726	0.9400	1.0320	1.1149	1.2039	1.2845	1.1922	Avg	1.107201		9.6	1.1072	9.6	Yes	Yes
13C8-PFOS	SESI-0098	0.8870	1.1260	1.1655	0.9516	1.0400	1.0533	0.9594	0.9613	0.9500	1.0428	Avg	1.013707		8.6	1.0137	8.6	Yes	Yes
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	0.8237	0.8243	1.0132	1.0778	0.8938	0.9928	0.9727	0.9871	0.9378	0.9205	Ln	0.974909	-15.674656	6.7	See below			
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	0.9520	0.8254	0.9302	1.0761	0.9264	0.9392	1.0454	1.0341	1.0786	1.0211	Avg	0.982846		8.3	0.9828	8.3	Yes	Yes
13C7-PFUnA	SESI-0117	1.0394	1.2015	1.2619	1.0628	1.0728	1.1014	1.0042	0.9531	1.0856	0.9982	Avg	1.078081		8.7	1.0781	8.7	Yes	Yes
13C2-PFDoA	SESI-0118	0.9511	1.0696	1.1308	0.9045	1.0145	1.0719	0.9527	0.9433	0.9955	0.9514	Avg	0.998518		7.2	0.9985	7.2	Yes	Yes
13C8-PFOSA	SESI-0107	1.5335	1.8332	1.9011	1.6761	1.7179	1.6791	1.4924	1.5796	1.5975	1.7503	Avg	1.676088		7.8	1.6761	7.8	Yes	Yes
Perfluorooctanesulfonamide (PFOSA)	754-91-6	0.8795	0.8874	0.9493	1.0055	0.9289	0.9613	1.0477	1.0049	1.0111	1.0117	Avg	0.968729		5.9	0.9687	5.9	Yes	Yes
13C2-PFTeDA	SESI-0119	0.8536	0.9981	1.0211	0.8746	0.9382	0.8584	0.8912	0.8762	0.9279	0.8958	Avg	0.913515		6.3	0.9135	6.3	Yes	Yes
D7-NMeFOSE	SESI-0129	0.6023	0.7196	0.7798	0.6871	0.6841	0.6692	0.6008	0.6237	0.6106	0.6652	Avg	0.664236		8.7	0.6642	8.7	Yes	Yes
D3-NMeFOSA	SESI-0109	0.3798	0.4582	0.4754	0.4292	0.4548	0.4387	0.3963	0.4036	0.4295	0.4674	Avg	0.433295		7.4	0.4333	7.4	Yes	Yes
D9-NEtFOSE	SESI-0130	0.6737	0.7973	0.8578	0.7657	0.7805	0.7494	0.6622	0.6894	0.6738	0.7279	Avg	0.73779		8.7	0.7378	8.7	Yes	Yes
D5-NEtFOSA	SESI-0108	0.4111	0.4836	0.5218	0.4605	0.4730	0.4633	0.4267	0.4440	0.4452	0.4705	Avg	0.459974		6.7	0.4600	6.7	Yes	Yes

Key

	from reported calibration
	from lab report/SEDD
	calculated value/comparison

Avg	average
RF	response factor
Conc.	concentration
Calc.	calculated
RSD	relative standard deviation
RSE	relative standard error
IS	internal standard

Linear Regressions

Analyte	Data File	Response	Conc., x	IS Response	IS Conc.	Response Ratio, y
Perfluoroheptanesulfonic acid (PFHpS)	072924009.d	17313	95.3	551351	2500	78.503
Perfluoroheptanesulfonic acid (PFHpS)	072924010.d	36399	190.6	579157	2500	157.121
Perfluoroheptanesulfonic acid (PFHpS)	072924011.d	106333	476.5	550614	2500	482.793
Perfluoroheptanesulfonic acid (PFHpS)	072924012.d	260907	1191	508143	2500	1283.630
Perfluoroheptanesulfonic acid (PFHpS)	072924013.d	466862	2383	547965	2500	2129.981
Perfluoroheptanesulfonic acid (PFHpS)	072924014.d	1090924	4765	576510	2500	4730.725
Perfluoroheptanesulfonic acid (PFHpS)	072924015.d	2496821	11913	538674	2500	11587.811
Perfluoroheptanesulfonic acid (PFHpS)	072924016.d	4768246	23825	506872	2500	23517.999
Perfluoroheptanesulfonic acid (PFHpS)	072924017.d	8767547	47650	490492	2500	44687.513
Perfluoroheptanesulfonic acid (PFHpS)	072924018.d	10764225	59563	490801	2500	54829.885

Response Ratio = Response/IS Response * IS Conc

formula = y ~ x, weights = 1/x^2

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	-15.67466	6.34352	-2.471	0.0387
x	0.97491	0.02399	40.645	1.48E-10

Residual standard error: 0.06502 on 8 degrees of freedom
Multiple R-squared: 0.9952,Adjusted R-squared: 0.9946
F-statistic: 1652 on 1 and 8 DF, p-value: 1.478e-10

Table 4a – Recalculation Summary: ZF20024 Instrument QC Samples

Arctic Data Services, LLC

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3121906	13C3-PFBA	1353955	5000	Avg	1.1358				10150	10150.41	Yes	10000	102	101.5	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1266518	13C2-PFHxA	725985	2500	Avg	0.83265				5237.95	5237.95	Yes	5000	105	104.8	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	168062	18O2-PFHxS	470455	2500	Avg	0.194687				4587.27	4587.27	Yes	5000	92	91.7	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	820227	13C2-PFHxA	725985	2500	Avg	1.093021				2584.15	2584.15	Yes	2500	103	103.4	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	629663	18O2-PFHxS	470455	2500	Avg	1.295673				2582.47	2582.47	Yes	2500	103	103.3	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	595170	13C2-PFHxA	725985	2500	Avg	0.198771				10311	10310.99	Yes	10000	103	103.1	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	913462	13C2-PFHxA	725985	2500	Avg	1.214304				2590.45	2590.45	Yes	2500	104	103.6	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	188101	18O2-PFHxS	470455	2500	Avg	0.21977				4548.24	4548.25	Yes	5000	91	91.0	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	997426	13C4-PFOA	146641	2500	Avg	6.83278				2488.67	2488.67	Yes	2500	100	99.5	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	538372	18O2-PFHxS	470455	2500	Avg	1.163436				2459.02	2459.02	Yes	2500	98	98.4	Yes
072924019.d	1633 BLK A	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	4019	13C3-PFHxS	538372	2500	Avg	1.132717		0.01	16.476	0.16476	0.1648	Yes				
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	500211	13C5-PFNA	498292	1250	Avg	0.985194				1273.67	1273.67	Yes	1250	102	101.9	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	164119	18O2-PFHxS	470455	2500	Avg	0.204418				4266.39	4266.4	Yes	5000	85	85.3	Yes
072924019.d	1633 BLK A	Instrument_Blank	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	3595	13C2-8:2FTS	164119	5000	Avg	1.687379		0.01	64.908	0.64908	0.6491	Yes				
072924019.d	1633 BLK A	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	520766	13C4-PFOS	565800	2500	Avg	0.49426				4655.48	4655.48	Yes	5000	93	93.1	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	468125	13C2-PFDA	383980	1250	Avg	1.130832				1347.61	1347.61	Yes	1250	108	107.8	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	457164	13C4-PFOS	565800	2500	Avg	0.37805				5343.17	5343.18	Yes	5000	107	106.9	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	583120	13C4-PFOS	565800	2500	Avg	1.013707				2541.69	2541.69	Yes	2500	102	101.7	Yes
072924019.d	1633 BLK A	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4438	13C8-PFOS	583120	2500	Avg	0.982846		0.01	19.359	0.19359	0.1936	Yes				
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	476286	13C2-PFDA	383980	1250	Avg	1.078081				1438.19	1438.2	Yes	1250	115	115.1	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	411040	13C2-PFDA	383980	1250	Avg	0.998518				1340.08	1340.08	Yes	1250	107	107.2	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	923440	13C4-PFOS	565800	2500	Avg	1.676088				2434.38	2434.38	Yes	2500	97	97.4	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	364541	13C2-PFDA	383980	1250	Avg	0.913515				1299.07	1299.07	Yes	1250	104	103.9	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3765229	13C4-PFOS	565800	2500	Avg	0.664236				25046	25046.44	Yes	25000	100	100.2	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	230117	13C4-PFOS	565800	2500	Avg	0.433295				2346.62	2346.62	Yes	2500	94	93.9	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4026642	13C4-PFOS	565800	2500	Avg	0.73779				24115	24115	Yes	25000	96	96.5	Yes
072924019.d	1633 BLK A	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	256636	13C4-PFOS	565800	2500	Avg	0.459974				2465.25	2465.25	Yes	2500	99	98.6	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2989383	13C3-PFBA	1286995	5000	Avg	1.1358				10225	10225.22	Yes	10000	102	102.3	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1201992	13C2-PFHxA	712303	2500	Avg	0.83265				5066.58	5066.57	Yes	5000	101	101.3	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	157871	18O2-PFHxS	412801	2500	Avg	0.194687				4910.94	4910.94	Yes	5000	98	98.2	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	765979	13C2-PFHxA	712303	2500	Avg	1.093021				2459.6	2459.59	Yes	2500	98	98.4	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	237935	13C5-PFHxA	765979	2500	Avg	0.897522				865.24	865.24	Yes	1000	87	86.5	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	565601	18O2-PFHxS	412801	2500	Avg	1.295673				2643.71	2643.71	Yes	2500	106	105.7	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	588240	13C2-PFHxA	712303	2500	Avg	0.198771				10387	10386.68	Yes	10000	104	103.9	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	867392	13C2-PFHxA	712303	2500	Avg	1.214304				2507.05	2507.05	Yes	2500	100	100.3	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	170534	18O2-PFHxS	412801	2500	Avg	0.21977				4699.38	4699.39	Yes	5000	94	94.0	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	934432	13C4-PFOA	145741	2500	Avg	6.83278				2345.89	2345.89	Yes	2500	94	93.8	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	271680	13C8-PFOA	934432	2500	Avg	0.884916				821.39	821.39	Yes	1000	82	82.1	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	473238	18O2-PFHxS	412801	2500	Avg	1.163436				2463.41	2463.41	Yes	2500	99	98.5	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	211733	13C3-PFHxS	473238	2500	Avg	1.132717				987.48	987.48	Yes	914	108	108.0	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	485861	13C5-PFNA	455100	1250	Avg	0.985194				1354.55	1354.55	Yes	1250	108	108.4	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	279235	13C9-PFNA	485861	1250	Avg	0.861997				833.42	833.42	Yes	1000	83	83.3	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	169460	18O2-PFHxS	412801	2500	Avg	0.204418				5020.5	5020.5	Yes	5000	100	100.4	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	57848	13C2-8:2FTS	169460	5000	Avg	1.687379				1011.53	1011.53	Yes	960	105	105.4	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	563049	13C4-PFOS	550067	2500	Avg	0.49426				5177.44	5177.44	Yes	5000	104	103.5	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	75408	D3-NMeFOSAA	563049	5000	Avg	0.833032				803.86	803.86	Yes	1000	80	80.4	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	462343	13C2-PFDA	430975	1250	Avg	1.130832				1185.83	1185.83	Yes	1250	95	94.9	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	395904	13C4-PFOS	550067	2500	Avg	0.37805				4759.54	4759.54	Yes	5000	95	95.2	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	78165	D5-NEtFOSAA	395904	5000	Avg	1.107201				891.59	891.59	Yes	1000	89	89.2	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	540904	13C4-PFOS	550067	2500	Avg	1.013707				2425.11	2425.11	Yes	2500	97	97.0	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	164562	13C8-PFOS	540904	2500	Ln	0.974909	-15.674656			796.24	796.24	Yes	953	84	83.6	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	184996	13C8-PFOS	540904	2500	Avg	0.982846				869.96	869.95	Yes	928	94	93.7	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	419552	13C2-PFDA	430975	1250	Avg	1.078081				1128.74	1128.74	Yes	1250	90	90.3	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	412100	13C2-PFDA	430975	1250	Avg	0.998518				1197.03	1197.03	Yes	1250	96	95.8	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	848662	13C4-PFOS	550067	2500	Avg	1.676088				2301.24	2301.24	Yes	2500	92	92.0	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	284852	13C8-PFOSA	848662	2500	Avg	0.968729				866.21	866.21	Yes	1000	87	86.6	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	358534	13C2-PFDA	430975	1250	Avg	0.913515				1138.34	1138.34	Yes	1250	91	91.1	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3637808	13C4-PFOS	550067	2500	Avg	0.664236				24891	24890.97	Yes	25000	100	99.6	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	228016	13C4-PFOS	550067	2500	Avg	0.433295				2391.7	2391.7	Yes	2500	96	95.7	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3963886	13C4-PFOS	550067	2500	Avg	0.73779				24418	24418.15	Yes	25000	98	97.7	Yes
072924020.d	ICV_SVLC-3915	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	247775	13C4-PFOS	550067	2500	Avg	0.459974				2448.21	2448.21	Yes	2500	98	97.9	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3037865	13C3-PFBA	1394208	5000	Avg	1.1358				9592	9592	Yes	10000	96	95.9	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1227106	13C2-PFHxA	778773	2500	Avg	0.83265				4730.96	4730.95	Yes	5000	95	94.6	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	130675	18O2-PFHxS	423342	2500	Avg	0.194687				3963.73	3963.73	Yes	5000	79	79.3	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	825031	13C2-PFHxA	778773	2500	Avg	1.093021				2423.1	2423.1	Yes	2500	97	96.9	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	28714	13C5-PFHxA	825031	2500	Avg	0.897522				96.943	96.94	Yes	100	97	96.9	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	594086	18O2-PFHxS	423342	2500	Avg	1.295673				2707.71	2707.71	Yes	2500	108	108.3	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	650397	13C2-PFHxA	778773	2500	Avg	0.198771				10504	10504	Yes	10000	105	105.0	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	887757	13C2-PFHxA	778773	2500	Avg	1.214304				2346.91	2346.91	Yes	2500	94	93.9	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	158068	18O2-PFHxS	423342	2500	Avg	0.21977				4247.4	4247.41	Yes	5000	85	84.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1031936	13C4-PFOA	149672	2500	Avg	6.83278				2522.64	2522.64	Yes	2500	101	100.9	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	42674	13C8-PFOA	1031936	2500	Avg	0.884916				116.83	116.83	Yes	100	117	116.8	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	477414	18O2-PFHxS	423342	2500	Avg	1.163436				2423.27	2423.27	Yes	2500	97	96.9	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	21219	13C3-PFHxS	477414	2500	Avg	1.132717				98.095	98.1	Yes	91.4	107	107.3	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	458637	13C5-PFNA	511636	1250	Avg	0.985194				1137.36	1137.36	Yes	1250	91	91.0	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	30235	13C9-PFNA	458637	1250	Avg	0.861997				95.597	95.6	Yes	100	96	95.6	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	140207	18O2-PFHxS	423342	2500	Avg	0.204418				4050.4	4050.41	Yes	5000	81	81.0	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	19798	13C2-8:2FTS	140207	5000	Avg	1.687379				418.42	418.42	Yes	384	109	109.0	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	482545	13C4-PFOS	590575	2500	Avg	0.49426				4132.83	4132.83	Yes	5000	83	82.7	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	6975	D3-NMeFOSAA	482545	5000	Avg	0.833032				86.759	86.76	Yes	100	87	86.8	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	467559	13C2-PFDA	408376	1250	Avg	1.130832				1265.58	1265.58	Yes	1250	101	101.2	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	366094	13C4-PFOS	590575	2500	Avg	0.37805				4099.28	4099.29	Yes	5000	82	82.0	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	8044	D5-NEtFOSAA	366094	5000	Avg	1.107201				99.225	99.23	Yes	100	99	99.2	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	561276	13C4-PFOS	590575	2500	Avg	1.013707				2343.85	2343.85	Yes	2500	94	93.8	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	14042	13C8-PFOS	561276	2500	Ln	0.974909	-15.674656			80.233	80.23	Yes	95.3	84	84.2	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20252	13C8-PFOS	561276	2500	Avg	0.982846				91.78	91.78	Yes	92.8	99	98.9	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	444327	13C2-PFDA	408376	1250	Avg	1.078081				1261.54	1261.54	Yes	1250	101	100.9	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	380921	13C2-PFDA	408376	1250	Avg	0.998518				1167.69	1167.69	Yes	1250	93	93.4	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	914253	13C4-PFOS	590575	2500	Avg	1.676088				2309.06	2309.06	Yes	2500	92	92.4	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	33167	13C8-PFOSA	914253	2500	Avg	0.968729				93.622	93.62	Yes	100	94	93.6	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	356787	13C2-PFDA	408376	1250	Avg	0.913515				1195.48	1195.48	Yes	1250	96	95.6	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3898038	13C4-PFOS	590575	2500	Avg	0.664236				24842	24842.12	Yes	25000	99	99.4	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	237938	13C4-PFOS	590575	2500	Avg	0.433295				2324.58	2324.58	Yes	2500	93	93.0	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4180592	13C4-PFOS	590575	2500	Avg	0.73779				23987	23986.67	Yes	25000	96	95.9	Yes
073024001.d	L1_SVLC-3905	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	265883	13C4-PFOS	590575	2500	Avg	0.459974				2446.93	2446.93	Yes	2500	98	97.9	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3253995	13C3-PFBA	1466368	5000	Avg	1.1358				9768.82	9768.82	Yes	10000	98	97.7	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1281510	13C2-PFHxA	788283	2500	Avg	0.83265				4881.1	4881.1	Yes	5000	98	97.6	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	183288	18O2-PFHxS	455011	2500	Avg	0.194687				5172.67	5172.67	Yes	5000	103	103.5	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	880886	13C2-PFHxA	788283	2500	Avg	1.093021				2555.93	2555.93	Yes	2500	102	102.2	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	719190	13C5-PFHxA	880886	2500	Avg	0.897522				2274.15	2274.15	Yes	2500	91	91.0	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	619833	18O2-PFHxS	455011	2500	Avg	1.295673				2628.44	2628.44	Yes	2500	105	105.1	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	643241	13C2-PFHxA	788283	2500	Avg	0.198771				10263	10263.1	Yes	10000	103	102.6	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	885752	13C2-PFHxA	788283	2500	Avg	1.214304				2313.36	2313.36	Yes	2500	93	92.5	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	199529	18O2-PFHxS	455011	2500	Avg	0.21977				4988.33	4988.34	Yes	5000	100	99.8	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1042437	13C4-PFOA	170523	2500	Avg	6.83278				2236.71	2236.71	Yes	2500	89	89.5	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	926632	13C8-PFOA	1042437	2500	Avg	0.884916				2511.28	2511.28	Yes	2500	100	100.5	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	560397	18O2-PFHxS	455011	2500	Avg	1.163436				2646.5	2646.5	Yes	2500	106	105.9	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	539912	13C3-PFHxS	560397	2500	Avg	1.132717				2126.4	2126.4	Yes	2285	93	93.1	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	541069	13C5-PFNA	541378	1250	Avg	0.985194				1268.06	1268.06	Yes	1250	101	101.4	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	805356	13C9-PFNA	541069	1250	Avg	0.861997				2158.44	2158.44	Yes	2500	86	86.3	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	179722	18O2-PFHxS	455011	2500	Avg	0.204418				4830.58	4830.59	Yes	5000	97	96.6	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	588442	13C2-8:2FTS	179722	5000	Avg	1.687379				9701.97	9701.97	Yes	9600	101	101.1	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	580864	13C4-PFOS	612151	2500	Avg	0.49426				4799.55	4799.55	Yes	5000	96	96.0	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	229166	D3-NMeFOSAA	580864	5000	Avg	0.833032				2368.01	2368.01	Yes	2500	95	94.7	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	498926	13C2-PFDA	401685	1250	Avg	1.130832				1372.97	1372.97	Yes	1250	110	109.8	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	473159	13C4-PFOS	612151	2500	Avg	0.37805				5111.39	5111.39	Yes	5000	102	102.2	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	231602	D5-NEtFOSAA	473159	5000	Avg	1.107201				2210.44	2210.44	Yes	2500	88	88.4	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	601279	13C4-PFOS	612151	2500	Avg	1.013707				2422.4	2422.4	Yes	2500	97	96.9	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	522283	13C8-PFOS	601279	2500	Ln	0.974909	-15.674656			2243.52	2243.52	Yes	2383	94	94.1	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	544817	13C8-PFOS	601279	2500	Avg	0.982846				2304.78	2304.78	Yes	2320	99	99.3	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	474558	13C2-PFDA	401685	1250	Avg	1.078081				1369.82	1369.82	Yes	1250	110	109.6	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	430838	13C2-PFDA	401685	1250	Avg	0.998518				1342.71	1342.71	Yes	1250	107	107.4	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	965162	13C4-PFOS	612151	2500	Avg	1.676088				2351.72	2351.72	Yes	2500	94	94.1	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	918778	13C8-PFOSA	965162	2500	Avg	0.968729				2456.68	2456.68	Yes	2500	98	98.3	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	400023	13C2-PFDA	401685	1250	Avg	0.913515				1362.68	1362.68	Yes	1250	109	109.0	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4005131	13C4-PFOS	612151	2500	Avg	0.664236				24625	24624.97	Yes	25000	98	98.5	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	257111	13C4-PFOS	612151	2500	Avg	0.433295				2423.36	2423.36	Yes	2500	97	96.9	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4380740	13C4-PFOS	612151	2500	Avg	0.73779				24249	24249.13	Yes	25000	97	97.0	Yes
073024063.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	266349	13C4-PFOS	612151	2500	Avg	0.459974				2364.82	2364.83	Yes	2500	95	94.6	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3199168	13C3-PFBA	1404719	5000	Avg	1.1358				10026	10025.72	Yes	10000	100	100.3	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1262605	13C2-PFHxA	793190	2500	Avg	0.83265				4779.34	4779.34	Yes	5000	96	95.6	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	179472	18O2-PFHxS	485612	2500	Avg	0.194687				4745.81	4745.81	Yes	5000	95	94.9	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	875697	13C2-PFHxA	793190	2500	Avg	1.093021				2525.16	2525.16	Yes	2500	101	101.0	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	744041	13C5-PFHxA	875697	2500	Avg	0.897522				2366.67	2366.67	Yes	2500	95	94.7	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	619064	18O2-PFHxS	485612	2500	Avg	1.295673				2459.75	2459.75	Yes	2500	98	98.4	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	641874	13C2-PFHxA	793190	2500	Avg	0.198771				10178	10177.93	Yes	10000	102	101.8	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	954355	13C2-PFHxA	793190	2500	Avg	1.214304				2477.11	2477.11	Yes	2500	99	99.1	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	195434	18O2-PFHxS	485612	2500	Avg	0.21977				4578.06	4578.07	Yes	5000	92	91.6	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1050297	13C4-PFOA	141894	2500	Avg	6.83278				2708.26	2708.26	Yes	2500	108	108.3	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	878937	13C8-PFOA	1050297	2500	Avg	0.884916				2364.2	2364.2	Yes	2500	95	94.6	Yes

Table 4a – Recalculation Summary: ZF20024 Instrument QC Samples

Arctic Data Services, LLC

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	524514	18O2-PFHxS	485612	2500	Avg	1.163436				2320.95	2320.95	Yes	2500	93	92.8	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	520270	13C3-PFHxS	524514	2500	Avg	1.132717				2189.22	2189.22	Yes	2285	96	95.8	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	517986	13C5-PFNA	540902	1250	Avg	0.985194				1215.03	1215.03	Yes	1250	97	97.2	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	828773	13C9-PFNA	517986	1250	Avg	0.861997				2320.18	2320.18	Yes	2500	93	92.8	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	169324	18O2-PFHxS	485612	2500	Avg	0.204418				4264.31	4264.32	Yes	5000	85	85.3	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	627026	13C2-8:2FTS	169324	5000	Avg	1.687379				10973	10972.98	Yes	9600	114	114.3	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	602209	13C4-PFOS	588598	2500	Avg	0.49426				5175.03	5175.03	Yes	5000	104	103.5	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	228972	D3-NMeFOSAA	602209	5000	Avg	0.833032				2282.15	2282.15	Yes	2500	91	91.3	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	490047	13C2-PFDA	441102	1250	Avg	1.130832				1228.03	1228.03	Yes	1250	98	98.2	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	454353	13C4-PFOS	588598	2500	Avg	0.37805				5104.64	5104.64	Yes	5000	102	102.1	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	253699	D5-NEtFOSAA	454353	5000	Avg	1.107201				2521.56	2521.56	Yes	2500	101	100.9	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	597139	13C4-PFOS	588598	2500	Avg	1.013707				2501.98	2501.98	Yes	2500	100	100.1	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	550509	13C8-PFOS	597139	2500	Ln	0.974909	-15.674656			2380.17	2380.17	Yes	2383	100	99.9	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	526535	13C8-PFOS	597139	2500	Avg	0.982846				2242.88	2242.88	Yes	2320	97	96.7	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	439567	13C2-PFDA	441102	1250	Avg	1.078081				1155.43	1155.43	Yes	1250	92	92.4	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	435346	13C2-PFDA	441102	1250	Avg	0.998518				1235.52	1235.52	Yes	1250	99	98.8	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	998516	13C4-PFOS	588598	2500	Avg	1.676088				2530.34	2530.34	Yes	2500	101	101.2	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	928763	13C8-PFOSA	998516	2500	Avg	0.968729				2400.42	2400.42	Yes	2500	96	96.0	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	388169	13C2-PFDA	441102	1250	Avg	0.913515				1204.14	1204.14	Yes	1250	96	96.3	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4098478	13C4-PFOS	588598	2500	Avg	0.664236				26207	26207.25	Yes	25000	105	104.8	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	247802	13C4-PFOS	588598	2500	Avg	0.433295				2429.08	2429.08	Yes	2500	97	97.2	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4660460	13C4-PFOS	588598	2500	Avg	0.73779				26830	26829.79	Yes	25000	107	107.3	Yes
073024078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	270488	13C4-PFOS	588598	2500	Avg	0.459974				2497.67	2497.68	Yes	2500	100	99.9	Yes
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3350130	13C3-PFBA	1578697	5000	Avg	1.1358				9341.81	9341.81	Yes	10000	93	93.4	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1342541	13C2-PFHxA	801374	2500	Avg	0.83265				5030.02	5030.02	Yes	5000	101	100.6	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	171829	18O2-PFHxS	488697	2500	Avg	0.194687				4515.02	4515.02	Yes	5000	90	90.3	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	871464	13C2-PFHxA	801374	2500	Avg	1.093021				2487.29	2487.29	Yes	2500	99	99.5	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	648488	18O2-PFHxS	488697	2500	Avg	1.295673				2560.39	2560.39	Yes	2500	102	102.4	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	682290	13C2-PFHxA	801374	2500	Avg	0.198771				10708	10708.31	Yes	10000	107	107.1	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	960503	13C2-PFHxA	801374	2500	Avg	1.214304				2467.61	2467.61	Yes	2500	99	98.7	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	186812	18O2-PFHxS	488697	2500	Avg	0.21977				4348.46	4348.47	Yes	5000	87	87.0	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1009942	13C4-PFOA	160653	2500	Avg	6.83278				2300.12	2300.12	Yes	2500	92	92.0	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	519556	18O2-PFHxS	488697	2500	Avg	1.163436				2284.5	2284.49	Yes	2500	91	91.4	
073024002.d	1633 IBLK A	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2018	13C3-PFHxS	519556	2500	Avg	1.132717		0.01	8.5725	0.08572	0.0857	Yes				
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	549187	13C5-PFNA	591228	1250	Avg	0.985194				1178.57	1178.56	Yes	1250	94	94.3	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	173301	18O2-PFHxS	488697	2500	Avg	0.204418				4336.92	4336.93	Yes	5000	87	86.7	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	555746	13C4-PFOS	614397	2500	Avg	0.49426				4575.22	4575.22	Yes	5000	92	91.5	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	509974	13C2-PFDA	460555	1250	Avg	1.130832				1223.99	1223.99	Yes	1250	98	97.9	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	436807	13C4-PFOS	614397	2500	Avg	0.37805				4701.44	4701.44	Yes	5000	94	94.0	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	614754	13C4-PFOS	614397	2500	Avg	1.013707				2467.63	2467.63	Yes	2500	99	98.7	
073024002.d	1633 IBLK A	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3075	13C8-PFOS	614754	2500	Avg	0.982846		0.01	12.723	0.12723	0.1272	Yes				
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	513832	13C2-PFDA	460555	1250	Avg	1.078081				1293.59	1293.59	Yes	1250	103	103.5	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	445605	13C2-PFDA	460555	1250	Avg	0.998518				1211.22	1211.22	Yes	1250	97	96.9	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	999613	13C4-PFOS	614397	2500	Avg	1.676088				2426.75	2426.76	Yes	2500	97	97.1	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	387582	13C2-PFDA	460555	1250	Avg	0.913515				1151.53	1151.53	Yes	1250	92	92.1	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4105916	13C4-PFOS	614397	2500	Avg	0.664236				25152	25152.35	Yes	25000	101	100.6	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	251726	13C4-PFOS	614397	2500	Avg	0.433295				2363.94	2363.93	Yes	2500	95	94.6	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4504691	13C4-PFOS	614397	2500	Avg	0.73779				24844	24844.09	Yes	25000	99	99.4	
073024002.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	272578	13C4-PFOS	614397	2500	Avg	0.459974				2411.28	2411.28	Yes	2500	96	96.5	
073024064.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3251162	13C3-PFBA	1500033	5000	Avg	1.1358				9541.27	9541.26	Yes	10000	95	95.4	
073024064.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1332666	13C2-PFHxA	844794	2500	Avg	0.83265				4736.4	4736.4	Yes	5000	95	94.7	
073024064.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	182786	18O2-PFHxS	533951	2500	Avg	0.194687				4395.87	4395.87	Yes	5000	88	87.9	
073024064.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	889188	13C2-PFHxA	844794	2500	Avg	1.093021				2407.43	2407.43	Yes	2500	96	96.3	
073024064.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	652653	18O2-PFHxS	533951	2500	Avg	1.295673				2358.44	2358.44	Yes	2500	94	94.3	
073024064.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	660931	13C2-PFHxA	844794	2500	Avg	0.198771				9839.96	9839.94	Yes	10000	98	98.4	
073024064.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	989731	13C2-PFHxA	844794	2500	Avg	1.214304				2412.01	2412.01	Yes	2500	86	96.5	
073024064.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	194025	18O2-PFHxS	533951	2500	Avg	0.21977				4133.59	4133.59	Yes	5000	83	82.7	
073024064.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	983863	13C4-PFOA	181082	2500	Avg	6.83278				1987.93	1987.93	Yes	2500	80	79.5	
073024064.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	591805	18O2-PFHxS	533951	2500	Avg	1.163436				2381.63	2381.63	Yes	2500	95	95.3	
073024064.d	CCB A4	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3373	13C3-PFHxS	591805	2500	Avg	1.132717		0.01	12.579	0.12579	0.1258	Yes				
073024064.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	523803	13C5-PFNA	583367	1250	Avg	0.985194				1139.24	1139.24	Yes	1250	91	91.1	
073024064.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	193986	18O2-PFHxS	533951	2500	Avg	0.204418				4443.13	4443.14	Yes	5000	89	88.9	
073024064.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	647067	13C4-PFOS	636230	2500	Avg	0.49426				5144.22	5144.22	Yes	5000	103	102.9	
073024064.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	492825	13C2-PFDA	461659	1250	Avg	1.130832				1180	1180	Yes	1250	94	94.4	
073024064.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	467113	13C4-PFOS	636230	2500	Avg	0.37805				4855.1	4855.1	Yes	5000	97	97.1	
073024064.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	628602	13C4-PFOS	636230	2500	Avg	1.013707				2436.63	2436.63	Yes	2500	97	97.5	
073024064.d	CCB A4	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3338	13C8-PFOS	628602	2500	Avg	0.982846		0.01	13.507	0.13507	0.1351	Yes				
073024064.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	525102	13C2-PFDA	461659	1250	Avg	1.078081				1318.81	1318.81	Yes	1250	106	105.5	
073024064.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	453737	13C2-PFDA	461659	1250	Avg	0.998518				1230.37	1230.37	Yes	1250	98	98.4	
073024064.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1000080	13C4-PFOS	636230	2500	Avg	1.676088				2344.57	2344.57	Yes	2500	94	93.8	

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
073024064.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	419965	13C2-PFDA	461659	1250	Avg	0.913515				1244.76	1244.76	Yes	1250	100	99.6	
073024064.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4199640	13C4-PFOS	636230	2500	Avg	0.664236				24844	24843.66	Yes	25000	99	99.4	
073024064.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	249671	13C4-PFOS	636230	2500	Avg	0.433295				2264.18	2264.18	Yes	2500	91	90.6	
073024064.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4519076	13C4-PFOS	636230	2500	Avg	0.73779				24068	24068.15	Yes	25000	96	96.3	
073024064.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	275861	13C4-PFOS	636230	2500	Avg	0.459974				2356.58	2356.58	Yes	2500	94	94.3	
073024079.d	CCB A5	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3309074	13C3-PFBA	1551178	5000	Avg	1.1358				9391.03	9391.02	Yes	10000	94	93.9	
073024079.d	CCB A5	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1359700	13C2-PFHxA	868821	2500	Avg	0.83265				4698.84	4698.84	Yes	5000	94	94.0	
073024079.d	CCB A5	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	183359	18O2-PFHxS	517277	2500	Avg	0.194687				4551.79	4551.79	Yes	5000	91	91.0	
073024079.d	CCB A5	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	924713	13C2-PFHxA	868821	2500	Avg	1.093021				2434.38	2434.38	Yes	2500	97	97.4	
073024079.d	CCB A5	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	664506	18O2-PFHxS	517277	2500	Avg	1.295673				2478.68	2478.68	Yes	2500	99	99.1	
073024079.d	CCB A5	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	658922	13C2-PFHxA	868821	2500	Avg	0.198771				9538.75	9538.73	Yes	10000	95	95.4	
073024079.d	CCB A5	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	971197	13C2-PFHxA	868821	2500	Avg	1.214304				2301.39	2301.39	Yes	2500	92	92.1	
073024079.d	CCB A5	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	206804	18O2-PFHxS	517277	2500	Avg	0.21977				4547.85	4547.86	Yes	5000	91	91.0	
073024079.d	CCB A5	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	975735	13C4-PFOA	185194	2500	Avg	6.83278				1927.74	1927.74	Yes	2500	77	77.1	
073024079.d	CCB A5	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	581412	18O2-PFHxS	517277	2500	Avg	1.163436				2415.23	2415.23	Yes	2500	97	96.6	
073024079.d	CCB A5	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	561152	13C5-PFNA	586834	1250	Avg	0.985194				1213.26	1213.26	Yes	1250	97	97.1	
073024079.d	CCB A5	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	179395	18O2-PFHxS	517277	2500	Avg	0.204418				4241.38	4241.39	Yes	5000	85	84.8	
073024079.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	630122	13C4-PFOS	699431	2500	Avg	0.49426				4556.85	4556.85	Yes	5000	91	91.1	
073024079.d	CCB A5	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	542284	13C2-PFDA	473494	1250	Avg	1.130832				1265.97	1265.97	Yes	1250	101	101.3	
073024079.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	496570	13C4-PFOS	699431	2500	Avg	0.37805				4694.9	4694.9	Yes	5000	94	93.9	
073024079.d	CCB A5	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	652499	13C4-PFOS	699431	2500	Avg	1.013707				2300.71	2300.71	Yes	2500	92	92.0	
073024079.d	CCB A5	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3907	13C8-PFOS	652499	2500	Avg	0.982846		0.01	15.231	0.15231	0.1523	Yes				
073024079.d	CCB A5	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	509032	13C2-PFDA	473494	1250	Avg	1.078081				1246.49	1246.49	Yes	1250	100	99.7	
073024079.d	CCB A5	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	460333	13C2-PFDA	473494	1250	Avg	0.998518				1217.06	1217.06	Yes	1250	97	97.4	
073024079.d	CCB A5	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	952552	13C4-PFOS	699431	2500	Avg	1.676088				2031.36	2031.36	Yes	2500	81	81.3	
073024079.d	CCB A5	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	415739	13C2-PFDA	473494	1250	Avg	0.913515				1201.44	1201.44	Yes	1250	96	96.1	
073024079.d	CCB A5	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4216233	13C4-PFOS	699431	2500	Avg	0.664236				22688	22688.06	Yes	25000	91	90.8	
073024079.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	254575	13C4-PFOS	699431	2500	Avg	0.433295				2100.04	2100.04	Yes	2500	84	84.0	
073024079.d	CCB A5	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4624366	13C4-PFOS	699431	2500	Avg	0.73779				22403	22403.43	Yes	25000	90	89.6	
073024079.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	280883	13C4-PFOS	699431	2500	Avg	0.459974				2182.66	2182.67	Yes	2500	87	87.3	

Key

from quantitation report
from reported calibration
from lab report/EDD
calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
ND	not detected
ng/L	nanograms per liter
RF	response factor

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc. (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3198046	13C3-PFBA	1433072	5000	Avg	1.130641				9868.75	9868.75	Yes	10000	99	98.7	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2614970	13C4-PFBA	3198046	10000	Avg	0.834189				9802.06	9802.06	Yes	10000	98	98	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1311043	13C2-PFHxA	749699	2500	Avg	0.8402				5203.4	5203.4	Yes	5000	104	104.1	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	174032	18O2-PFHxS	465653	2500	Avg	0.200536				4659.23	4659.23	Yes	5000	93	93.2	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	814878	13C2-PFHxA	749699	2500	Avg	1.104288				2460.73	2460.73	Yes	2500	98	98.4	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	566164	18O2-PFHxS	465653	2500	Avg	1.299121				2339.76	2339.75	Yes	2500	94	93.6	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	618330	13C2-PFHxA	749699	2500	Avg	0.205187				10049	10049.02	Yes	10000	100	100.5	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	888697	13C2-PFHxA	749699	2500	Avg	1.198314				2473.07	2473.07	Yes	2500	99	98.9	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	196492	18O2-PFHxS	465653	2500	Avg	0.236825				4454.46	4454.46	Yes	5000	89	89.1	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1082792	13C4-PFOA	159367	2500	Avg	6.698736				2535.68	2535.68	Yes	2500	101	101.4	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	507525	18O2-PFHxS	465653	2500	Avg	1.157763				2353.51	2353.51	Yes	2500	94	94.1	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	474450	13C3-PFHxS	507525	2500	Avg	1.144236				2042.48	2042.48	Yes	2285	89	89.4	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	509331	13C5-PFNA	532971	1250	Avg	0.988588				1208.35	1208.35	Yes	1250	97	96.7	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	166983	18O2-PFHxS	465653	2500	Avg	0.213625				4196.61	4196.6	Yes	5000	84	83.9	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	598488	13C4-PFOS	536674	2500	Avg	0.548279				5084.91	5084.91	Yes	5000	102	101.7	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	486805	13C2-PFDA	411167	1250	Avg	1.165674				1269.61	1269.61	Yes	1250	102	101.6	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	486523	13C4-PFOS	536674	2500	Avg	0.420694				5387.24	5387.24	Yes	5000	108	107.7	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	535024	13C4-PFOS	536674	2500	Avg	1.004997				2479.92	2479.92	Yes	2500	99	99.2	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	482678	13C8-PFOS	535024	2500	Avg	0.990455				2277.14	2277.14	Yes	2320	98	98.2	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	469540	13C2-PFDA	411167	1250	Avg	1.107859				1288.49	1288.49	Yes	1250	103	103.1	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	448736	13C2-PFDA	411167	1250	Avg	1.018582				1339.33	1339.33	Yes	1250	107	107.1	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	965031	13C4-PFOS	536674	2500	Avg	1.722863				2609.28	2609.28	Yes	2500	104	104.4	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	382601	13C2-PFDA	411167	1250	Avg	0.914538				1271.85	1271.85	Yes	1250	102	101.7	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4106214	13C4-PFOS	536674	2500	Avg	0.727301				26300	26300.07	Yes	25000	105	105.2	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	244453	13C4-PFOS	536674	2500	Avg	0.453376				2511.69	2511.69	Yes	2500	100	100.5	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4546666	13C4-PFOS	536674	2500	Avg	0.801502				26425	26425.18	Yes	25000	106	105.7	Yes
080824061.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	263697	13C4-PFOS	536674	2500	Avg	0.486842				2523.17	2523.17	Yes	2500	101	100.9	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3070956	13C3-PFBA	1375687	5000	Avg	1.130641				9871.86	9871.87	Yes	10000	99	98.7	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2480428	13C4-PFBA	3070956	10000	Avg	0.834189				9682.52	9682.52	Yes	10000	97	96.8	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1252625	13C2-PFHxA	741059	2500	Avg	0.8402				5029.51	5029.51	Yes	5000	101	100.6	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	179627	18O2-PFHxS	448621	2500	Avg	0.200536				4991.6	4991.6	Yes	5000	100	99.8	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	800008	13C2-PFHxA	741059	2500	Avg	1.104288				2443.99	2443.99	Yes	2500	98	97.8	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	564567	18O2-PFHxS	448621	2500	Avg	1.299121				2421.73	2421.73	Yes	2500	97	96.9	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	579970	13C2-PFHxA	741059	2500	Avg	0.205187				9535.49	9535.49	Yes	10000	95	95.4	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	888247	13C2-PFHxA	741059	2500	Avg	1.198314				2500.64	2500.64	Yes	2500	100	100	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	226225	18O2-PFHxS	448621	2500	Avg	0.236825				5323.22	5323.21	Yes	5000	106	106.5	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1050344	13C4-PFOA	157369	2500	Avg	6.698736				2490.92	2490.92	Yes	2500	100	99.6	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	535056	18O2-PFHxS	448621	2500	Avg	1.157763				2575.37	2575.37	Yes	2500	103	103	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	501409	13C3-PFHxS	535056	2500	Avg	1.144236				2047.47	2047.47	Yes	2285	90	89.6	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	529178	13C5-PFNA	497409	1250	Avg	0.988588				1345.19	1345.19	Yes	1250	108	107.6	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	207250	18O2-PFHxS	448621	2500	Avg	0.213625				5406.34	5406.33	Yes	5000	108	108.1	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	620004	13C4-PFOS	563434	2500	Avg	0.548279				5017.53	5017.53	Yes	5000	100	100.4	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	467464	13C2-PFDA	405514	1250	Avg	1.165674				1236.16	1236.16	Yes	1250	99	98.9	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	483493	13C4-PFOS	563434	2500	Avg	0.420694				5099.42	5099.42	Yes	5000	102	102	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	573711	13C4-PFOS	563434	2500	Avg	1.004997				2532.94	2532.94	Yes	2500	101	101.3	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	481584	13C8-PFOS	573711	2500	Avg	0.990455				2118.77	2118.77	Yes	2320	91	91.3	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	458990	13C2-PFDA	405514	1250	Avg	1.107859				1277.09	1277.09	Yes	1250	102	102.2	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	421508	13C2-PFDA	405514	1250	Avg	1.018582				1275.6	1275.6	Yes	1250	102	102	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	945059	13C4-PFOS	563434	2500	Avg	1.722863				2433.91	2433.91	Yes	2500	97	97.4	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	376682	13C2-PFDA	405514	1250	Avg	0.914538				1269.63	1269.63	Yes	1250	102	101.6	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3985760	13C4-PFOS	563434	2500	Avg	0.727301				24316	24316.1	Yes	25000	97	97.3	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	241644	13C4-PFOS	563434	2500	Avg	0.453376				2364.91	2364.91	Yes	2500	95	94.6	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4427420	13C4-PFOS	563434	2500	Avg	0.801502				24510	24509.99	Yes	25000	98	98	Yes
080824078.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	259170	13C4-PFOS	563434	2500	Avg	0.486842				2362.07	2362.07	Yes	2500	94	94.5	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3285721	13C3-PFBA	1462932	5000	Avg	1.130641				9932.34	9932.35	Yes	10000	99	99.3	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2655745	13C4-PFBA	3285721	10000	Avg	0.834189				9689.27	9689.27	Yes	10000	97	96.9	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1302665	13C2-PFHxA	780495	2500	Avg	0.8402				4966.15	4966.15	Yes	5000	99	99.3	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	178634	18O2-PFHxS	452721	2500	Avg	0.200536				4919.05	4919.05	Yes	5000	98	98.4	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	874170	13C2-PFHxA	780495	2500	Avg	1.104288				2535.62	2535.62	Yes	2500	101	101.4	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	576053	18O2-PFHxS	452721	2500	Avg	1.299121				2448.63	2448.62	Yes	2500	98	97.9	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	653053	13C2-PFHxA	780495	2500	Avg	0.205187				10195	10194.56	Yes	10000	102	101.9	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	927464	13C2-PFHxA	780495	2500	Avg	1.198314				2479.11	2479.11	Yes	2500	99	99.2	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	220896	18O2-PFHxS	452721	2500	Avg	0.236825				5150.75	5150.74	Yes	5000	103	103	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc. (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1003816	13C4-PFOA	160214	2500	Avg	6.698736				2338.3	2338.3	Yes	2500	94	93.5	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	512579	18O2-PFHxS	452721	2500	Avg	1.157763				2444.84	2444.84	Yes	2500	98	97.8	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	515662	13C3-PFHxS	512579	2500	Avg	1.144236				2198	2198.01	Yes	2285	96	96.2	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	528476	13C5-PFNA	534416	1250	Avg	0.988588				1250.38	1250.38	Yes	1250	100	100	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	205682	18O2-PFHxS	452721	2500	Avg	0.213625				5316.85	5316.84	Yes	5000	106	106.3	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	611499	13C4-PFOS	549058	2500	Avg	0.548279				5078.27	5078.27	Yes	5000	102	101.6	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	465871	13C2-PFDA	436185	1250	Avg	1.165674				1145.32	1145.32	Yes	1250	92	91.6	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	498861	13C4-PFOS	549058	2500	Avg	0.420694				5399.26	5399.27	Yes	5000	108	108	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	556851	13C4-PFOS	549058	2500	Avg	1.004997				2522.88	2522.88	Yes	2500	101	100.9	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	491609	13C8-PFOS	556851	2500	Avg	0.990455				2228.36	2228.36	Yes	2320	96	96.1	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	464323	13C2-PFDA	436185	1250	Avg	1.107859				1201.09	1201.09	Yes	1250	96	96.1	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	420589	13C2-PFDA	436185	1250	Avg	1.018582				1183.32	1183.32	Yes	1250	95	94.7	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	969162	13C4-PFOS	549058	2500	Avg	1.722863				2561.34	2561.34	Yes	2500	102	102.5	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	387783	13C2-PFDA	436185	1250	Avg	0.914538				1215.14	1215.14	Yes	1250	97	97.2	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4233596	13C4-PFOS	549058	2500	Avg	0.727301				26504	26504.34	Yes	25000	106	106	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	248450	13C4-PFOS	549058	2500	Avg	0.453376				2495.18	2495.18	Yes	2500	100	99.8	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4566539	13C4-PFOS	549058	2500	Avg	0.801502				25942	25942.05	Yes	25000	104	103.8	Yes
080824090.d	CCV L5F_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	266592	13C4-PFOS	549058	2500	Avg	0.486842				2493.34	2493.34	Yes	2500	100	99.7	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3010754	13C3-PFBA	1326441	5000	Avg	1.130641				10038	10037.66	Yes	10000	100	100.4	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2413039	13C4-PFBA	3010754	10000	Avg	0.834189				9607.81	9607.81	Yes	10000	96	96.1	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1176520	13C2-PFHxA	707195	2500	Avg	0.8402				4950.14	4950.14	Yes	5000	99	99	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	174531	18O2-PFHxS	419515	2500	Avg	0.200536				5186.48	5186.48	Yes	5000	104	103.7	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	777086	13C2-PFHxA	707195	2500	Avg	1.104288				2487.64	2487.64	Yes	2500	100	99.5	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	552719	18O2-PFHxS	419515	2500	Avg	1.299121				2535.41	2535.4	Yes	2500	101	101.4	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	602525	13C2-PFHxA	707195	2500	Avg	0.205187				10381	10380.69	Yes	10000	104	103.8	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	847080	13C2-PFHxA	707195	2500	Avg	1.198314				2498.93	2498.93	Yes	2500	100	100	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	195327	18O2-PFHxS	419515	2500	Avg	0.236825				4915.05	4915.04	Yes	5000	98	98.3	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	990650	13C4-PFOA	155757	2500	Avg	6.698736				2373.67	2373.67	Yes	2500	95	94.9	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	511526	18O2-PFHxS	419515	2500	Avg	1.157763				2632.94	2632.94	Yes	2500	105	105.3	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	473541	13C3-PFHxS	511526	2500	Avg	1.144236				2022.62	2022.62	Yes	2285	89	88.5	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	495942	13C5-PFNA	498270	1250	Avg	0.988588				1258.52	1258.52	Yes	1250	101	100.7	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	185931	18O2-PFHxS	419515	2500	Avg	0.213625				5186.72	5186.71	Yes	5000	104	103.7	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	636840	13C4-PFOS	529179	2500	Avg	0.548279				5487.39	5487.39	Yes	5000	110	109.7	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	457548	13C2-PFDA	392686	1250	Avg	1.165674				1249.46	1249.47	Yes	1250	100	100	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	439585	13C4-PFOS	529179	2500	Avg	0.420694				4936.44	4936.44	Yes	5000	99	98.7	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	540313	13C4-PFOS	529179	2500	Avg	1.004997				2539.91	2539.91	Yes	2500	102	101.6	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	439077	13C8-PFOS	540313	2500	Avg	0.990455				2051.17	2051.16	Yes	2320	88	88.4	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	441422	13C2-PFDA	392686	1250	Avg	1.107859				1268.34	1268.34	Yes	1250	101	101.5	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	415773	13C2-PFDA	392686	1250	Avg	1.018582				1299.35	1299.35	Yes	1250	104	103.9	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	922717	13C4-PFOS	529179	2500	Avg	1.722863				2530.2	2530.2	Yes	2500	101	101.2	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	373162	13C2-PFDA	392686	1250	Avg	0.914538				1298.85	1298.85	Yes	1250	104	103.9	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3848259	13C4-PFOS	529179	2500	Avg	0.727301				24997	24996.98	Yes	25000	100	100	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	227225	13C4-PFOS	529179	2500	Avg	0.453376				2367.74	2367.75	Yes	2500	95	94.7	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4242317	13C4-PFOS	529179	2500	Avg	0.801502				25006	25005.52	Yes	25000	100	100	Yes
080824105.d	CCV L5G_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	255959	13C4-PFOS	529179	2500	Avg	0.486842				2483.82	2483.82	Yes	2500	99	99.4	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3082344	13C3-PFBA	1541176	5000	Avg	1.130641				8844.52	8844.52	Yes	10000	88	88.4	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1244970	13C2-PFHxA	815398	2500	Avg	0.8402				4543.04	4543.04	Yes	5000	91	90.9	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	172388	18O2-PFHxS	428842	2500	Avg	0.200536				5011.38	5011.38	Yes	5000	100	100.2	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	800327	13C2-PFHxA	815398	2500	Avg	1.104288				2222.06	2222.06	Yes	2500	89	88.9	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	531685	18O2-PFHxS	428842	2500	Avg	1.299121				2385.87	2385.87	Yes	2500	95	95.4	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	613916	13C2-PFHxA	815398	2500	Avg	0.205187				9173.38	9173.38	Yes	10000	92	91.7	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	893105	13C2-PFHxA	815398	2500	Avg	1.198314				2285.08	2285.08	Yes	2500	91	91.4	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	198993	18O2-PFHxS	428842	2500	Avg	0.236825				4898.39	4898.39	Yes	5000	98	98.0	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1013095	13C4-PFOA	167169	2500	Avg	6.698736				2261.73	2261.73	Yes	2500	90	90.5	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	514463	18O2-PFHxS	428842	2500	Avg	1.157763				2590.46	2590.46	Yes	2500	104	103.6	Yes
080824062.d	CCB A4	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2963	13C3-PFHxS	514463	2500	Avg	1.144236		0.01	12.584	0.12584	0.1258	Yes				
080824062.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	463301	13C5-PFNA	518411	1250	Avg	0.988588				1130.01	1130.01	Yes	1250	90	90.4	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	182125	18O2-PFHxS	428842	2500	Avg	0.213625				4970.05	4970.04	Yes	5000	99	99.4	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	589459	13C4-PFOS	636773	2500	Avg	0.548279				4220.92	4220.92	Yes	5000	84	84.4	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	475894	13C2-PFDA	460991	1250	Avg	1.165674				1107.01	1107.01	Yes	1250	89	88.6	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	453202	13C4-PFOS	636773	2500	Avg	0.420694				4229.42	4229.42	Yes	5000	85	84.6	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	581429	13C4-PFOS	636773	2500	Avg	1.004997				2271.37	2271.37	Yes	2500	91	90.9	Yes
080824062.d	CCB A4	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3553	13C8-PFOS	581429	2500	Avg	0.990455		0.01	15.424	0.15424	0.1542	Yes				

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc. (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080824062.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	443562	13C2-PFDA	460991	1250	Avg	1.107859				1085.64	1085.64	Yes	1250	87	86.9	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	411657	13C2-PFDA	460991	1250	Avg	1.018582				1095.86	1095.87	Yes	1250	88	87.7	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	908737	13C4-PFOS	636773	2500	Avg	1.722863				2070.82	2070.82	Yes	2500	83	82.8	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	364779	13C2-PFDA	460991	1250	Avg	0.914538				1081.55	1081.55	Yes	1250	87	86.5	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3924175	13C4-PFOS	636773	2500	Avg	0.727301				21183	21183.1	Yes	25000	85	84.7	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	236579	13C4-PFOS	636773	2500	Avg	0.453376				2048.67	2048.67	Yes	2500	82	81.9	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4367444	13C4-PFOS	636773	2500	Avg	0.801502				21393	21393.32	Yes	25000	86	85.6	Yes
080824062.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	260093	13C4-PFOS	636773	2500	Avg	0.486842				2097.47	2097.47	Yes	2500	84	83.9	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3048298	13C3-PFBA	1513268	5000	Avg	1.130641				8908.14	8908.14	Yes	10000	89	89.1	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1234539	13C2-PFHxA	805736	2500	Avg	0.8402				4559	4559	Yes	5000	91	91.2	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	180555	18O2-PFHxS	444281	2500	Avg	0.200536				5066.4	5066.4	Yes	5000	101	101.3	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	808325	13C2-PFHxA	805736	2500	Avg	1.104288				2271.18	2271.18	Yes	2500	91	90.8	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	567675	18O2-PFHxS	444281	2500	Avg	1.299121				2458.85	2458.85	Yes	2500	98	98.4	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	630023	13C2-PFHxA	805736	2500	Avg	0.205187				9526.95	9526.95	Yes	10000	95	95.3	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	899133	13C2-PFHxA	805736	2500	Avg	1.198314				2328.09	2328.09	Yes	2500	93	93.1	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	218403	18O2-PFHxS	444281	2500	Avg	0.236825				5189.36	5189.35	Yes	5000	104	103.8	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1005051	13C4-PFOA	157657	2500	Avg	6.698736				2379.15	2379.15	Yes	2500	95	95.2	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	494383	18O2-PFHxS	444281	2500	Avg	1.157763				2402.85	2402.85	Yes	2500	96	96.1	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	533237	13C5-PFNA	581342	1250	Avg	0.988588				1159.8	1159.8	Yes	1250	93	92.8	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	178284	18O2-PFHxS	444281	2500	Avg	0.213625				4696.16	4696.16	Yes	5000	94	93.9	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	586272	13C4-PFOS	571092	2500	Avg	0.548279				4680.92	4680.92	Yes	5000	94	93.6	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	478190	13C2-PFDA	471689	1250	Avg	1.165674				1087.12	1087.12	Yes	1250	87	87.0	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	467833	13C4-PFOS	571092	2500	Avg	0.420694				4868.08	4868.09	Yes	5000	97	97.4	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	560209	13C4-PFOS	571092	2500	Avg	1.004997				2440.16	2440.17	Yes	2500	98	97.6	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	457170	13C2-PFDA	471689	1250	Avg	1.107859				1093.57	1093.57	Yes	1250	87	87.5	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	422580	13C2-PFDA	471689	1250	Avg	1.018582				1099.43	1099.43	Yes	1250	88	88.0	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	916208	13C4-PFOS	571092	2500	Avg	1.722863				2327.97	2327.97	Yes	2500	93	93.1	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	393688	13C2-PFDA	471689	1250	Avg	0.914538				1140.79	1140.79	Yes	1250	91	91.3	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3865683	13C4-PFOS	571092	2500	Avg	0.727301				23267	23267.3	Yes	25000	93	93.1	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	241918	13C4-PFOS	571092	2500	Avg	0.453376				2335.84	2335.84	Yes	2500	93	93.4	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4397498	13C4-PFOS	571092	2500	Avg	0.801502				24018	24017.9	Yes	25000	96	96.1	Yes
080824079.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	253987	13C4-PFOS	571092	2500	Avg	0.486842				2283.8	2283.8	Yes	2500	91	91.4	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3144011	13C3-PFBA	1543526	5000	Avg	1.130641				9007.73	9007.73	Yes	10000	90	90.1	Yes
080824091.d	CCB A6	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1683	13C4-PFBA	3144011	10000	Avg	0.834189		0.01	6.4171	0.06417	0.0642	Yes				
080824091.d	CCB A6	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1246309	13C2-PFHxA	820742	2500	Avg	0.8402				4518.31	4518.31	Yes	5000	90	90.4	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	176054	18O2-PFHxS	468664	2500	Avg	0.200536				4683.08	4683.08	Yes	5000	94	93.7	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	779709	13C2-PFHxA	820742	2500	Avg	1.104288				2150.72	2150.72	Yes	2500	86	86.0	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	581112	18O2-PFHxS	468664	2500	Avg	1.299121				2386.1	2386.1	Yes	2500	95	95.4	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	607922	13C2-PFHxA	820742	2500	Avg	0.205187				9024.67	9024.67	Yes	10000	90	90.2	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	916488	13C2-PFHxA	820742	2500	Avg	1.198314				2329.64	2329.64	Yes	2500	93	93.2	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	193880	18O2-PFHxS	468664	2500	Avg	0.236825				4367.01	4367.01	Yes	5000	87	87.3	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	997564	13C4-PFOA	172163	2500	Avg	6.698736				2162.46	2162.46	Yes	2500	86	86.5	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	494761	18O2-PFHxS	468664	2500	Avg	1.157763				2279.58	2279.58	Yes	2500	91	91.2	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	460026	13C5-PFNA	567760	1250	Avg	0.988588				1024.5	1024.5	Yes	1250	82	82.0	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	178595	18O2-PFHxS	468664	2500	Avg	0.213625				4459.6	4459.6	Yes	5000	89	89.2	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	575556	13C4-PFOS	618419	2500	Avg	0.548279				4243.69	4243.69	Yes	5000	85	84.9	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	496112	13C2-PFDA	415798	1250	Avg	1.165674				1279.47	1279.47	Yes	1250	102	102.4	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	435910	13C4-PFOS	618419	2500	Avg	0.420694				4188.78	4188.78	Yes	5000	84	83.8	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	568421	13C4-PFOS	618419	2500	Avg	1.004997				2286.45	2286.45	Yes	2500	91	91.5	Yes
080824091.d	CCB A6	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2018	13C8-PFOS	568421	2500	Avg	0.990455		0.01	8.961	0.08961	0.0896	Yes				
080824091.d	CCB A6	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	448998	13C2-PFDA	415798	1250	Avg	1.107859				1218.39	1218.39	Yes	1250	97	97.5	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	386132	13C2-PFDA	415798	1250	Avg	1.018582				1139.64	1139.64	Yes	1250	91	91.2	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	916942	13C4-PFOS	618419	2500	Avg	1.722863				2151.53	2151.53	Yes	2500	86	86.1	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	370857	13C2-PFDA	415798	1250	Avg	0.914538				1219.08	1219.08	Yes	1250	98	97.5	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4059129	13C4-PFOS	618419	2500	Avg	0.727301				22562	22561.91	Yes	25000	90	90.2	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	234276	13C4-PFOS	618419	2500	Avg	0.453376				2088.94	2088.94	Yes	2500	84	83.6	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4444666	13C4-PFOS	618419	2500	Avg	0.801502				22418	22417.73	Yes	25000	90	89.7	Yes
080824091.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	247718	13C4-PFOS	618419	2500	Avg	0.486842				2056.96	2056.96	Yes	2500	82	82.3	Yes
080824106.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2928622	13C3-PFBA	1431912	5000	Avg	1.130641				9044.66	9044.66	Yes	10000	90	90.4	
080824106.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1226136	13C2-PFHxA	804796	2500	Avg	0.8402				4533.25	4533.26	Yes	5000	91	90.7	
080824106.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	178069	18O2-PFHxS	484126	2500	Avg	0.200536				4585.4	4585.4	Yes	5000	92	91.7	
080824106.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	812804	13C2-PFHxA	804796	2500	Avg	1.104288				2286.43	2286.43	Yes	2500	91	91.5	
080824106.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	556274	18O2-PFHxS	484126	2500	Avg	1.299121				2211.16	2211.16	Yes	2500	88	88.4	

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc. (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080824106.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	587614	13C2-PFHxA	804796	2500	Avg	0.205187				8896.03	8896.04	Yes	10000	89	89.0	
080824106.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	864064	13C2-PFHxA	804796	2500	Avg	1.198314				2239.9	2239.9	Yes	2500	90	89.6	
080824106.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	196920	18O2-PFHxS	484126	2500	Avg	0.236825				4293.83	4293.82	Yes	5000	86	85.9	
080824106.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	994811	13C4-PFOA	166892	2500	Avg	6.698736				2224.6	2224.6	Yes	2500	89	89.0	
080824106.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	531467	18O2-PFHxS	484126	2500	Avg	1.157763				2370.49	2370.49	Yes	2500	95	94.8	
080824106.d	CCB A7	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2652	13C3-PFHxS	531467	2500	Avg	1.144236		0.01	10.902	0.10902	0.109	Yes				
080824106.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	491232	13C5-PFNA	583068	1250	Avg	0.988588				1065.28	1065.28	Yes	1250	85	85.2	
080824106.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	189968	18O2-PFHxS	484126	2500	Avg	0.213625				4592.09	4592.09	Yes	5000	92	91.8	
080824106.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	611203	13C4-PFOS	607961	2500	Avg	0.548279				4584.04	4584.04	Yes	5000	92	91.7	
080824106.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	468730	13C2-PFDA	460162	1250	Avg	1.165674				1092.31	1092.31	Yes	1250	87	87.4	
080824106.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	483726	13C4-PFOS	607961	2500	Avg	0.420694				4728.21	4728.22	Yes	5000	95	94.6	
080824106.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	558506	13C4-PFOS	607961	2500	Avg	1.004997				2285.22	2285.22	Yes	2500	91	91.4	
080824106.d	CCB A7	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2834	13C8-PFOS	558506	2500	Avg	0.990455		0.01	12.808	0.12808	0.1281	Yes				
080824106.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	470271	13C2-PFDA	460162	1250	Avg	1.107859				1153.09	1153.09	Yes	1250	92	92.2	
080824106.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	392118	13C2-PFDA	460162	1250	Avg	1.018582				1045.73	1045.73	Yes	1250	84	83.7	
080824106.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	933792	13C4-PFOS	607961	2500	Avg	1.722863				2228.76	2228.76	Yes	2500	89	89.2	
080824106.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	372648	13C2-PFDA	460162	1250	Avg	0.914538				1106.87	1106.87	Yes	1250	89	88.5	
080824106.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3952179	13C4-PFOS	607961	2500	Avg	0.727301				22345	22345.33	Yes	25000	89	89.4	
080824106.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	239468	13C4-PFOS	607961	2500	Avg	0.453376				2171.97	2171.97	Yes	2500	87	86.9	
080824106.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4299762	13C4-PFOS	607961	2500	Avg	0.801502				22060	22059.93	Yes	25000	88	88.2	
080824106.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	249532	13C4-PFOS	607961	2500	Avg	0.486842				2107.67	2107.67	Yes	2500	84	84.3	

Key

	from quantitation report
	from reported calibration
	from lab report/EDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
ND	not detected
ng/L	nanograms per liter
RF	response factor

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
073024045.d	ZQ15153-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	2940661	13C3-PFBA	1715109	5000	Avg	1.1358						7547.82	7547.82	100				10000	75	75	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1207938	13C2-PFHxA	948050	2500	Avg	0.83265						3825.53	3825.52	100				5000	77	77	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	161022	18O2-PFHxS	602887	2500	Avg	0.194687						3429.67	3429.67	100				5000	69	69	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	798791	13C2-PFHxA	948050	2500	Avg	1.093021						1927.14	1927.14	100				2500	77	77	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	586975	18O2-PFHxS	602887	2500	Avg	1.295673						1878.57	1878.57	100				2500	75	75	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	607040	13C2-PFHxA	948050	2500	Avg	0.198771						8053.3	8053.28	100				10000	81	81	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	868830	13C2-PFHxA	948050	2500	Avg	1.214304						1886.76	1886.76	100				2500	75	75	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	185541	18O2-PFHxS	602887	2500	Avg	0.21977						3500.86	3500.87	100				5000	70	70	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	998763	13C4-PFOA	199595	2500	Avg	6.83278						1830.86	1830.86	100				2500	73	73	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	504880	18O2-PFHxS	602887	2500	Avg	1.163436						1799.49	1799.49	100				2500	72	72	Yes			
073024045.d	ZQ15153-001		Method_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	5334	13C3-PFHxS	504880	2500	Avg	1.132717		23.318	5	5	1	0.02332	0.0233	100	0.023	0.023	Yes							
073024045.d	ZQ15153-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	497710	13C5-PFNA	696887	1250	Avg	0.985194						906.15	906.15	100				1250	72	72	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	166699	18O2-PFHxS	602887	2500	Avg	0.204418						3381.56	3381.57	100				5000	68	68	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	560675	13C4-PFOS	750702	2500	Avg	0.49426						3777.71	3777.71	100				5000	76	76	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	470881	13C2-PFDA	523595	1250	Avg	1.130832						994.09	994.09	100				1250	80	80	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	447372	13C4-PFOS	750702	2500	Avg	0.37805						3940.86	3940.87	100				5000	79	79	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	558205	13C4-PFOS	750702	2500	Avg	1.013707						1833.81	1833.81	100				2500	73	73	Yes			
073024045.d	ZQ15153-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	5187	13C8-PFOS	558205	2500	Avg	0.982846		23.636	5	5	1	0.02364	0.0236	100	0.024	0.024	Yes							
073024045.d	ZQ15153-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	455961	13C2-PFDA	523595	1250	Avg	1.078081						1009.7	1009.7	100				1250	81	81	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	419201	13C2-PFDA	523595	1250	Avg	0.998518						1002.26	1002.26	100				1250	80	80	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	650021	13C4-PFOS	750702	2500	Avg	1.676088						1291.53	1291.53	100				2500	52	52	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	411890	13C2-PFDA	523595	1250	Avg	0.913515						1076.42	1076.42	100				1250	86	86	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2195116	13C4-PFOS	750702	2500	Avg	0.664236						11005	11005.44	100				25000	44	44	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	112068	13C4-PFOS	750702	2500	Avg	0.433295						861.33	861.33	100				2500	34	34	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2458909	13C4-PFOS	750702	2500	Avg	0.73779						11099	11098.96	100				25000	44	44	Yes			
073024045.d	ZQ15153-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	122691	13C4-PFOS	750702	2500	Avg	0.459974						888.28	888.28	100				2500	36	36	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2832194	13C3-PFBA	1497424	5000	Avg	1.1358						8326.19	8326.19	100				10000	83	83	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1162984	13C2-PFHxA	837778	2500	Avg	0.83265						4167.95	4167.95	100				5000	83	83	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	163884	18O2-PFHxS	495871	2500	Avg	0.194687						4243.96	4243.96	100				5000	85	85	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	737321	13C2-PFHxA	837778	2500	Avg	1.093021						2012.98	2012.98	100				2500	81	81	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	639398	13C5-PFHxA	737321	2500	Avg	0.897522		2415.51	5	5	1	2.4155	2.4155	100	2.4	2.4	Yes	2.4	101	101	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	544779	18O2-PFHxS	495871	2500	Avg	1.295673						2119.81	2119.81	100				2500	85	85	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	540253	13C2-PFHxA	837778	2500	Avg	0.198771						8110.66	8110.64	100				10000	81	81	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	815821	13C2-PFHxA	837778	2500	Avg	1.214304						2004.83	2004.83	100				2500	80	80	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	163243	18O2-PFHxS	495871	2500	Avg	0.21977						3744.87	3744.88	100				5000	75	75	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	988957	13C4-PFOA	164373	2500	Avg	6.83278						2201.35	2201.35	100				2500	88	88	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	791027	13C8-PFOA	988957	2500	Avg	0.884916		2259.71	5	5	1	2.2597	2.2597	100	2.3	2.3	Yes	2.4	94	94	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	504496	18O2-PFHxS	495871	2500	Avg	1.163436						2186.18	2186.18	100				2500	87	87	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	498009	13C3-PFHxS	504496	2500	Avg	1.132717		2178.7	5	5	1	2.1787	2.1787	100	2.2	2.2	Yes	2.2	99	99	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	440537	13C5-PFNA	593341	1250	Avg	0.985194						942.03	942.03	100				1250	75	75	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	735215	13C9-PFNA	440537	1250	Avg	0.861997		2420.12	5	5	1	2.4201	2.4201	100	2.4	2.4	Yes	2.4	101	101	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	160582	18O2-PFHxS	495871	2500	Avg	0.204418						3960.48	3960.49	100				5000	79	79	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	551430	13C2-8:2FTS	160582	5000	Avg	1.687379		10175	5	5	1	10.175	10.1754	100	10	10	Yes	9.2	110	111	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	516085	13C4-PFOS	637066	2500	Avg	0.49426						4097.52	4097.52	100				5000	82	82	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	194703	D3-NMeFOSAA	516085	5000	Avg	0.833032		2264.43	5	5	1	2.2644	2.2644	100	2.3	2.3	Yes	2.4	94	94	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	451328	13C2-PFDA	484312	1250	Avg	1.130832						1030.1	1030.1	100				1250	82	82	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	393288	13C4-PFOS	637066	2500	Avg	0.37805						4082.41	4082.41	100				5000	82	82	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	202649	D5-NEtFOSAA	393288	5000	Avg	1.107201		2326.9	5	5	1	2.3269	2.3269	100	2.3	2.3	Yes	2.4	97	97	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	495199	13C4-PFOS	637066	2500	Avg	1.013707						1917	1917	100				2500	77	77	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	470085	13C8-PFOS	495199	2500	Ln	0.974909	-15.674656	2450.37	5	5	1	2.4504	2.4504	100	2.5	2.5	Yes	2.3	107	107	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	471340	13C8-PFOS	495199	2500	Avg	0.982846		2421.08	5	5	1	2.4211	2.4211	100	2.4	2.4	Yes	2.2	109	110	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	392712	13C2-PFDA	484312	1250	Avg	1.078081						940.17	940.17	100				1250	75	75	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	347649	13C2-PFDA	484312	1250	Avg	0.998518						898.61	898.61	100				1250	72	72	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	596885	13C4-PFOS	637066	2500	Avg	1.676088						1397.49	1397.49	100				2500	56	56	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	548018	13C8-PFOSA	596885	2500	Avg	0.968729		2369.42	5	5	1	2.3694	2.3694	100	2.4	2.4	Yes	2.4	99	99	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	353418	13C2-PFDA	484312	1250	Avg	0.913515						998.52	998.52	100				1250	80	80	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1924972	13C4-PFOS	637066	2500	Avg	0.664236						11373	11372.54	100				25000	45	45	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	111949	13C4-PFOS	637066	2500	Avg	0.433295						1013.89	1013.89	100				2500	41	41	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2301937	13C4-PFOS	637066	2500	Avg	0.73779						12244	12243.8	100				25000	49	49	Yes			
073024046.d	ZQ15153-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	113353	13C4-PFOS	637066	2500	Avg	0.459974						967.06	967.06	100				2500	39	39	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2931542	13C3-PFBA	1558207	5000	Avg	1.1358						8282.07	8282.0741	100				10000	83	82.8	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1212556	13C2-PFHxA	886666	2500	Avg	0.83265						4106.01	4106.0031	100				5000	82	82.1	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	166310	18O2-PFHxS	528195	2500	Avg	0.194687						4043.22	4043.2178	100				5000	81	80.9	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	830885	13C2-PFHxA	886666	2500	Avg	1.093021						2143.35	2143.3464	100				2500	86	85.7	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	63052	13C5-PFHxA	830885	2500	Avg	0.897522		211.37	5	5	1	0.21137	2.1137	100	0.21	0.21	Yes	0.20	106	105.7	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	553403	18O2-PFHxS	528195	2500	Avg	1.295673						2021.58	2021.5841	100				2500	81	80.9	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	597839	13C2-PFHxA	886666	2500	Avg	0.198771						8480.32	8480.2992	100				10000	85	84.8	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	841265	13C2-PFHxA	886666	2500	Avg	1.214304						1953.37	1953.3738	100				2500	78	78.1	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	169503	18O2-PFHxS	528195	2500	Avg	0.21977						3650.51	3650.5198	100				5000	73	73.0	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	979291	13C4-PFOA	165896	2500	Avg	6.83278						2159.82	2159.8243	100				2500	86	86.4	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	93090	13C8-PFOA	979291	2500	Avg	0.884916		268.55	5	5	1	0.26855	2.6855	100	0.27	0.27	Yes	0.20	134	134.3	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	528136	18O2-PFHxS	528195	2500	Avg	1.163436						2148.57	2148.5675	100				2500	86	85.9	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	48058	13C3-PFHxS	528136	2500	Avg	1.132717		200.83	5	5	1	0.20083	2.0083	100	0.20	0.20	Yes	0.18	112	111.6	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	441119	13C5-PFNA	613567	1250	Avg	0.985194						912.18	912.1831	100				1250	73	73.0	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	78193	13C9-PFNA	441119	1250	Avg	0.861997		257.05	5	5	1	0.25705	2.5705	100	0.26	0.26	Yes	0.20	129	128.5	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	151308	18O2-PFHxS	528195	2500	Avg	0.204418						3503.38	3503.3899	100				5000	70	70.1	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	48973	13C2-8:2FTS	151308	5000	Avg	1.687379		959.07	5	5	1	0.95907	9.5907	100	0.96	0.96	Yes	0.76	126	126.2	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	538891	13C4-PFOS	707296	2500	Avg	0.49426						3853.76	3853.7565	100				5000	77	77.1	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	16602	D3-NMeFOSAA	538891	5000	Avg	0.833032		184.91	5	5	1	0.18491	1.8491	100	0.18	0.18	Yes	0.20	92	92.5	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	461293	13C2-PFDA	486509	1250	Avg	1.130832						1048.09	1048.0884	100				1250	84	83.8	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	419324	13C4-PFOS	707296	2500	Avg	0.37805						3920.48	3920.4804	100				5000	78	78.4	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	22549	D5-NEtFOSAA	419324	5000	Avg	1.107201		242.84	5	5	1	0.24284	2.4284	100	0.24	0.24	Yes	0.20	121	121.4	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	550450	13C4-PFOS	707296	2500	Avg	1.013707						1919.31	1919.3061	100				2500	77	76.8	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	43429	13C8-PFOS	550450	2500	Ln	0.974909	-15.674656	218.4	5	5	1	0.2184	0.2184	100	0.22	0.22	Yes	0.19	115	114.9	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	44231	13C8-PFOS	550450	2500	Avg	0.982846		204.39	5	5	1	0.20439	2.0439	100	0.20	0.20	Yes	0.18	114	113.6	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	416211	13C2-PFDA	486509	1250	Avg	1.078081						991.93	991.9306	100				1250	79	79.4	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	403725	13C2-PFDA	486509	1250	Avg	0.998518						1038.84	1038.8405	100				1250	83	83.1	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	648285	13C4-PFOS	707296	2500	Avg	1.676088						1367.12	1367.1242	100				2500	55	54.7	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	58233	13C8-PFOSA	648285	2500	Avg	0.968729		231.81	5	5	1	0.23181	2.3181	100	0.23	0.23	Yes	0.20	116	115.9	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	334157	13C2-PFDA	486509	1250	Avg	0.913515						939.84	939.8402	100				1250	75	75.2	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2163788	13C4-PFOS	707296	2500	Avg	0.664236						11514	11514.1294	100				25000	46	46.1	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	109860	13C4-PFOS	707296	2500	Avg	0.433295						896.18	896.1789	100				2500	36	35.8	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2401004	13C4-PFOS	707296	2500	Avg	0.73779						11503	11502.6770	100				25000	46	46.0	Yes			
073024047.d	ZQ15153-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	121832	13C4-PFOS	707296	2500	Avg	0.459974						936.2	936.1962	100				2500	37	37.4	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C4-PFBA	SESI-0111	2985070	13C3-PFBA	1618310	5000	Avg	1.1358						8120.09	8120.09	72.9				10000	81	81	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1241959	13C2-PFHxA	900397	2500	Avg	0.83265						4141.44	4141.43	72.9				5000	83	83	Yes			

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Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	172195	18O2-PFHxS	613986	2500	Avg	0.194687						3601.35	3601.35	72.9				5000	72	72	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C5-PFHxA	SESI-0113	805688	13C2-PFHxA	900397	2500	Avg	1.093021						2046.65	2046.65	72.9				2500	82	82	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	16679	13C5-PFHxA	805688	2500	Avg	0.897522		57.663	5	6.91	1	0.04172	0.0417	72.9	0.057	0.057	Yes							
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C3-PFBS	SESI-0116	601388	18O2-PFHxS	613986	2500	Avg	1.295673						1889.91	1889.91	72.9				2500	76	76	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	618074	13C2-PFHxA	900397	2500	Avg	0.198771						8633.65	8633.63	72.9				10000	86	86	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C4-PFHpA	SESI-0114	901248	13C2-PFHxA	900397	2500	Avg	1.214304						2060.74	2060.74	72.9				2500	82	82	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	207453	18O2-PFHxS	613986	2500	Avg	0.21977						3843.54	3843.55	72.9				5000	77	77	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C8-PFOA	SESI-0097	1017244	13C4-PFOA	187577	2500	Avg	6.83278						1984.21	1984.21	72.9				2500	79	79	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	28947	13C8-PFOA	1017244	2500	Avg	0.884916		80.393	5	6.91	1	0.05817	0.0582	72.9	0.08	0.08	Yes							
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C3-PFHxS	SESI-0096	570870	18O2-PFHxS	613986	2500	Avg	1.163436						1997.91	1997.91	72.9				2500	80	80	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	53601	13C3-PFHxS	570870	2500	Avg	1.132717		207.23	5	6.91	1	0.14995	0.1499	72.9	0.21	0.21	Yes							
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C9-PFNA	SESI-0099	504272	13C5-PFNA	620374	2500	Avg	0.985194						1031.33	1031.33	72.9				1250	83	83	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	9513	13C9-PFNA	504272	1250	Avg	0.861997		27.356	5	6.91	1	0.01979	0.0198	72.9	0.027	0.027	Yes							
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	195180	18O2-PFHxS	613986	2500	Avg	0.204418						3887.74	3887.74	72.9				5000	78	78	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	13258	13C2-8:2FTS	195180	5000	Avg	1.687379		201.28	5	6.91	1	0.14564	0.1456	72.9	0.2	0.2	Yes							
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	702323	13C4-PFOS	738257	2500	Avg	0.49426						4811.87	4811.87	72.9				5000	96	96	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	23138	D3-NMeFOSAA	702323	5000	Avg	0.833032		197.74	5	6.91	1	0.14308	0.1431	72.9	0.2	0.2	Yes							
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C6-PFDA	SESI-0115	514429	13C2-PFDA	530771	1250	Avg	1.130832						1071.35	1071.35	72.9				1250	86	86	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	477000	13C4-PFOS	738257	2500	Avg	0.37805						4272.69	4272.69	72.9				5000	85	85	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	29005	D5-NEtFOSAA	477000	5000	Avg	1.107201		274.6	5	6.91	1	0.1987	0.1987	72.9	0.27	0.27	Yes							
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C8-PFOS	SESI-0098	621651	13C4-PFOS	738257	2500	Avg	1.013707						2076.67	2076.67	72.9				2500	83	83	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	11498	13C8-PFOS	621651	2500	Ln	0.974909	-15.674656	63.508	5	6.91	1	0.04595	0.046	72.9	0.063	0.063	Yes							
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2238029	13C8-PFOS	621651	2500	Avg	0.982846		9157.43	5	6.91	1	6.6262	6.6262	72.9	9.1	9.1	Yes							
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C7-PFUnA	SESI-0117	460920	13C2-PFDA	530771	1250	Avg	1.078081						1006.88	1006.88	72.9				1250	81	81	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C2-PFDoA	SESI-0118	416768	13C2-PFDA	530771	1250	Avg	0.998518						982.97	982.97	72.9				1250	79	79	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C8-PFOSA	SESI-0107	835678	13C4-PFOS	738257	2500	Avg	1.676088						1688.4	1688.4	72.9				2500	68	68	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	27128	13C8-PFOSA	835678	2500	Avg	0.968729		83.775	5	6.91	1	0.06062	0.0606	72.9	0.083	0.083	Yes							
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	390059	13C2-PFDA	530771	1250	Avg	0.913515						1005.58	1005.58	72.9				1250	80	80	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	3132945	13C4-PFOS	738257	2500	Avg	0.664236						15972	15972.13	72.9				25000	64	64	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	168085	13C4-PFOS	738257	2500	Avg	0.433295						1313.65	1313.64	72.9				2500	53	53	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	3424169	13C4-PFOS	738257	2500	Avg	0.73779						15716	15716.46	72.9				25000	63	63	Yes			
073024072.d	ZF20024-006	CACMW-002-160-82.25-0615	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	168514	13C4-PFOS	738257	2500	Avg	0.459974						1240.61	1240.61	72.9				2500	50	50	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C4-PFBA	SESI-0111	2868112	13C3-PFBA	1469831	5000	Avg	1.1358						8590.07	8590.07	93.1				10000	86	86	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1171161	13C2-PFHxA	813602	2500	Avg	0.83265						4321.98	4321.97	93.1				5000	86	86	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	160076	18O2-PFHxS	509643	2500	Avg	0.194687						4033.32	4033.32	93.1				5000	81	81	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C5-PFHxA	SESI-0113	785436	13C2-PFHxA	813602	2500	Avg	1.093021						2208.06	2208.06	93.1				2500	88	88	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C3-PFBS	SESI-0116	539294	18O2-PFHxS	509643	2500	Avg	1.295673						2041.76	2041.76	93.1				2500	82	82	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	585295	13C2-PFHxA	813602	2500	Avg	0.198771						9047.96	9047.94	93.1				10000	90	90	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C4-PFHpA	SESI-0114	866226	13C2-PFHxA	813602	2500	Avg	1.214304						2191.96	2191.96	93.1				2500	88	88	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	199855	18O2-PFHxS	509643	2500	Avg	0.21977						4460.87	4460.88	93.1				5000	89	89	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C8-PFOA	SESI-0097	867686	13C4-PFOA	171671	2500	Avg	6.83278						1849.3	1849.3	93.1				2500	74	74	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C3-PFHxS	SESI-0096	502226	18O2-PFHxS	509643	2500	Avg	1.163436						2117.54	2117.54	93.1				2500	85	85	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C9-PFNA	SESI-0099	467207	13C5-PFNA	584745	1250	Avg	0.985194						1013.75	1013.75	93.1				1250	81	81	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	164210	18O2-PFHxS	509643	2500	Avg	0.204418						3940.52	3940.53	93.1				5000	79	79	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	545085	13C4-PFOS	626856	2500	Avg	0.49426						4398.26	4398.26	93.1				5000	88	88	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C6-PFDA	SESI-0115	447117	13C2-PFDA	437003	1250	Avg	1.130832						1130.96	1130.96	93.1				1250	90	90	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	401320	13C4-PFOS	626856	2500	Avg	0.37805						4233.63	4233.64	93.1				5000	85	85	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C8-PFOS	SESI-0098	569114	13C4-PFOS	626856	2500	Avg	1.013707						2239.03	2239.03	93.1				2500	90	90	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	6806	13C8-PFOS	569114	2500	Avg	0.982846		30.419	5	5.42	1	0.02806	0.0281	93.1	0.03	0.03	Yes							
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C7-PFUnA	SESI-0117	466046	13C2-PFDA	437003	1250	Avg	1.078081						1236.52	1236.53	93.1				1250	99	99	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C2-PFDoA	SESI-0118	397008	13C2-PFDA	437003	1250	Avg	0.998518						1137.28	1137.28	93.1				1250	91	91	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C8-PFOSA	SESI-0107	736870	13C4-PFOS	626856	2500	Avg	1.676088						1753.34	1753.34	93.1				2500	70	70	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	339725	13C2-PFDA	437003	1250	Avg	0.913515						1063.74	1063.74	93.1				1250	85	85	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2454535	13C4-PFOS	626856	2500	Avg	0.664236						14737	14737.34	93.1				25000	59	59	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	135105	13C4-PFOS	626856	2500	Avg	0.433295						1243.54	1243.54	93.1				2500	50	50	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2718004	13C4-PFOS	626856	2500	Avg	0.73779						14692	14692.29	93.1				25000	59	59	Yes			
073124072.d	ZF20024-008	CACMW-003-160-158.5-0617	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	138027	13C4-PFOS	626856	2500	Avg	0.459974						1196.75	1196.75	93.1				2500	48	48	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	2754734	13C3-PFBA	1468451	5000	Avg	1.1358						8258.26	8258.26	93.1				10000	83	83	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	1160142	13C2-PFHxA	836948	2500	Avg	0.83265						4161.89	4161.89	93.1				5000	83	83	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	147196	18O2-PFHxS	521570	2500	Avg	0.194687						3623.99	3623.99	93.1				5000	72	72	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	746830	13C2-PFHxA	836948	2500	Avg	1.093021						2040.96	2040.96	93.1				2500	82	82	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	612407	13C5-PFHxA	746830	2500	Avg	0.897522		2284.09	5	5.43	1	2.1032	2.1032	93.1	2.3	2.3	Yes	2.4	96	96	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	513804	18O2-PFHxS	521570	2500	Avg	1.295673						1900.77	1900.77	93.1				2500	76	76	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	549119	13C2-PFHxA	836948	2500	Avg	0.198771						8251.94	8251.92	93.1				10000	83	83	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	844349	13C2-PFHxA	836948	2500	Avg	1.214304						2077	2077	93.1				2500	83	83	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	167321	18O2-PFHxS	521570	2500	Avg	0.21977						3649.29	3649.3	93.1				5000	73	73	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	919031	13C4-PFOA	158126	2500	Avg	6.83278						2126.52	2126.52	93.1				2500	85	85	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	745663	13C8-PFOA	919031	2500	Avg	0.884916		2292.19	5	5.43	1	2.1107	2.1107	93.1	2.3	2.3	Yes	2.4	96	96	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	510052	18O2-PFHxS	521570	2500	Avg	1.163436						2101.35	2101.35	93.1				2500	84	84	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	465303	13C3-PFHxS	510052	2500	Avg	1.132717		2013.45	5	5.43	1	1.854	1.854	93.1	2	2	Yes	2.2	92	91	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	462106	13C5-PFNA	634498	1250	Avg	0.985194						924.06	924.06	93.1				1250	74	74	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	693764	13C9-PFNA	462106	1250	Avg	0.861997		2177.08	5	5.43	1	2.0047	2.0047	93.1	2.2	2.2	Yes	2.4	91	92	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	149223	18O2-PFHxS	521570	2500	Avg	0.204418						3498.99	3499	93.1				5000	70	70	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	514218	13C2-8:2FTS	149223	5000	Avg	1.687379		10211	5	5.43	1	9.4024	9.4024	93.1	10	10	Yes	9.1	111	110	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	513826	13C4-PFOS	636692	2500	Avg	0.49426						4081.98	4081.98	93.1				5000	82	82	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	181921	D3-NMeFOSAA	513826	5000	Avg	0.833032		2125.08	5	5.43	1	1.9568	1.9568	93.1	2.1	2.1	Yes	2.4	89	88	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	473035	13C2-PFDA	526361	1250	Avg	1.130832						993.39	993.39	93.1				1250	79	79	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	356513	13C4-PFOS	636692	2500	Avg	0.37805						3702.85	3702.86	93.1				5000	74	74	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	179810	D5-NEtFOSAA	356513	5000	Avg	1.107201		2277.62	5	5.43	1	2.0973	2.0973	93.1	2.3	2.3	Yes	2.4	95	96	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	544441	13C4-PFOS	636692	2500	Avg	1.013707						2108.87	2108.87	93.1				2500	84	84	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	400189	13C8-PFOS	544441	2500	Ln	0.974909	-15.674656	1900.99	5	5.43	1	1.7504	1.7504	93.1	1.9	1.9	Yes	2.3	83	83	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	460369	13C8-PFOS	544441	2500	Avg	0.982846		2150.85	5	5.43	1	1.9805	1.9805	93.1	2.1	2.1	Yes	2.2	95	95	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	411044	13C2-PFDA	526361	1250	Avg	1.078081						905.45	905.45	93.1				1250	72	72	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	387645	13C2-PFDA	526361	1250	Avg	0.998518						921.94	921.94	93.1				1250	74	74	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	722972	13C4-PFOS	636692	2500	Avg	1.676088						1693.69	1693.7	93.1				2500	68	68	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	638660	13C8-PFOSA	722972	2500	Avg	0.968729		2279.74	5	5.43	1	2.0992	2.0992	93.1	2.3	2.3	Yes	2.4	95	96	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	312936	13C2-PFDA	526361	1250	Avg	0.913515						813.52	813.52	93.1				1250	65	65	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	2426529	13C4-PFOS	636692	2500	Avg	0.664236						14344	14344.11	93.1				25000	57	57	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	141921	13C4-PFOS	636692	2500	Avg	0.433295						1286.1	1286.1	93.1				2500	51	51	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	2604230	13C4-PFOS	636692	2500	Avg	0.73779						13860	13859.81	93.1				25000	55	55	Yes			
073124073.d	ZF20024-008MS	CACMW-003-160-158.5-0617	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	141821	13C4-PFOS	636692	2500	Avg	0.459974						1210.65	1210.65	93.1				2500	48	48	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	2877179	13C3-PFBA	1596005	5000	Avg	1.1358						7935.98	7935.98	93.1				10000	79	79	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	1201890	13C2-PFHxA	914497	2500	Avg	0.83265						3946.03	3946.03	93.1				5000	79	79	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	158123	18O2-PFHxS	561848	2500	Avg	0.194687						3613.93	3613.93	93.1				5000	72	72	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	823163	13C2-PFHxA	914497	2500	Avg	1.093021						2058.8	2058.8	93.1				2500	82	82	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	681427	13C5-PFHxA	823163	2500	Avg	0.897522		2305.83	5	5.43	1	2.1232	2.1232	93.1	2.3	2.3	Yes	2.4	97	96	Yes	0.95	0.9	Yes

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	571843	18O2-PFHxS	561848	2500	Avg	1.295673						1963.82	1963.82	93.1				2500	79	79	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	583274	13C2-PFHxA	914497	2500	Avg	0.198771						8021.92	8021.9	93.1				10000	80	80	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	859316	13C2-PFHxA	914497	2500	Avg	1.214304						1934.56	1934.56	93.1				2500	77	77	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	168828	18O2-PFHxS	561848	2500	Avg	0.21977						3418.19	3418.2	93.1				5000	68	68	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	868503	13C4-PFOA	186678	2500	Avg	6.83278						1702.24	1702.24	93.1				2500	68	68	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	841754	13C8-PFOA	868503	2500	Avg	0.884916		2738.12	5	5.43	1	2.5213	2.5213	93.1	2.7	2.7	Yes	2.4	115	113	Yes	18	17.7	Yes
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	526284	18O2-PFHxS	561848	2500	Avg	1.163436						2012.79	2012.79	93.1				2500	81	81	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	511083	13C3-PFHxS	526284	2500	Avg	1.132717		2143.33	5	5.43	1	1.9736	1.9736	93.1	2.1	2.1	Yes	2.2	98	95	Yes	6.2	6.2	Yes
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	480293	13C5-PFNA	677739	1250	Avg	0.985194						899.15	899.15	93.1				1250	72	72	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	782196	13C9-PFNA	480293	1250	Avg	0.861997		2361.64	5	5.43	1	2.1746	2.1746	93.1	2.3	2.3	Yes	2.4	99	96	Yes	8.1	8.1	Yes
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	158949	18O2-PFHxS	561848	2500	Avg	0.204418						3459.86	3459.87	93.1				5000	69	69	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	572958	13C2-8:2FTS	158949	5000	Avg	1.687379		10681	5	5.43	1	9.8354	9.8354	93.1	11	11	Yes	9.1	116	121	Yes	4.5	4.5	Yes
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	560402	13C4-PFOS	705170	2500	Avg	0.49426						4019.67	4019.67	93.1				5000	80	80	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	205084	D3-NMeFOSAA	560402	5000	Avg	0.833032		2196.55	5	5.43	1	2.0226	2.0226	93.1	2.2	2.2	Yes	2.4	92	92	Yes	3.3	3.3	Yes
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	467864	13C2-PFDA	563948	1250	Avg	1.130832						917.05	917.05	93.1				1250	73	73	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	403138	13C4-PFOS	705170	2500	Avg	0.37805						3780.51	3780.51	93.1				5000	76	76	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	219426	D5-NEtFOSAA	403138	5000	Avg	1.107201		2457.98	5	5.43	1	2.2633	2.2633	93.1	2.4	2.4	Yes	2.4	103	100	Yes	7.6	7.6	Yes
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	583908	13C4-PFOS	705170	2500	Avg	1.013707						2042.11	2042.11	93.1				2500	82	82	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	490140	13C8-PFOS	583908	2500	Ln	0.974909	-15.674656	2168.62	5	5.43	1	1.9969	1.9969	93.1	2.1	2.1	Yes	2.3	95	91	Yes	13	13.2	Yes
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	532886	13C8-PFOS	583908	2500	Avg	0.982846		2321.37	5	5.43	1	2.1375	2.1375	93.1	2.3	2.3	Yes	2.2	103	105	Yes	7.6	7.6	Yes
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	463975	13C2-PFDA	563948	1250	Avg	1.078081						953.92	953.92	93.1				1250	76	76	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	435849	13C2-PFDA	563948	1250	Avg	0.998518						967.5	967.5	93.1				1250	77	77	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	724212	13C4-PFOS	705170	2500	Avg	1.676088						1531.85	1531.85	93.1				2500	61	61	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	666414	13C8-PFOSA	724212	2500	Avg	0.968729		2374.74	5	5.43	1	2.1867	2.1867	93.1	2.3	2.3	Yes	2.4	99	96	Yes	4.1	4.1	Yes
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	332075	13C2-PFDA	563948	1250	Avg	0.913515						805.73	805.73	93.1				1250	64	64	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	2362876	13C4-PFOS	705170	2500	Avg	0.664236						12611	12611.44	93.1				25000	50	50	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	137558	13C4-PFOS	705170	2500	Avg	0.433295						1125.51	1125.51	93.1				2500	45	45	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	2605023	13C4-PFOS	705170	2500	Avg	0.73779						12518	12517.71	93.1				25000	50	50	Yes			
073124074.d	ZF20024-008MD	CACMW-003-160-158.5-0617	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	138348	13C4-PFOS	705170	2500	Avg	0.459974						1066.31	1066.32	93.1				2500	43	43	Yes			

Key

	from quantitation report
	from reported calibration
	from lab report/SEDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
g	grams
IS	internal standard
mL	milliliters
ND	not detected
ng/g	nanograms per gram
ng/L	nanograms per liter
On Col.	on column
RF	response factor
RPD	relative percent difference

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
072424029.d	ZF28037-024	CACMW-EB01-062624	Field_Sample	EIS	13C8-PFOS	SESI-0098	202077	13C4-PFOS	682649	2500	Avg	0.980186						755.01	755.01	100				2500	30	30	Yes			
072424029.d	ZF28037-024	CACMW-EB01-062624	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	16023	13C8-PFOS	202077	2500	Avg	1.03957		190.68	5	169.65	1	5.6199	5.6198	100	5.6	5.6	Yes							
072424030.d	ZF28037-026	CACMW-FB02-062524	Field_Sample	EIS	13C8-PFOS	SESI-0098	577519	13C4-PFOS	836832	2500	Avg	0.980186						1760.19	1760.19	100				2500	70	70	Yes			
072424030.d	ZF28037-026	CACMW-FB02-062524	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	36723	13C8-PFOS	577519	2500	Avg	1.03957		152.92	5	497.16	1	1.5379	1.5379	100	1.5	1.5	Yes							
073024105.d	ZF28037-024	CACMW-EB01-062624	Field_Sample	EIS	13C8-PFOS	SESI-0098	709072	13C4-PFOS	817747	2500	Avg	1.013707						2138.45	2138.45	100				2500	86	86	Yes			
073024105.d	ZF28037-024	CACMW-EB01-062624	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	12878	13C8-PFOS	709072	2500	Avg	0.982846		46.197	5	50	1	4.6197	4.6197	100	4.6	4.6	Yes							
080824065.d	ZQ15759-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3285054	13C3-PFBA	1718434	5000	Avg	1.130641						8453.86	8453.86	100				10000	85	85	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1374934	13C2-PFHxA	963467	2500	Avg	0.8402						4246.22	4246.22	100				5000	85	85	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	189845	18O2-PFHxS	540814	2500	Avg	0.200536						4376.21	4376.22	100				5000	88	88	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	861373	13C2-PFHxA	963467	2500	Avg	1.104288						2024.01	2024.01	100				2500	81	81	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	618164	18O2-PFHxS	540814	2500	Avg	1.299121						2199.61	2199.61	100				2500	88	88	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	649934	13C2-PFHxA	963467	2500	Avg	0.205187						8219.07	8219.07	100				10000	82	82	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	918454	13C2-PFHxA	963467	2500	Avg	1.198314						1988.79	1988.79	100				2500	80	80	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	219901	18O2-PFHxS	540814	2500	Avg	0.236825						4292.32	4292.32	100				5000	86	86	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1182164	13C4-PFOA	194402	2500	Avg	6.698736						2269.47	2269.47	100				2500	91	91	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	538974	18O2-PFHxS	540814	2500	Avg	1.157763						2151.99	2151.99	100				2500	86	86	Yes			
080824065.d	ZQ15759-001		Method_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3189	13C3-PFHxS	538974	2500	Avg	1.144236		12.927	5	5	1	0.01293	0.0129	100	ND	0.013	Yes							
080824065.d	ZQ15759-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	508688	13C5-PFNA	622587	1250	Avg	0.988588						1033.11	1033.11	100				1250	83	83	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	190872	18O2-PFHxS	540814	2500	Avg	0.213625						4130.31	4130.31	100				5000	83	83	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	610508	13C4-PFOS	693740	2500	Avg	0.548279						4012.67	4012.67	100				5000	80	80	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	505352	13C2-PFDA	538766	1250	Avg	1.165674						1005.83	1005.83	100				1250	80	80	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	424940	13C4-PFOS	693740	2500	Avg	0.420694						3640.02	3640.03	100				5000	73	73	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	586993	13C4-PFOS	693740	2500	Avg	1.004997						2104.8	2104.8	100				2500	84	84	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	498385	13C2-PFDA	538766	1250	Avg	1.107859						1043.74	1043.74	100				1250	83	83	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	400299	13C2-PFDA	538766	1250	Avg	1.018582						911.8	911.8	100				1250	73	73	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	804225	13C4-PFOS	693740	2500	Avg	1.722863						1682.17	1682.17	100				2500	67	67	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	340569	13C2-PFDA	538766	1250	Avg	0.914538						864	864	100				1250	69	69	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2230069	13C4-PFOS	693740	2500	Avg	0.727301						11050	11049.62	100				25000	44	44	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	104680	13C4-PFOS	693740	2500	Avg	0.453376						832.05	832.05	100				2500	33	33	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2373628	13C4-PFOS	693740	2500	Avg	0.801502						10672	10672.14	100				25000	43	43	Yes			
080824065.d	ZQ15759-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	105925	13C4-PFOS	693740	2500	Avg	0.486842						784.07	784.07	100				2500	31	31	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3194062	13C3-PFBA	1693465	5000	Avg	1.130641						8340.89	8340.89	100				10000	83	83	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3071526	13C4-PFBA	3194062	10000	Avg	0.834189		11528	5	5	1	11.528	11.5278	100	12	12	Yes	9.6	120	120	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1342330	13C2-PFHxA	934844	2500	Avg	0.8402						4272.45	4272.45	100				5000	85	85	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	181917	18O2-PFHxS	520437	2500	Avg	0.200536						4357.65	4357.65	100				5000	87	87	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	889493	13C2-PFHxA	934844	2500	Avg	1.104288						2154.08	2154.08	100				2500	86	86	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	613025	18O2-PFHxS	520437	2500	Avg	1.299121						2266.73	2266.73	100				2500	91	91	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	645652	13C2-PFHxA	934844	2500	Avg	0.205187						8414.91	8414.91	100				10000	84	84	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	956491	13C2-PFHxA	934844	2500	Avg	1.198314						2134.57	2134.57	100				2500	85	85	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	229751	18O2-PFHxS	520437	2500	Avg	0.236825						4660.18	4660.17	100				5000	93	93	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1093880	13C4-PFOA	197968	2500	Avg	6.698736						2062.16	2062.16	100				2500	82	82	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	532825	18O2-PFHxS	520437	2500	Avg	1.157763						2210.74	2210.74	100				2500	88	88	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	610617	13C3-PFHxS	532825	2500	Avg	1.144236		2503.85	5	5	1	2.5039	2.5039	100	2.5	2.5	Yes	2.2	114	114	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	523313	13C5-PFNA	656300	1250	Avg	0.988588						1008.22	1008.22	100				1250	81	81	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	196631	18O2-PFHxS	520437	2500	Avg	0.213625						4421.53	4421.52	100				5000	88	88	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	600217	13C4-PFOS	706238	2500	Avg	0.548279						3875.21	3875.21	100				5000	78	78	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	507893	13C2-PFDA	503713	1250	Avg	1.165674						1081.24	1081.24	100				1250	86	86	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	449749	13C4-PFOS	706238	2500	Avg	0.420694						3784.36	3784.36	100				5000	76	76	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	568029	13C4-PFOS	706238	2500	Avg	1.004997						2000.76	2000.76	100				2500	80	80	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	620462	13C8-PFOS	568029	2500	Avg	0.990455		2757.08	5	5	1	2.7571	2.7571	100	2.8	2.8	Yes	2.2	124	125	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	443268	13C2-PFDA	503713	1250	Avg	1.107859						992.91	992.91	100				1250	79	79	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	401396	13C2-PFDA	503713	1250	Avg	1.018582						977.92	977.92	100				1250	78	78	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	829318	13C4-PFOS	706238	2500	Avg	1.722863						1703.96	1703.96	100				2500	68	68	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	357631	13C2-PFDA	503713	1250	Avg	0.914538						970.42	970.42	100				1250	78	78	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2293698	13C4-PFOS	706238	2500	Avg	0.727301						11164	11163.77	100				25000	45	45	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	109668	13C4-PFOS	706238	2500	Avg	0.453376						856.27	856.27	100				2500	34	34	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2512860	13C4-PFOS	706238	2500	Avg	0.801502						11098	11098.2	100				25000	44	44	Yes			
080824066.d	ZQ15759-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	112829	13C4-PFOS	706238	2500	Avg	0.486842						820.39	820.39	100				2500	33	33	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3288778	13C3-PFBA	1697626	5000	Avg	1.130641						8567.18	8567.18	100				10000	96	85.7	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	253251	13C4-PFBA	3288778	10000	Avg	0.834189		923.11	5	5	1	0.92311	0.9231	100	0.92	0.92	Yes	0.8	115	115.0	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1350345	13C2-PFHxA	916070	2500	Avg	0.8402						4386.05	4386.05	100				5000	88	87.7	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	185154	18O2-PFHxS	563832	2500	Avg	0.200536						4093.84	4093.84	100				5000	82	81.9	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	883262	13C2-PFHxA	916070	2500	Avg	1.104288						2182.82	2182.82	100				2500	87	87.3	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	625458	18O2-PFHxS	563832	2500	Avg	1.299121						2134.71	2134.71	100				2500	85	85.4	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	642766	13C2-PFHxA	916070	2500	Avg	0.205187						8548.98	8548.98	100				10000	85	85.5	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	925383	13C2-PFHxA	916070	2500	Avg	1.198314						2107.47	2107.47	100				2500	84	84.3	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	201319	18O2-PFHxS	563832	2500	Avg	0.236825						3769.19	3769.19	100				5000	75	75.4	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1124185	13C4-PFOA	182403	2500	Avg	6.698736						2300.13	2300.13	100				2500	92	92.0	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	556676	18O2-PFHxS	563832	2500	Avg	1.157763						2131.93	2131.93	100				2500	85	85.3	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	62077	13C3-PFHxS	556676	2500	Avg	1.144236		243.64	5	5	1	0.24364	0.2436	100	0.24	0.24	Yes	0.18	135	133.3	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	502221	13C5-PFNA	649335	1250	Avg	0.988588						977.96	977.96	100				1250	78	78.2	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	193839	18O2-PFHxS	563832	2500	Avg	0.213625						4023.28	4023.27	100				5000	80	80.5	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	577638	13C4-PFOS	687206	2500	Avg	0.548279						3832.72	3832.72	100				5000	77	76.7	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	478792	13C2-PFDA	497859	1250	Avg	1.165674						1031.27	1031.27	100				1250	83	82.5	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	448850	13C4-PFOS	687206	2500	Avg	0.420694						3881.39	3881.4	100				5000	78	77.6	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	581315	13C4-PFOS	687206	2500	Avg	1.004997						2104.26	2104.26	100				5000	84	42.1	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	44435	13C8-PFOS	581315	2500	Avg	0.990455		192.94	5	5	1	0.19294	0.1929	100	0.19	0.19	Yes	0.18	107	105.6	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	451855	13C2-PFDA	497859	1250	Avg	1.107859						1024.04	1024.04	100				1250	82	81.9	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	388763	13C2-PFDA	497859	1250	Avg	1.018582						958.28	958.28	100				1250	77	76.7	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	755198	13C4-PFOS	687206	2500	Avg	1.722863						1594.64	1594.64	100				2500	64	63.8	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	336907	13C2-PFDA	497859	1250	Avg	0.914538						924.94	924.94	100				1250	74	74.0	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2298309	13C4-PFOS	687206	2500	Avg	0.727301						11496	11496.01	100				25000	46	46.0	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	108281	13C4-PFOS	687206	2500	Avg	0.453376						868.85	868.85	100				2500	35	34.8	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2461215	13C4-PFOS	687206	2500	Avg	0.801502						11171	11171.15	100				25000	45	44.7	Yes			
080824067.d	ZQ15759-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	111477	13C4-PFOS	687206	2500	Avg	0.486842						833.01	833.01	100				2500	33	33.3	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C4-PFBA	SESI-0111	3231911	13C3-PFBA	1712878	5000	Avg	1.130641						8344.08	8344.08	89				10000	83	83	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1359424	13C2-PFHxA	961006	2500	Avg	0.8402						4209.07	4209.07	89				5000	84	84	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	191304	18O2-PFHxS	564560	2500	Avg	0.200536						4224.36	4224.37	89				5000	84	84	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C5-PFHxA	SESI-0113	864142	13C2-PFHxA	961006	2500	Avg	1.104288						2035.71	2035.71	89				2500	81	81	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C3-PFBS	SESI-0116	601496	18O2-PFHxS	564560	2500	Avg	1.299121						2050.28	2050.28	89				2500	82	82	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	625727	13C2-PFHxA	961006	2500	Avg	0.205187						7933.21	7933.21	89				10000	79	79	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C4-PFHpA	SESI-0114	938278	13C2-PFHxA	961006	2500	Avg	1.198314						2036.92	2036.92	89				2500	81	81	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	195778	18O2-PFHxS	564560	2500	Avg	0.236825						3660.72	3660.72	89				5000	73	73	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C8-PFOA	SESI-0097	1098517	13C4-PFOA	205915	2500	Avg	6.698736						1990.98	1990.98	89				2500	80	80	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C3-PFHxS	SESI-0096	555302	18O2-PFHxS	564560	2500	Avg	1.157763						2123.93	2123.93	89				2500	85	85	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	14992	13C3-PFHxS	555302	2500	Avg	1.144236		58.987	5	5.68	1	0.05192	0.0519	89	0.058	0.058	Yes							
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C9-PFNA	SESI-0099	516442	13C5-PFNA	653526	1250	Avg	0.988588						999.2	999.2	89				1250	80	80	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	199162	18O2-PFHxS	564560	2500	Avg	0.213625						4128.43	4128.42	89				5000	83	83	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	625731	13C4-PFOS	714620	2500	Avg	0.548279						3992.56	3992.55	89				5000	80	80	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C6-PFDA	SESI-0115	499385	13C2-PFDA	516099	1250	Avg	1.165674						1037.61	1037.61	89				1250	83	83	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	439133	13C4-PFOS	714620	2500	Avg	0.420694						3651.69	3651.7	89				5000	73	73	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C8-PFOS	SESI-0098	561090	13C4-PFOS	714620	2500	Avg	1.004997						1953.14	1953.14	89				2500	78	78	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	75272	13C8-PFOS	561090	2500	Avg	0.990455		338.62	5	5.68	1	0.29808	0.2981	89	0.33	0.33	Yes							
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C7-PFUnA	SESI-0117	428197	13C2-PFDA	516099	1250	Avg	1.107859						936.13	936.13	89				1250	75	75	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C2-PFDoA	SESI-0118	404877	13C2-PFDA	516099	1250	Avg	1.018582						962.73	962.73	89				1250	77	77	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C8-PFOSA	SESI-0107	747389	13C4-PFOS	714620	2500	Avg	1.722863						1517.61	1517.61	89				2500	61	61	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	353391	13C2-PFDA	516099	1250	Avg	0.914538						935.9	935.9	89				1250	75	75	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2596768	13C4-PFOS	714620	2500	Avg	0.727301						12491	12490.61	89				25000	50	50	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	105743	13C4-PFOS	714620	2500	Avg	0.453376						815.94	815.94	89				2500	33	33	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2789798	13C4-PFOS	714620	2500	Avg	0.801502						12177	12176.79	89				25000	49	49	Yes			
080824070.d	ZF28037-003	CACMW-004-160-92.75-0624	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	100630	13C4-PFOS	714620	2500	Avg	0.486842						723.11	723.11	89				2500	29	29	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	3151268	13C3-PFBA	1653580	5000	Avg	1.130641						8427.63	8427.63	89				10000	84	84	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2988162	13C4-PFBA	3151268	10000	Avg	0.834189		11367	5	5.61	1	10.131	10.1312	89	11	11	Yes	9.6	118	119	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	1337027	13C2-PFHxA	927351	2500	Avg	0.8402						4289.96	4289.96	89				5000	86	86	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	180704	18O2-PFHxS	557769	2500	Avg	0.200536						4038.88	4038.88	89				5000	81	81	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	834370	13C2-PFHxA	927351	2500	Avg	1.104288						2036.91	2036.91	89				2500	81	81	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	621522	18O2-PFHxS	557769	2500	Avg	1.299121						2144.34	2144.33	89				2500	86	86	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	636270	13C2-PFHxA	927351	2500	Avg	0.205187						8359.64	8359.64	89				10000	84	84	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	943310	13C2-PFHxA	927351	2500	Avg	1.198314						2122.17	2122.17	89				2500	85	85	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	177839	18O2-PFHxS	557769	2500	Avg	0.236825						3365.78	3365.78	89				5000	67	67	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	1176562	13C4-PFOA	197989	2500	Avg	6.698736						2217.79	2217.79	89				2500	89	89	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	460010	18O2-PFHxS	557769	2500	Avg	1.157763						1780.87	1780.87	89				2500	71	71	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	597832	13C3-PFHxS	460010	2500	Avg	1.144236		2839.46	5	5.61	1	2.5307	2.5307	89	2.8	2.8	Yes	2.2	127	129	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	513612	13C5-PFNA	638673	1250	Avg	0.988588						1016.84	1016.84	89				1250	81	81	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	195912	18O2-PFHxS	557769	2500	Avg	0.213625						4110.5	4110.5	89				5000	82	82	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	575907	13C4-PFOS	667262	2500	Avg	0.548279						3935.45	3935.45	89				5000	79	79	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	479365	13C2-PFDA	520475	1250	Avg	1.165674						987.64	987.64	89				1250	79	79	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	439249	13C4-PFOS	667262	2500	Avg	0.420694						3911.9	3911.9	89				5000	78	78	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	499859	13C4-PFOS	667262	2500	Avg	1.004997						1863.49	1863.49	89				2500	75	75	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	624684	13C8-PFOS	499859	2500	Avg	0.990455		3154.41	5	5.61	1	2.8114	2.8114	89	3.2	3.2	Yes	2.2	127	130	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	425570	13C2-PFDA	520475	1250	Avg	1.107859						922.56	922.56	89				1250	74	74	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	396457	13C2-PFDA	520475	1250	Avg	1.018582						934.78	934.78	89				1250	75	75	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	804239	13C4-PFOS	667262	2500	Avg	1.722863						1748.95	1748.95	89				2500	70	70	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	364671	13C2-PFDA	520475	1250	Avg	0.914538						957.66	957.66	89				1250	77	77	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	2490655	13C4-PFOS	667262	2500	Avg	0.727301						12830	12830.48	89				25000	51	51	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	130364	13C4-PFOS	667262	2500	Avg	0.453376						1077.31	1077.32	89				2500	43	43	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	2692535	13C4-PFOS	667262	2500	Avg	0.801502						12586	12586.37	89				25000	50	50	Yes			
080824071.d	ZF28037-003MS	CACMW-004-160-92.75-0624	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	131214	13C4-PFOS	667262	2500	Avg	0.486842						1009.8	1009.8	89				2500	40	40	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	3090073	13C3-PFBA	1661384	5000	Avg	1.130641						8225.15	8225.15	89				10000	82	82	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2915849	13C4-PFBA	3090073	10000	Avg	0.834189		11312	5	5.66	1	9.993	9.9928	89	11	11	Yes	9.5	118	118	Yes	1.4	1.4	Yes
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	1317400	13C2-PFHxA	924219	2500	Avg	0.8402						4241.31	4241.31	89				5000	85	85	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	187194	18O2-PFHxS	536523	2500	Avg	0.200536						4349.62	4349.62	89				5000	87	87	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	820014	13C2-PFHxA	924219	2500	Avg	1.104288						2008.65	2008.65	89				2500	80	80	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	587076	18O2-PFHxS	536523	2500	Avg	1.299121						2105.7	2105.7	89				2500	84	84	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	626691	13C2-PFHxA	924219	2500	Avg	0.205187						8261.69	8261.69	89				10000	83	83	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	918477	13C2-PFHxA	924219	2500	Avg	1.198314						2073.3	2073.3	89				2500	83	83	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	198472	18O2-PFHxS	536523	2500	Avg	0.236825						3905.03	3905.02	89				5000	78	78	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	1038407	13C4-PFOA	173585	2500	Avg	6.698736						2232.56	2232.56	89				2500	89	89	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	504164	18O2-PFHxS	536523	2500	Avg	1.157763						2029.1	2029.1	89				2500	81	81	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	580260	13C3-PFHxS	504164	2500	Avg	1.144236		2514.64	5	5.66	1	2.2214	2.2214	89	2.5	2.5	Yes	2.2	112	113	Yes	13	13.0	Yes
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	539766	13C5-PFNA	643598	1250	Avg	0.988588						1060.44	1060.44	89				1250	85	85	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	201636	18O2-PFHxS	536523	2500	Avg	0.213625						4398.13	4398.13	89				5000	88	88	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	587787	13C4-PFOS	697785	2500	Avg	0.548279						3840.93	3840.93	89				5000	77	77	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	483745	13C2-PFDA	487373	1250	Avg	1.165674						1064.36	1064.36	89				1250	85	85	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	445969	13C4-PFOS	697785	2500	Avg	0.420694						3798.01	3798.02	89				5000	76	76	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	573123	13C4-PFOS	697785	2500	Avg	1.004997						2043.15	2043.16	89				2500	82	82	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	639535	13C8-PFOS	573123	2500	Avg	0.990455		2816.58	5	5.66	1	2.4881	2.4881	89	2.8	2.8	Yes	2.2	112	127	Yes	12	12.2	Yes
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	436433	13C2-PFDA	487373	1250	Avg	1.107859						1010.37	1010.37	89				1250	81	81	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	414350	13C2-PFDA	487373	1250	Avg	1.018582						1043.33	1043.33	89				1250	83	83	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	843778	13C4-PFOS	697785	2500	Avg	1.722863						1754.67	1754.67	89				2500	70	70	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	336265	13C2-PFDA	487373	1250	Avg	0.914538						943.04	943.04	89				1250	75	75	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	2647598	13C4-PFOS	697785	2500	Avg	0.727301						13042	13042.36	89				25000	52	52	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	139502	13C4-PFOS	697785	2500	Avg	0.453376						1102.4	1102.4	89				2500	44	44	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	2802580	13C4-PFOS	697785	2500	Avg	0.801502						12528	12527.71	89				25000	50	50	Yes			
080824072.d	ZF28037-003MD	CACMW-004-160-92.75-0624	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	134777	13C4-PFOS	697785	2500	Avg	0.486842						991.85	991.85	89				2500	40	40	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C4-PFBA	SESI-0111	3215643	13C3-PFBA	1638646	5000	Avg	1.130641						8678.17	8678.17	96.1				10000	87	87	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1311265	13C2-PFHxA	879003	2500	Avg	0.8402						4438.72	4438.72	96.1				5000	89	89	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	177226	18O2-PFHxS	524997	2500	Avg	0.200536						4208.41	4208.41	96.1				5000	84	84	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C5-PFHxA	SESI-0113	861118	13C2-PFHxA	879003	2500	Avg	1.104288						2217.84	2217.84	96.1				2500	89	89	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C3-PFBS	SESI-0116	591197	18O2-PFHxS	524997	2500	Avg	1.299121						2167.04	2167.03	96.1				2500	87	87	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	659741	13C2-PFHxA	879003	2500	Avg	0.205187						9144.78	9144.78	96.1				10000	91	91	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C4-PFHpA	SESI-0114	927093	13C2-PFHxA	879003	2500	Avg	1.198314						2200.4	2200.4	96.1				2500	88	88	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	192146	18O2-PFHxS	524997	2500	Avg	0.236825						3863.56	3863.55	96.1				5000	77	77	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C8-PFOA	SESI-0097	1052480	13C4-PFOA	182890	2500	Avg	6.698736						2147.69	2147.69	96.1				2500	86	86	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C3-PFHxS	SESI-0096	473331	18O2-PFHxS	524997	2500	Avg	1.157763						1946.83	1946.83	96.1				2500	78	78	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	7215	13C3-PFHxS	473331	2500	Avg	1.144236		33.304	5	5.26	1	0.03166	0.0317	96.1	0.033	0.033	Yes							
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C9-PFNA	SESI-0099	488651	13C5-PFNA	618785	1250	Avg	0.988588						998.51	998.51	96.1				1250	80	80	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	193786	18O2-PFHxS	524997	2500	Avg	0.213625						4319.7	4319.7	96.1				5000	86	86	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	548317	13C4-PFOS	599111	2500	Avg	0.548279						4173.14	4173.14	96.1				5000	83	83	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C6-PFDA	SESI-0115	469796	13C2-PFDA	484872	1250	Avg	1.165674						1039	1039	96.1				1250	83	83	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	417733	13C4-PFOS	599111	2500	Avg	0.420694						4143.48	4143.48	96.1				5000	83	83	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C8-PFOS	SESI-0098	513676	13C4-PFOS	599111	2500	Avg	1.004997						2132.83	2132.83	96.1				2500	85	85	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	31927	13C8-PFOS	513676	2500	Avg	0.990455		156.88	5	5.26	1	0.14913	0.1491	96.1	0.16	0.16	Yes							
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C7-PFUnA	SESI-0117	431827	13C2-PFDA	484872	1250	Avg	1.107859						1004.87	1004.87	96.1				1250	80	80	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C2-PFDoA	SESI-0118	383451	13C2-PFDA	484872	1250	Avg	1.018582						970.5	970.5	96.1				1250	78	78	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	852329	13C4-PFOS	599111	2500	Avg	1.722863						2064.38	2064.38	96.1				2500	83	83	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	316125	13C2-PFDA	484872	1250	Avg	0.914538						891.13	891.13	96.1				1250	71	71	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2523862	13C4-PFOS	599111	2500	Avg	0.727301						14481	14480.52	96.1				25000	58	58	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	118579	13C4-PFOS	599111	2500	Avg	0.453376						1091.39	1091.4	96.1				2500	44	44	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2637299	13C4-PFOS	599111	2500	Avg	0.801502						13731	13730.54	96.1				25000	55	55	Yes			
080824089.d	ZF28037-018	CACMW-007-160-33-062024-	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	121023	13C4-PFOS	599111	2500	Avg	0.486842						1037.32	1037.32	96.1				2500	41	41	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3031383	13C3-PFBA	1716380	5000	Avg	1.130641						7810.39	7810.39	100				10000	78	78	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1290316	13C2-PFHxA	980709	2500	Avg	0.8402						3914.83	3914.83	100				5000	78	78	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	176724	18O2-PFHxS	562319	2500	Avg	0.200536						3917.96	3917.96	100				5000	78	78	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	796299	13C2-PFHxA	980709	2500	Avg	1.104288						1838.2	1838.2	100				2500	74	74	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	596497	18O2-PFHxS	562319	2500	Avg	1.299121						2041.34	2041.34	100				2500	82	82	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	599170	13C2-PFHxA	980709	2500	Avg	0.205187						7443.89	7443.89	100				10000	74	74	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	895192	13C2-PFHxA	980709	2500	Avg	1.198314						1904.34	1904.34	100				2500	76	76	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	212251	18O2-PFHxS	562319	2500	Avg	0.236825						3984.56	3984.55	100				5000	80	80	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	991698	13C4-PFOA	201657	2500	Avg	6.698736						1835.33	1835.33	100				2500	73	73	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	502129	18O2-PFHxS	562319	2500	Avg	1.157763						1928.2	1928.2	100				2500	77	77	Yes			
080824093.d	ZQ15761-001		Method_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3577	13C3-PFHxS	502129	2500	Avg	1.144236		15.564	5	5	1	0.01556	0.0156	100	ND	0.016	Yes							
080824093.d	ZQ15761-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	524597	13C5-PFNA	664306	1250	Avg	0.988588						998.51	998.51	100				1250	80	80	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	191301	18O2-PFHxS	562319	2500	Avg	0.213625						3981.28	3981.28	100				5000	80	80	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	558840	13C4-PFOS	725702	2500	Avg	0.548279						3511.3	3511.3	100				5000	70	70	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	465143	13C2-PFDA	513253	1250	Avg	1.165674						971.82	971.82	100				1250	78	78	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	434874	13C4-PFOS	725702	2500	Avg	0.420694						3561.05	3561.06	100				5000	71	71	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	528216	13C4-PFOS	725702	2500	Avg	1.004997						1810.62	1810.62	100				2500	72	72	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	421701	13C2-PFDA	513253	1250	Avg	1.107859						927.04	927.04	100				1250	74	74	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	376073	13C2-PFDA	513253	1250	Avg	1.018582						899.2	899.2	100				1250	72	72	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	759237	13C4-PFOS	725702	2500	Avg	1.722863						1518.13	1518.13	100				2500	61	61	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	331359	13C2-PFDA	513253	1250	Avg	0.914538						882.42	882.42	100				1250	71	71	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2295529	13C4-PFOS	725702	2500	Avg	0.727301						10873	10873.02	100				25000	43	43	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	108750	13C4-PFOS	725702	2500	Avg	0.453376						826.33	826.33	100				2500	33	33	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2496535	13C4-PFOS	725702	2500	Avg	0.801502						10730	10730.37	100				25000	43	43	Yes			
080824093.d	ZQ15761-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	116760	13C4-PFOS	725702	2500	Avg	0.486842						826.2	826.2	100				2500	33	33	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2910189	13C3-PFBA	1575543	5000	Avg	1.130641						8168.38	8168.39	100				10000	82	82	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2797103	13C4-PFBA	2910189	10000	Avg	0.834189		11522	5	5	1	11.522	11.5219	100	12	12	Yes	9.6	120	120	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1201874	13C2-PFHxA	890609	2500	Avg	0.8402						4015.4	4015.4	100				5000	80	80	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	164200	18O2-PFHxS	485226	2500	Avg	0.200536						4218.68	4218.68	100				5000	84	84	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	774087	13C2-PFHxA	890609	2500	Avg	1.104288						1967.71	1967.71	100				2500	79	79	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	550249	18O2-PFHxS	485226	2500	Avg	1.299121						2182.26	2182.26	100				2500	87	87	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	589956	13C2-PFHxA	890609	2500	Avg	0.205187						8070.91	8070.91	100				10000	81	81	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	863186	13C2-PFHxA	890609	2500	Avg	1.198314						2022.03	2022.03	100				2500	81	81	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	189488	18O2-PFHxS	485226	2500	Avg	0.236825						4122.41	4122.4	100				5000	82	82	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	972594	13C4-PFOA	178557	2500	Avg	6.698736						2032.83	2032.83	100				2500	81	81	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	475977	18O2-PFHxS	485226	2500	Avg	1.157763						2118.18	2118.18	100				2500	85	85	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	515038	13C3-PFHxS	475977	2500	Avg	1.144236		2364.16	5	5	1	2.3642	2.3642	100	2.4	2.4	Yes	2.2	108	107	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	452940	13C5-PFNA	622752	1250	Avg	0.988588						919.65	919.65	100				1250	74	74	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	171864	18O2-PFHxS	485226	2500	Avg	0.213625						4145.05	4145.04	100				5000	83	83	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	532598	13C4-PFOS	636874	2500	Avg	0.548279						3813.15	3813.15	100				5000	76	76	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	449678	13C2-PFDA	497935	1250	Avg	1.165674						968.42	968.42	100				1250	77	77	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	411858	13C4-PFOS	636874	2500	Avg	0.420694						3842.97	3842.98	100				5000	77	77	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	498159	13C4-PFOS	636874	2500	Avg	1.004997						1945.76	1945.76	100				2500	78	78	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	533899	13C8-PFOS	498159	2500	Avg	0.990455		2705.18	5	5	1	2.7052	2.7052	100	2.7	2.7	Yes	2.2	122	123	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	404709	13C2-PFDA	497935	1250	Avg	1.107859						917.06	917.06	100				1250	73	73	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	350093	13C2-PFDA	497935	1250	Avg	1.018582						862.83	862.83	100				1250	69	69	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	797574	13C4-PFOS	636874	2500	Avg	1.722863						1817.22	1817.22	100				2500	73	73	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	313142	13C2-PFDA	497935	1250	Avg	0.914538						859.56	859.56	100				1250	69	69	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2304262	13C4-PFOS	636874	2500	Avg	0.727301						12437	12436.67	100				25000	50	50	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	116130	13C4-PFOS	636874	2500	Avg	0.453376						1005.48	1005.48	100				2500	40	40	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2492705	13C4-PFOS	636874	2500	Avg	0.801502						12208	12208.23	100				25000	49	49	Yes			
080824094.d	ZQ15761-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	115374	13C4-PFOS	636874	2500	Avg	0.486842						930.26	930.26	100				2500	37	37	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3008199	13C3-PFBA	1639563	5000	Avg	1.130641						8113.79	8113.79	100				10000	81	81.1	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	241549	13C4-PFBA	3008199	10000	Avg	0.834189		962.57	5	5	1	0.96257	0.96257	100	0.96	0.96	Yes	0.8	120	120.0	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1245122	13C2-PFHxA	863322	2500	Avg	0.8402						4291.37	4291.37	100				5000	86	85.8	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	181180	18O2-PFHxS	541273	2500	Avg	0.200536						4172.93	4172.93	100				5000	83	83.5	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	801420	13C2-PFHxA	863322	2500	Avg	1.104288						2101.58	2101.58	100				2500	84	84.1	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	554126	18O2-PFHxS	541273	2500	Avg	1.299121						1970.07	1970.07	100				2500	78	78.8	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	592810	13C2-PFHxA	863322	2500	Avg	0.205187						8366.29	8366.29	100				10000	84	83.7	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	911443	13C2-PFHxA	863322	2500	Avg	1.198314						2202.55	2202.55	100				2500	88	88.1	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	200671	18O2-PFHxS	541273	2500	Avg	0.236825						3913.64	3913.64	100				5000	78	78.3	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1024403	13C4-PFOA	213716	2500	Avg	6.698736						1788.88	1788.88	100				2500	72	71.6	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	466825	18O2-PFHxS	541273	2500	Avg	1.157763						1862.34	1862.34	100				2500	74	74.5	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	49055	13C3-PFHxS	466825	2500	Avg	1.144236		229.59	5	5	1	0.22959	0.22959	100	0.23	0.23	Yes	0.18	128	127.6	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	503710	13C5-PFNA	628300	1250	Avg	0.988588						1013.7	1013.7	100				1250	81	81.1	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	190021	18O2-PFHxS	541273	2500	Avg	0.213625						4108.41	4108.4	100				5000	82	82.2	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	526538	13C4-PFOS	649681	2500	Avg	0.548279						3695.46	3695.46	100				5000	74	73.9	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	380513	13C2-PFDA	498760	1250	Avg	1.165674						818.11	818.11	100				1250	65	65.4	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	418560	13C4-PFOS	649681	2500	Avg	0.420694						3828.52	3828.52	100				5000	77	76.6	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	541855	13C4-PFOS	649681	2500	Avg	1.004997						2074.71	2074.71	100				2500	83	83.0	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	49544	13C8-PFOS	541855	2500	Avg	0.990455		230.79	5	5	1	0.23079	0.23079	100	0.23	0.23	Yes	0.18	128	128.2	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	406775	13C2-PFDA	498760	1250	Avg	1.107859						920.21	920.21	100				1250	74	73.6	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	356469	13C2-PFDA	498760	1250	Avg	1.018582						877.09	877.09	100				1250	70	70.2	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	777551	13C4-PFOS	649681	2500	Avg	1.722863						1736.67	1736.67	100				2500	69	69.5	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	316604	13C2-PFDA	498760	1250	Avg	0.914538						867.63	867.63	100				1250	69	69.4	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2366105	13C4-PFOS	649681	2500	Avg	0.727301						12519	12518.71	100				25000	50	50.1	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	107528	13C4-PFOS	649681	2500	Avg	0.453376						912.65	912.65	100				2500	37	36.5	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2556759	13C4-PFOS	649681	2500	Avg	0.801502						12275	12275.1	100				25000	49	49.1	Yes			
080824095.d	ZQ15761-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	113944	13C4-PFOS	649681	2500	Avg	0.486842						900.62	900.62	100				2500	36	36.0	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C4-PFBA	SESI-0111	4447912	13C3-PFBA	2692045	5000	Avg	1.130641						7306.66	7306.66	89.3				10000	73	73	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1873923	13C2-PFHxA	1523367	2500	Avg	0.8402						3660.2	3660.2	89.3				5000	73	73	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	248659	18O2-PFHxS	953034	2500	Avg	0.200536						3252.69	3252.7	89.3				5000	65	65	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C5-PFHxA	SESI-0113	1167823	13C2-PFHxA	1523367	2500	Avg	1.104288						1735.52	1735.52	89.3				2500	69	69	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C3-PFBS	SESI-0116	851685	18O2-PFHxS	953034	2500	Avg	1.299121						1719.73	1719.73	89.3				2500	69	69	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	931059	13C2-PFHxA	1523367	2500	Avg	0.205187						7446.68	7446.68	89.3				10000	74	74	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1336827	13C2-PFHxA	1523367	2500	Avg	1.198314						1830.8	1830.8	89.3				2500	73	73	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	278878	18O2-PFHxS	953034	2500	Avg	0.236825						3089.01	3089	89.3				5000	62	62	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C8-PFOA	SESI-0097	1513096	13C4-PFOA	298969	2500	Avg	6.698736						1888.81	1888.81	89.3				2500	76	76	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C3-PFHxS	SESI-0096	804740	18O2-PFHxS	953034	2500	Avg	1.157763						1823.34	1823.34	89.3				2500	73	73	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	21519	13C3-PFHxS	804740	2500	Avg	1.144236		58.424	5	5.68	1	0.05143	0.0514	89.3	0.058	0.058	Yes							
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C9-PFNA	SESI-0099	679082	13C5-PFNA	1051423	1250	Avg	0.988588						816.66	816.66	89.3				1250	65	65	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	253212	18O2-PFHxS	953034	2500	Avg	0.213625						3109.31	3109.31	89.3				5000	62	62	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	743012	13C4-PFOS	1086805	2500	Avg	0.548279						3117.33	3117.33	89.3				5000	62	62	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C6-PFDA	SESI-0115	623059	13C2-PFDA	827260	1250	Avg	1.165674						807.64	807.64	89.3				1250	65	65	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	575717	13C4-PFOS	1086805	2500	Avg	0.420694						3147.97	3147.97	89.3				5000	63	63	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C8-PFOS	SESI-0098	736941	13C4-PFOS	1086805	2500	Avg	1.004997						1686.77	1686.77	89.3				2500	67	67	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	140318	13C8-PFOS	736941	2500	Avg	0.990455		480.6	5	5.68	1	0.42307	0.4231	89.3	0.47	0.47	Yes							
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C7-PFUnA	SESI-0117	562093	13C2-PFDA	827260	1250	Avg	1.107859						766.64	766.64	89.3				1250	61	61	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C2-PFDoA	SESI-0118	494791	13C2-PFDA	827260	1250	Avg	1.018582						734	734	89.3				1250	59	59	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	1097641	13C4-PFOS	1086805	2500	Avg	1.722863						1465.54	1465.54	89.3				2500	59	59	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	428272	13C2-PFDA	827260	1250	Avg	0.914538						707.6	707.6	89.3				1250	57	57	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	3189490	13C4-PFOS	1086805	2500	Avg	0.727301						10088	10087.78	89.3				25000	40	40	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	127175	13C4-PFOS	1086805	2500	Avg	0.453376						645.25	645.26	89.3				2500	26	26	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	3395149	13C4-PFOS	1086805	2500	Avg	0.801502						9744.12	9744.12	89.3				25000	39	39	Yes			
080824096.d	ZF28037-020	CACMW-007-160-93-062024-	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	134898	13C4-PFOS	1086805	2500	Avg	0.486842						637.39	637.39	89.3				2500	25	25	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C4-PFBA	SESI-0111	3129861	13C3-PFBA	1771265	5000	Avg	1.130641						7814.24	7814.24	90.3				10000	78	78	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1309162	13C2-PFHxA	954390	2500	Avg	0.8402						4081.55	4081.55	90.3				5000	82	82	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	178436	18O2-PFHxS	585733	2500	Avg	0.200536						3797.78	3797.79	90.3				5000	76	76	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C5-PFHxA	SESI-0113	800755	13C2-PFHxA	954390	2500	Avg	1.104288						1899.47	1899.47	90.3				2500	76	76	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C3-PFBS	SESI-0116	588888	18O2-PFHxS	585733	2500	Avg	1.299121						1934.74	1934.74	90.3				2500	77	77	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	617069	13C2-PFHxA	954390	2500	Avg	0.205187						7877.67	7877.67	90.3				10000	79	79	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C4-PFHpA	SESI-0114	885017	13C2-PFHxA	954390	2500	Avg	1.198314						1934.62	1934.62	90.3				2500	77	77	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	219543	18O2-PFHxS	585733	2500	Avg	0.236825						3956.7	3956.69	90.3				5000	79	79	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C8-PFOA	SESI-0097	1015794	13C4-PFOA	198251	2500	Avg	6.698736						1912.22	1912.22	90.3				2500	76	76	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C3-PFHxS	SESI-0096	528950	18O2-PFHxS	585733	2500	Avg	1.157763						1950	1950	90.3				2500	78	78	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	14911	13C3-PFHxS	528950	2500	Avg	1.144236		61.591	5	5.51	1	0.05589	0.0559	90.3	0.062	0.062	Yes							
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C9-PFNA	SESI-0099	524439	13C5-PFNA	686966	1250	Avg	0.988588						965.28	965.28	90.3				1250	77	77	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	199623	18O2-PFHxS	585733	2500	Avg	0.213625						3988.41	3988.4	90.3				5000	80	80	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	580376	13C4-PFOS	714138	2500	Avg	0.548279						3705.66	3705.66	90.3				5000	74	74	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C6-PFDA	SESI-0115	481215	13C2-PFDA	534883	1250	Avg	1.165674						964.75	964.75	90.3				1250	77	77	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	433783	13C4-PFOS	714138	2500	Avg	0.420694						3609.64	3609.64	90.3				5000	72	72	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C8-PFOS	SESI-0098	581604	13C4-PFOS	714138	2500	Avg	1.004997						2025.91	2025.91	90.3				2500	81	81	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	98721	13C8-PFOS	581604	2500	Avg	0.990455		428.44	5	5.51	1	0.38878	0.3888	90.3	0.43	0.43	Yes							
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C7-PFUnA	SESI-0117	427975	13C2-PFDA	534883	1250	Avg	1.107859						902.79	902.79	90.3				1250	72	72	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C2-PFDoA	SESI-0118	365209	13C2-PFDA	534883	1250	Avg	1.018582						837.91	837.91	90.3				1250	67	67	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C8-PFOSA	SESI-0107	822751	13C4-PFOS	714138	2500	Avg	1.722863						1671.77	1671.77	90.3				2500	67	67	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	312266	13C2-PFDA	534883	1250	Avg	0.914538						797.95	797.95	90.3				1250	64	64	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2482317	13C4-PFOS	714138	2500	Avg	0.727301						11948	11948.16	90.3				25000	48	48	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	134919	13C4-PFOS	714138	2500	Avg	0.453376						1041.77	1041.77	90.3				2500	42	42	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2599410	13C4-PFOS	714138	2500	Avg	0.801502						11353	11353.45	90.3				25000	45	45	Yes			
080824100.d	ZF28037-027	CACMW-SO-FD02-062024	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	128353	13C4-PFOS	714138	2500	Avg	0.486842						922.94	922.95	90.3				2500	37	37	Yes			

Key

from quantitation report
from reported calibration
from lab report/SEDD
calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
g	grams
IS	internal standard
mL	milliliters
ND	not detected
ng/g	nanograms per gram
ng/L	nanograms per liter
On Col.	on column
RF	response factor
RPD	relative percent difference

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Leslie Brooks	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical Services
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	ZF20024
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	August 6, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical Services – West Columbia, South Carolina. The laboratory is ADEC CS approved for the analyses performed, where required

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: : PFAS (1633)
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☒ No ☐ N/A ☐

Cooler temperature(s): 2.5
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☐ No ☒ N/A ☐
Comments: The laboratory report case narrative documented QC anomalies which are addressed in the following relevant sections of this checklist.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: No corrective actions were performed.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Are all soils reported on a dry weight basis?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☒ No ☐ N/A ☐
Comments: LOQs and LODs for non-detect results were compared to the Project Screening Levels (PSLs) as defined in Worksheet #15 of the UFP-QAPP.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: The following were detected in method blanks below the LOQ and LOD but above the DL:
Batch 15153 PFHxS 0.023 ng/g
Batch 15153 PFOS 0.024 ng/g
Batch 15275 PFOS 0.026 ng/g

iii. If above LoQ or RL, what samples are affected?
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated method blank concentration. The PFOS result for sample CACMW-003-160-158.5-061724-P is considered affected.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD.

v. Data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☐ No ☒ N/A ☐
Comments: Batches 15153 and 15154 had no sample duplicate.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R or RPD failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Sample CACMW-003-160-158.5-061724-P was submitted with additional volume for MS/MSD analysis.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: There were no %R or RPD failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: There were no IDA recovery failures.

iv. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☐ No ☒ N/A ☐
Comments: The following field duplicate pair was submitted in this work order: CACMW-003-160-108.5-061724-P / CACMW-SO-FD01-061724

ii. Was the duplicate submitted blind to lab?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☒ No ☐ N/A ☐
Comments: The following field blanks and equipment blanks were reported in SDG ZF28037: CACMW-EB01-062624, CACMW-FB01-062124 CACMW-FB02-062524

ii. Are all results less than LoQ or RL?
Yes ☐ No ☒ N/A ☐
Comments: See checklist ZF28037 for details.

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. PFOS results in all samples in this work order are considered affected

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?

Yes ☒ No ☐ N/A ☐

Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Leslie Brooks	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical Services
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	ZF28037
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	August 6, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical Services – West Columbia, South Carolina. The laboratory is ADEC CS approved for the analyses performed, where required

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: : PFAS (1633)
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☒ No ☐ N/A ☐

Cooler temperature(s): 4.3
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☐ No ☒ N/A ☐
Comments: The laboratory report case narrative documented QC anomalies which are addressed in the following relevant sections of this checklist.

c. Were all the corrective actions documented?
Yes ☒ No ☐ N/A ☐
Comments: The following corrective actions were noted in the case narrative.
For samples ZF28037-024, ZF28037-026 sample matrix prevented full volume from being extracted, precluding method mandated bottle rinse. Elution solvent was aliquoted directly into the reservoir, rinsing the inside. Surrogate recovery may be adversely affected.
The following sample was diluted due to the nature of the sample matrix: ZF28037-024. The LOQ has been elevated to reflect the dilution. Sample was diluted due to being foamy.
Sample ZF28037-024 had surrogates recovered outside of the acceptance limits.

The sample was reextracted outside the holding time. Both analysis results are reported.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☐ No ☒ N/A ☐
Comments: Reanalysis for sample CACMW-EB01-062624 was extracted 5 days past the recommended 28-day extraction holding time. Field QC samples are not flagged.

c. Are all soils reported on a dry weight basis?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☒ No ☐ N/A ☐
Comments: LOQs and LODs for non-detect results were compared to the Project Screening Levels (PSLs) as defined in Worksheet #15 of the UFP-QAPP.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: Click or tap here to enter text.

iii. If above LoQ or RL, what samples are affected?

Comments: NA; there were no method blank detections.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☐ No ☒ N/A ☐
Comments: Batches 14645, 14850, 15135, and 15761 had no sample duplicates.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R or RPD failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒

Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Sample CACMW-004-160-92.75-062424-P was submitted with additional volume for MS/MSD analysis.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: There were no %R or RPD failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☒ N/A ☐
Comments: Recoveries for IDA 13C2-Perfluorotetradecanoic acid, d-MeFOSA, and d-EtFOSA were below laboratory limits in sample CACMW-EB01-062624.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: Field QC samples are not flagged.

iv. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☐ No ☒ N/A ☐
Comments: The following field duplicate pairs were submitted in this work order:
CACMW-007-160-33-062024-P / CACMW-SO-FD02-062024
(CACMW-008-160-127-062124-P) / CACMW-SO-FD03-062124
CACMW-004-160-142.75-062424-P / CACMW-SO-FD04-062424

ii. Was the duplicate submitted blind to lab?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☒ No ☐ N/A ☐
Comments: The following field blanks and equipment blanks were reported in SDG ZF28037: CACMW-EB01-062624, CACMW-FB01-062124 CACMW-FB02-062524

ii. Are all results less than LoQ or RL?
Yes ☐ No ☒ N/A ☐
Comments: The following detections were above the LOQ:
CACMW-EB01-062624 PFOS 5.6 ng/l (initial)
The following were detected below the LOQ and LOD but above the DL:

CACMW-EB01-062624	PFBA 3.3 ng/l (initial)
CACMW-EB01-062624	PFOS 4.6 ng/l (reanalysis)
CACMW-FB02-062524	PFBA 1.1 ng/l
CACMW-FB02-062524	PFOS 1.5 ng/l

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. PFOS results in all samples in this work order are considered affected

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

SDG:	ZF20024
Lab Name:	Pace
Completed By:	Leslie Brooks
Date:	10/2/2024
Methods (types) reviewed	1633 (LC-MS/MS)

	Yes	No	N/A
Additional Stage 2A 1633 PFAS Checks			
Ion ratios within 50-150% of ion ratio of applicable calibration standard?	X		
Extracted Internal Standard (EIS) recovery within 20-150% or laboratory limits?	X		
EIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Non-Extracted Internal Standards (NIS) peak area greater than 30% of the average area of the calibration standards or within laboratory limits?	X		
NIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Laboratory Control (LCS) and Low-Level Laboratory Control Sample (LLLCS) are prepared in every preparation batch of 20 environmental samples and recovery within control limits?	X		
Bile Salt Interference Check reported and PFOS and TDCA separated by at least 1 minute	X		
Qualitative Identification Standard containing a mix of branched and linear isomers analyzed once daily prior to sample analysis?	X		
Comments: PFNA in sample CACMW-002-160-82.25-061524-P and PFHxS in sample CACMW-001-160-16.5-061124-P had ion rations outside 50-150% of the ion ratio of the midpoint calibration standard. However, these detections were below the LOQ and within 50-150% of the ion ratio of the initial daily CCV and qualification was not required.			
General			
Preparation and analysis run logs reported and complete?	X		
Bench logs and data sheets reported and complete? *(where relevant)*	X		
Comments:			
Tuning and Instrument Performance			
Mass Calibration and Mass Calibration Verification performed prior to initial calibration	X		
Verify the peak apex for each mass did not shift more than 0.2 Da (or amu) from the expected masses for each target analyte.	X		
Comments:			
Initial Calibration			
Initial calibration performed at the required frequency? *(generally prior to sample analysis or after ICV/CCV failure)*	X		

	Yes	No	N/A
Does the calibration include the minimum number of levels? *(6 for Avg. RF or linear with 5 within quantification range and 1 additional if second order)*	X		
Does the calibration meet method criteria? *(RSD or RSE < 20%)*	X		
Comments:			
Initial (Secondary Source), Continuing Calibration Verification, and Instrument Sensitivity Check			
Initial calibration verification (ICV) performed after initial calibration with second source standard?	X		
ICV within method criteria? *(%D <30%)*	X		
Instrument Sensitivity Check (ISC) performed at least once daily prior to sample analysis?	X		
ISC within method criteria? *(%D <30%)*	X		
Continuing calibration verification (CCV) performed at the required frequency? *(bracketing all field samples and after every 10 field samples)*	X		
CCVs within method criteria? *(%D <30%)*	X		
Comments:			
Instrument Blanks			
Instrument Blanks performed at the required frequency? (*immediately following the highest standard analyzed, daily prior to analyzing standards, after each CV, and immediately following samples with PFAS concentrations exceeding the quantification range*)	X		
IB target analyte concentrations below ½ LOQ?	X		
Comments:			
Other QC			
No other instrument-level QC failures or anomalies?		X	
Comments:			

SDG:	ZF28037
Lab Name:	Pace
Completed By:	Leslie Brooks
Date:	10/1/2024
Methods (types) reviewed	1633 (LC-MS/MS)

	Yes	No	N/A
Additional Stage 2A 1633 PFAS Checks			
Ion ratios within 50-150% of ion ratio of applicable calibration standard?		X	
Extracted Internal Standard (EIS) recovery within 20-150% or laboratory limits?		X	
EIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Non-Extracted Internal Standards (NIS) peak area greater than 30% of the average area of the calibration standards or within laboratory limits?		X	
NIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Laboratory Control (LCS) and Low-Level Laboratory Control Sample (LLLCS) are prepared in every preparation batch of 20 environmental samples and recovery within control limits?	X		
Bile Salt Interference Check reported and PFOS and TDCA separated by at least 1 minute	X		
Qualitative Identification Standard containing a mix of branched and linear isomers analyzed once daily prior to sample analysis?	X		
Comments:			
PFHxS in samples CACMW-004-160-142.75-062424-P and CACMW-005-160-121.75-061824-P and PFOS in sample CACMW-006-160-137.5-061924-P had ion ratios outside 50-150% of the ion ratio of the midpoint calibration standard and the initial daily CCV. Affected results are qualified 'J' as estimated.			
EIS in sample CACMW-EB01-062624 were outside limits see ADEC checklist for details.			
NIS areas in samples CACMW-007-160-93-062024-P, CACMW-008-160-77-062124-P, and CACMW-SO-FD03-062124 were above the laboratory upper limit of 100%. No qualification is required for NIS area above limits.			
General			
Preparation and analysis run logs reported and complete?	X		
Bench logs and data sheets reported and complete? *(where relevant)*	X		
Comments:			
Tuning and Instrument Performance			
Mass Calibration and Mass Calibration Verification performed prior to initial calibration	X		
Verify the peak apex for each mass did not shift more than 0.2 Da (or amu) from the expected masses for each target analyte.	X		
Comments:			

	Yes	No	N/A
Initial Calibration			
Initial calibration performed at the required frequency? *(generally prior to sample analysis or after ICV/CCV failure)*	X		
Does the calibration include the minimum number of levels? *(6 for Avg. RF or linear with 5 within quantification range and 1 additional if second order)*	X		
Does the calibration meet method criteria? *(RSD or RSE < 20%)*	X		
Comments:			
Initial (Secondary Source), Continuing Calibration Verification, and Instrument Sensitivity Check			
Initial calibration verification (ICV) performed after initial calibration with second source standard?	X		
ICV within method criteria? *(%D <30%)*	X		
Instrument Sensitivity Check (ISC) performed at least once daily prior to sample analysis?	X		
ISC within method criteria? *(%D <30%)*	X		
Continuing calibration verification (CCV) performed at the required frequency? *(bracketing all field samples and after every 10 field samples)*	X		
CCVs within method criteria? *(%D <30%)*	X		
Comments:			
Instrument Blanks			
Instrument Blanks performed at the required frequency? (*immediately following the highest standard analyzed, daily prior to analyzing standards, after each CV, and immediately following samples with PFAS concentrations exceeding the quantification range*)	X		
IB target analyte concentrations below ½ LOQ?	X		
Comments:			
Other QC			
No other instrument-level QC failures or anomalies?		X	
Comments:			

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907-457-3147

Date:	10/11/2024
Project name:	Arcadis Eielson Data Gaps Investigation - Groundwater
Laboratory:	Pace Analytical Services, LLC, Columbia, SC
Sample delivery groups:	L1756419, L1758081, L1758446, ZG13006, ZG18020, ZG19005
ADS Project Number:	D24007
Reviewed by:	Leslie Brooks, Environmental Scientist
Approved by:	Rodney Guritz, Principal Chemist

To: Mr. Timothy Bellis
Arcadis U.S., Inc
630 Plaza Drive
Suite 200
Highlands Ranch, CO 80129

Data Quality Assessment

This letter summarizes the findings of a data quality assessment (DQA) conducted by Arctic Data Services, LLC (ADS) for the above-referenced project data on behalf of Arcadis U.S., Inc. Precision, accuracy, sensitivity, representativeness, comparability, and completeness of the data was evaluated by reviewing laboratory-supplied quality assurance/quality control (QA/QC) information as well as conducting independent QA/QC checks on the data. A Stage 2A data validation was performed on 100% of project sample data, and a Stage 2B data validation was performed on 100% of project sample per- and polyfluoroalkyl substances (PFAS) data, in general accordance with the DoD *General Data Validation Guidelines* (2019) and method-specific modules, where they exist, and the *Uniform Federal Policy – Quality Assurance Project Plan, Data Gap Investigation & Groundwater Pilot Study Construction in Support of the Groundwater Response Action for PFAS Treatment at Site FT009P* (Ahtna Solutions-Arcadis 8(a) Joint Venture, LLC, 2024). Stage 2B validation includes reviewing sample handling, custody, sample-batch level QC information, and instrument-level QC data; applying data qualifiers to sample results affected by anomalies and QC failures; and summarizing the impacts to data quality. This validation meets the requirements of the Alaska Department of Environmental Conservation (ADEC) *Technical Memorandum 22-001, Guidelines for Data Reporting* (August 2022). Additionally, Stage 4 data validation was performed on 10% of the project sample data relating to analysis of PFAS as described in the Stage 4 Validation section below; Stage 4 data validation includes Stage 3 recalculation of field and QC sample results.

Laboratory QC-sample recoveries and relative percent differences (RPDs) were compared to measurement quality objectives (MQOs) specified in the UFP-QAPP, EPA Draft Method 1633, and/or laboratory control limits. Field-duplicate RPDs were compared to MQOs defined in Worksheet #12 of the UFP-QAPP for the applicable matrix. Limits of quantitation (LOQs) and limits of detection (LODs) were compared to project screening levels (PSLs) listed in Worksheet #15 of the 2024 UFP-QAPP to evaluate analytical sensitivity.

ADEC laboratory data review checklists (attached) were completed for each laboratory work order and summarize Stage 2A data validation findings. Separate checklists were prepared summarizing Stage 2B data validation findings and are also attached. Table 1 (attached) provides a list of qualified results. Table 2 lists the samples that were randomly selected for Stage 3/4 validation. Tables 3 through 5 summarize results recalculated in the course of Stage 3 data validation. The following sections provide a summary of data validation findings for each QA/QC element reviewed; failures or anomalies that had no impact to data quality are discussed in the checklists and are not further described herein.

Sample Analysis Summary

A total of 27 groundwater samples (including field duplicates) were collected and submitted in three sample delivery groups (SDGs) to Pace Analytical for analysis of the following:

- Alkalinity by EPA Method 2320B;
- Total organic carbon (TOC) by EPA Method 5310C;
- Total dissolved solids (TDS) by EPA Method 2540C;
- Total suspended solids (TSS) by EPA Method 2540D;
- Anions by EPA Method 300.0;
- Nitrate/Nitrite by EPA Method 353.2;
- Resource Conservation and Recovery Act (RCRA) metals by EPA Methods 6020A and 7470A;
- Total and dissolved iron, manganese, calcium, and magnesium by EPA Method 6010C and;
- Hardness by EPA Method 130.1.

An additional three SDGs of the same 27 groundwater samples were submitted to Pace Columbia for analysis of:

- Per- and polyfluoroalkyl substances (PFAS) by EPA Draft Method 1633

Stage 2A Data Validation

The following sections summarize findings of a Stage 2A data validation, which includes review of preparatory-batch-level QC information. Only failures affecting project-sample data quality are discussed here; for more information, refer to the attached ADEC laboratory data review checklists.

Sample Preservation, Handling, Custody, and Holding Times

Sample receipt forms were reviewed to check that samples were received in good condition, properly preserved, and within the required temperature range. Chain of custody forms were reviewed to confirm that custody was not breached during sample handling. Dates of sample collection, preparation, and analysis were compared to check that method holding times were not exceeded.

The following holding time exceedances affected project-sample data quality.

- **ZG13006**. Reanalysis of sample CACMW-003-160-071124 was extracted for PFAS analysis 5 days past the recommended 28-day extraction holding time. A total of 40 results were affected and are qualified as estimated ('J' for detects and 'UJ' for non-detects); see checklist and Table 1 for details.
- **ZG18020**. Reanalysis for samples CACMW-004-110-071224, CACMW-004-160-071224, CACMW-005-160-071224, and CACMW-GW-FD01-071224 were extracted for PFAS 5 days past the recommended 28-day extraction holding time. A total of results 160 were affected and are qualified as estimated ('J' for detects and 'UJ' for non-detects); see checklist and Table 1 for details.

Method Blanks

The laboratories analyzed and reported a method blank (MB) sample for each preparatory batch, to check for laboratory-based sample contamination. If and where analytes were detected in a MB, corresponding project-sample results were compared to the MB concentration and were considered potentially affected if detected within 5 times the MB concentration. Affected results above the LOD are qualified with 'J+' flags indicating the results are estimated with a high bias and results below the LOD were qualified with 'UB' flags as false-positives and are considered non-detect up to the LOD. This flagging criteria is in accordance with the *Data Validation Guidelines Modules 1, 3, 3, and 4 Revised Table for Sample Qualification in the Presence of Blank Contamination* (DoD, 2022).

There were no method blank detections determined to affect project-sample data quality; see checklists for details.

Laboratory Control Samples and Duplicates

The laboratory analyzed and reported a laboratory control sample (LCS) for each preparatory batch, to assess laboratory extraction efficiency and analytical accuracy. In some cases, LCS duplicates (LCSDs) were used to assess analytical precision. LCS/LCSD recovery information and LCSD RPD information (where available) were reviewed.

The following LCS/LCSD recovery and LCSD RPD failures were determined to affect project-sample data quality:

- **L1756419**. LCS recovery of total suspended solids (TSS) was below control limits in batches WG2322808 and WG2322815. TSS results for five project samples are considered affected and were qualified 'J-' as estimated with low bias. See checklist and Table 1 for details.

Matrix Spike Samples

Matrix spikes (MS) and MS duplicates (MSD) were analyzed for select organic batches, to evaluate potential matrix interference affecting accuracy and/or precision. MS/MSD recovery and RPDs were evaluated only if the parent sample (the sample spiked for the MS/MSD) was in the project-sample set. Additionally, MS/MSD recovery was only evaluated if the spiking concentration was greater than one-fourth the native analyte concentration, as a low spiking ratio (compared to native analyte concentration in the parent sample) does not yield useful recovery information.

Samples CACMW-003-160-071124 and CACMW-006-060-071524 were submitted with additional volume for project-specific MS/MSD analysis. Additionally, the laboratory performed MS/MSD analysis on several samples for batch QC purposes.

The following MS/MSD recovery failures and MSD RPD failures were determined to affect project-sample data quality:

- **L1758081.** MS recovery for chloride was below control limits in the MS of parent sample CAMW-004-110-071224. The affected result was qualified 'J-' as estimated with low bias; see checklist and Table 1 for details.
- **L1758446.** There were five MS/MSD recovery failures. Three project-sample results were affected by the recovery failures and qualified as estimated, biased low ('J-' for detections, 'UJ' for non-detects). Refer to the checklist and Table 1 for details.
- **ZG13006.** There were four MS/MSD recovery failures and four MSD RPD failures in the initial MS/MSD PFAS analysis of parent sample CACMW-003-160-071124. Four results were affected by the recovery failures. Perfluorotridecanoic acid (PFTriA) and perfluorodecanesulfonic acid (PFDS) were qualified 'UJ' as estimated with low bias. 11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) and perfluorododecanesulfonic acid (PFDOS) were qualified 'X' as recommended for rejection due to extremely low recovery. See checklist and Table 1 for details.

Extracted Internal Standard Recoveries

Samples submitted for PFAS analysis were spiked with radio-labelled extracted internal standards (EIS; also referred to as isotope dilution analytes) to evaluate accuracy, check for matrix interference on a sample-specific basis, and to quantify the associated target analyte(s). Due to the nature of isotope dilution, a direction of bias is not inferred for EIS recovery failures; the results are quantitated using the EIS as an analyte-specific internal standard, thereby correcting for low or high bias.

The following EIS recovery failures were determined to affect project-sample data quality:

- **ZG13006.** There were three EIS recovery failures for sample CACMW-003-160-071124. Four results were considered affected by the recovery failures. PFTriA and Perfluorotetradecanoic acid (PFTeA) were qualified 'UJ' as estimated with low bias. 2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE) and 2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE) were qualified 'X' as recommended for rejection due to extremely low recovery. See checklist and Table 1 for details.
- **ZG18020.** There were 15 EIS recovery failures in the initial analysis and reanalysis of samples CACMW-004-110-071224, CACMW-004-160-071224, CACMW-005-160-071224, and CACMW-GW-FD01-071224. A total of 16 results were affected by the recovery failures. Three results were qualified 'UJ' as estimated with low bias. A total of 13 results were qualified 'X' as recommended for rejection due to extremely low recovery. See checklist and Table 1 for details.

Field Duplicates

Field duplicate samples were collected and submitted blind to the laboratory at the required frequency (one per 10 primary samples). RPDs between field-duplicate results were calculated; where analytes were not detected, the LOD was used in the calculation. RPDs were compared to a MQO of 30% for water.

There were no field duplicate RPD failures considered to affect project-sample data quality.

Equipment and Field Blanks

Samples CACMW-EB02-071524, CACMW-EB03-071624, CACMW-FB02-071524, and CACMW-FB03-071624 were collected as equipment blanks (EB) and field blanks (FB) and submitted with groundwater samples; these EB and FB were conservatively assumed to correspond to all groundwater samples in all SDGs for purposes of data validation. The EBs were used to check for potential cross-contamination of samples from the reusable sampling equipment. The FBs were used to check for potential cross-contamination of samples from sample handling processes. Where analytes were detected in the blanks, corresponding project-sample results were compared to the blank concentration and were considered potentially affected if detected within 5 times the blank concentration in groundwater samples. Professional judgement was used to determine if data quality was affected for individual results, depending upon relative collection times and concentrations of associated samples. Affected results above the LOD are qualified with 'J+' flags indicating the results are estimated with a high bias and results below the LOD were qualified with 'UB' flags as false-positives and are considered non-detect up to the LOD.

The following EB and FB detections were considered to affect project-sample data quality:

- **L1758446**. Calcium, chloride, and fluoride were detected in one or more EB or FB. All fluoride results in SDGs L1756419, L1758081, and L1758446 were considered affected; see checklist and Table 1 for details.

- **ZG19005**. Five PFAS analytes were detected in CACMW-EB03-071624 and three PFAS analytes were detected in CACME-FB04-071624. Perfluorooctane sulfonamide (FOSA) results in samples CACMW-007-160-071524, CACMW-008-160-071624, and CACMW-GW-FD01-071224 were considered affected; see checklist and Table 1 for details.

Other QC Anomalies

The laboratory reported the following QC failures that were considered to affect project-sample data quality:

- **ZG18020**. The laboratory qualified PFOS results in both the initial and reanalysis of sample CACMW-004-110-071224 as having exceeded the calibration range. Affected results are qualified 'J' as estimated for exceeding the calibration range.

Stage 2B Data Validation

The following sections summarize findings of a Stage 2B data validation of the PFAS dataset, which includes review of instrument-level QC information. Only failures affecting project-sample data quality are discussed here; for more information, refer to the attached Stage 2B data validation checklists.

Additional Stage 2A 1633 PFAS Checks

Additional Stage 2A checks are included in the Stage 2B data validation as they are method-specific and are not covered by the standard ADEC Laboratory Data Review Checklist. For LC-MS/MS Methods, additional Stage 2A checks include ion rations, non-extracted internal standards (NIS), LCS and low-level laboratory control samples (LLCS), bile salt interference, and qualitative identification standards compared to method or QSM criteria.

The following anomalies were determined to affect project-sample data quality:

- **ZG13006**. Perfluoroundecanoic acid (PFUnA) in sample CACMW-004-060-071124 and FOSA in the initial analysis of sample CACMW-003-160-071124 had ion ratios outside laboratory limits. Affected results were qualified 'J' as estimated; see checklist and Table 1 for details.
- **ZG18020**. PFUnA in the reanalysis of sample CACMW-004-110-071224 and perfluorononanoic acid (PFNA) and FOSA in the reanalysis of sample CACMW-GW-FD01-071224 had ion ratios outside laboratory limits. Affected results were qualified 'J' as estimated; see checklist and Table 1 for details.
- **ZG19005**. Perfluorodecanoic acid (PFDA) in samples CACMW-008-060-071624 and CACMW-GW-FD02-071624, N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) in samples CACMW-006-160-071524 and CACMW-008-160-071624, and FOSA in sample CACMW-007-160-071524 had ion ratios outside laboratory limits. Affected results were qualified 'J' as estimated; see checklist and Table 1 for details.

Tuning & Instrument Performance

For LC-MS/MS methods, MS tune checks were evaluated against method-specific criteria. Instrument performance checks, such as mass calibration and mass peak, were reviewed where reported and compared to method or QSM criteria. There were no tuning or instrument performance anomalies affecting project-sample data quality.

Initial Calibration and Verification

The initial calibration for each analysis was reviewed, to check for compliance with method and/or QSM requirements. This included checking that an appropriate number of standards (calibration points) were used, the frequency of calibrations met method and/or project-specific QC requirements, and that the calibration curve met method requirements (e.g. an $r^2 \geq 0.99$). Initial calibrations were acceptable for each analysis.

ICV samples were verified to be from a second source and were reviewed to verify the accuracy of the initial calibration. ICV recoveries were within control limits for each calibration.

Continuing Calibration Verification and Instrument Sensitivity Check

Laboratory batch summaries and/or run logs were reviewed to check that all project samples were bracketed by CCVs, and that CCV percent recoveries were within control limits for target analytes. CCV analysis frequency and percent recoveries were acceptable.

The laboratory analyzed and reported instrument sensitivity checks (ISCs) to check instrument detection capabilities at the required reporting limits. Laboratory batch summaries and/or run logs were reviewed to check that an ISC was performed at least once daily prior to sample and analysis, and that ISC percent recoveries were within control limits. ISC performance and percent recoveries were acceptable.

Instrument Blanks

Laboratory batch summaries and/or run logs were reviewed to check that instrument blanks (IBs) were performed immediately following the highest standard analyzed, daily prior to analyzing standards, after each CCV, and immediately following samples with PFAS concentrations exceeding the quantitation range. Each IB analysis was reviewed to check that IB target analyte concentrations were below one half of the LOQ. IB performance and target analyte concentrations were acceptable.

Stage 3 and 4 Data Validation

The following sections summarize findings of the 10% Stage 3 and Stage 4 data validation, which includes recalculation of select results (Stage 3) and qualitative review of analyte identification and quantitation (Stage 4).

A random selection of 10% of project field samples per SDG were selected for recalculation. All instrument QC samples related to field sample analysis were recalculated. Associated preparatory-batch QC samples (MB, LCS/LCSD, MS/MSD) were recalculated. Only target analytes that were detected in one or more field samples were recalculated. For all selected samples, EIS recoveries were recalculated and compared to reported recoveries. Standards traceability was also reviewed.

For Stage 4 validation, target compound identification and manual integrations were reviewed as described below; there were no tentatively identified compounds reported for this project.

Instrument Calibration, Performance, and Instrument QC Samples

Initial calibrations were recalculated using raw instrument responses from the quantitation reports for calibration standards. The laboratory used an average response factor (RF) calibration for all methods and analytes. Concentrations were calculated based on associated internal standards.

Initial calibration verification (ICV) and bracketing CCV percent recoveries were recalculated and verified against reported recoveries. As noted in the relevant Stage 2B section above, CCV recovery failures did not affect project-sample data quality. ICB and CCBs were recalculated and verified below one-half the LOQ.

Field Samples and Field/Lab QC Samples

A random selection of 10% of field samples for each SDG were selected for Stage 3 recalculation; see Table 2 for a list of selected samples. For the selected field samples, all detected target analyte results were recalculated and compared to the reported results. Additionally, all EIS recoveries were recalculated and verified against reported percent recoveries.

At least one MB, LCS/LCSD, and MS/MSD per method and SDG were recalculated. When detections were reported in an associated blank (MB, FB, or EB), the sample was selected for recalculation. Overall, recalculated results matched reported results, with occasional slight differences likely due to rounding. For recalculations, no rounding was performed until the very end; the laboratory may have rounded intermediate values, accounting for the slight differences.

No anomalies were identified during recalculation of project field sample and field and lab QC sample results that could not be attributed to rounding differences.

Standards Traceability

Laboratory reports were reviewed to verify the certificates of analysis were included for all stock standard solutions, and that the standards used in the ICV were from a secondary source. Standards preparation logs were

reviewed to check that stock standards were diluted properly into working standards for the ICAL and spiking solutions. Standards preparation logs appeared complete and there were no anomalies identified.

Target Compound Identification

Target compound identification was evaluated by qualitatively reviewing signal to noise ratios and relative retention times for target analyte peaks, and presence of valid spectra with passing mass/ion ratios (for MS methods). This evaluation was performed for roughly 10% of positive detections within the randomly selected samples; no anomalies were identified.

Manual Integrations

Manual integrations were noted in the case narratives and with "M" flags on associated results. There was an unusually high frequency of manual integrations in both work orders, for laboratory instrument QC samples, batch QC samples, and field samples, including nearly all detections in field samples. In each case, the justification listed was "incorrect auto integration." A representative selection of manual integrations was reviewed, comparing the chromatograms before and after manual integration. In general, manual integrations were consistently performed across all field and QC samples and appeared appropriate. However, justification for manual integrations could have been more descriptive (e.g. base-line correction, split peak, etc.).

Summary of Data Quality Indicators

The following sections summarize the findings of the above review with respect to the six data quality indicators: sensitivity, precision, accuracy, representativeness, comparability, and completeness.

Sensitivity

Sensitivity describes the ability of the sampling and analytical methodology to meet detection and/or quantitation limit objectives. Analytical sensitivity was evaluated by checking that LODs for non-detect results were below relevant PSLs. A non-detect result is considered to be adequately sensitive if the LOD is below the PSL.

LODs for cadmium, mercury, and HFPO-DA were above the PSL for all samples. However, LOD goals from the UFP-QAPP were met. Overall analytical sensitivity is deemed acceptable for the purposes of this project.

Precision

Precision is a measure of the reproducibility of repetitive measurements. Precision was evaluated based on laboratory QC-sample RPDs and field-duplicate RPDs. No sample results were affected by MSD or field duplicate RPD failures. Overall precision is deemed acceptable for the purposes of this project.

Accuracy

Accuracy is a measure of the correctness, or the closeness, between the true value and the quantity detected. Accuracy was evaluated based on target-analyte recoveries for laboratory batch-level and instrument-level QC samples, and surrogate recoveries for project samples. Accuracy also may be affected by sample contamination identified in blank samples, or by sample handling, preservation, or holding time anomalies.

Five results were affected by LCS/LCSD recovery failures. A total of 20 results were affected by EIS recovery failures. Eight results were affected by MS/MSD recovery failures. A total of 30 results were affected by sample contamination identified in blank samples (MB, FB, and/or EB). A total of 200 PFAS results were affected by a holding time exceedance. Two results were affected by calibration exceedances. Ten results were affected by ion ratio failures. Impact to data usability was generally minor, with the exception of 17 results that were recommended for rejection ('X'-flagged) due to extremely low MS/MSD or EIS recovery. Target analyte and/or EIS recoveries for laboratory QC samples and select field samples were verified through Stage 3 recalculations, with no significant discrepancies identified that would impact project-sample data quality. Overall accuracy is deemed acceptable for the purposes of this project, with exceptions noted above.

Representativeness

Representativeness describes the degree to which data accurately and precisely represent site characteristics. Representativeness is affected by factors such as sample frequency and matrix or contaminant heterogeneity, as well as analytical performance (including sensitivity, accuracy, and precision), sample preservation, handling, and holding times, and sample cross-contamination.

Samples were collected in accordance with an approved work plan, and MQOs defined in the UFP-QAPP were generally met. Sensitivity, precision, and accuracy were acceptable for the purposes of this project. Results qualified due to QC anomalies affecting precision and accuracy are usable as qualified but are not wholly representative of site conditions. Overall, results were considered adequately representative of environmental conditions for the purposes of this project.

Comparability

Comparability describes whether two data sets can be considered equivalent with respect to project goals. Comparability is affected by factors such as sampling methodology and analytical performance (including sensitivity, accuracy, and precision). Comparability was evaluated by checking that standard analytical methods were employed, and analytical performance was acceptable.

Data review findings generally support that the dataset is comparable. Overall comparability should be evaluated by the project team considering sample collection methodology and historic results alongside data quality and analytical methodology.

Completeness

Completeness describes the amount of valid data obtained from the sampling event(s). It is calculated as the percentage of usable measurements compared to the total number of measurements. A total of 17 results were recommended for rejection in this review. The dataset is 99.1% complete. Overall completeness should be reviewed by the project team during data usability assessment. Data usability assessment should include determining whether the 17 results recommended for rejection during data validation are indeed unusable for the purposes of this project. If so, the 'X' flags and results should be replaced with 'R' flags for final reporting.

Conclusions

Sensitivity, precision, accuracy, representativeness, comparability, and completeness were deemed acceptable, and the data are usable for the purposes of this project. Stage 3/4 validation confirmed target analytes were appropriately identified and quantitated and that results were appropriately calculated. A total of 260 results were qualified due to QC anomalies, and 17 results were recommended for rejection. Qualified results are listed in Table 1.

Limitations

This review was based solely on information provided by the analytical laboratory in the laboratory reports and staged electronic data deliverables for the SDGs reviewed. A data quality assessment reduces the risk of reliance on data of compromised quality; however, it does not eliminate that risk.

Attachments:

Table 1 – Summary of Qualified Data
Table 2 – Selected 10% of Field Samples
Tables 3 – 1633 Calibration Recalculations
Tables 4a–4c – 1633 Recalculation Summary: Instrument QC Samples
Tables 5c–5c – 1633 Recalculation Summary: Field and QC Samples
ADEC Laboratory Data Review Checklists
Stage 2B Data Validation Checklists

Lab	SDG	Client Sample ID	Lab Sample ID	Matrix	Analysis Run	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag		Final Qualified Result	PSL
PACE	L1756419	CACMW-001-060-070924	L1756419-01	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	436		FB	J+	J+		436 [150] J+	
PACE	L1756419	CACMW-001-110-070924	L1756419-02	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	499		FB	J+	J+		499 [150] J+	
PACE	L1756419	CACMW-001-160-071024	L1756419-03	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	286	J	FB	J+	J+		286 [150] J+	
PACE	L1756419	CACMW-002-060-071024	L1756419-04	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	422		FB	J+	J+		422 [150] J+	
PACE	L1756419	CACMW-003-060-071024	L1756419-05	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	544		FB	J+	J+		544 [150] J+	
PACE	L1756419	CACMW-003-110-071124	L1756419-06	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	506		FB	J+	J+		506 [150] J+	
PACE	L1756419	CACMW-003-160-071124	L1756419-07	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	209	J	FB	J+	J+		209 [150] J+	
PACE	L1756419	CACMW-004-060-071124	L1756419-08	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	480		FB	J+	J+		480 [150] J+	
PACE	L1756419	CACMW-002-110-071124	L1756419-09	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	500		FB	J+	J+		500 [150] J+	
PACE	L1756419	CACMW-005-060-071124	L1756419-10	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	546		FB	J+	J+		546 [150] J+	
PACE	L1756419	CACMW-002-160-071124	L1756419-11	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	202	J	FB	J+	J+		202 [150] J+	
PACE	L1756419	CACMW-001-060-070924	L1756419-01	Groundwater		SM2540D	Total Suspended Solids	ARC-TSS	ug/l	376		3330	21100	J4	LCS %R	J-	J-		21100 J-	
PACE	L1756419	CACMW-001-110-070924	L1756419-02	Groundwater		SM2540D	Total Suspended Solids	ARC-TSS	ug/l	297		2630	6530	J4	LCS %R	J-	J-		6530 J-	
PACE	L1756419	CACMW-001-160-071024	L1756419-03	Groundwater		SM2540D	Total Suspended Solids	ARC-TSS	ug/l	283		2500	3400	J4	LCS %R	J-	J-		3400 J-	
PACE	L1756419	CACMW-002-060-071024	L1756419-04	Groundwater		SM2540D	Total Suspended Solids	ARC-TSS	ug/l	283		2500	5700	J4	LCS %R	J-	J-		5700 J-	
PACE	L1756419	CACMW-003-060-071024	L1756419-05	Groundwater		SM2540D	Total Suspended Solids	ARC-TSS	ug/l	283		2500	48200	J4	LCS %R	J-	J-		48200 J-	
PACE	L1758081	CACMW-004-110-071224	L1758081-01	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	552		FB	J+	J+		552 [150] J+	
PACE	L1758081	CACMW-004-160-071224	L1758081-02	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	281	J	FB	J+	J+		281 [150] J+	
PACE	L1758081	CACMW-005-110-071224	L1758081-03	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	520		FB	J+	J+		520 [150] J+	
PACE	L1758081	CACMW-005-160-071224	L1758081-04	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	329		FB	J+	J+		329 [150] J+	
PACE	L1758081	CACMW-GW-FD01-071224	L1758081-05	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	205	J	FB	J+	J+		205 [150] J+	
PACE	L1758081	CACMW-004-110-071224	L1758081-01	Groundwater		SW9056A	Chloride	16887-00-6	ug/l	379	1000	2000	58400	J6	MS %R	J-	J-		58400 [1000] J-	
PACE	L1758446	CACMW-006-060-071524	L1758446-01	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	379		FB	J+	J+		379 [150] J+	
PACE	L1758446	CACMW-006-110-071524	L1758446-02	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	442		FB	J+	J+		442 [150] J+	
PACE	L1758446	CACMW-006-160-071524	L1758446-03	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	306		FB	J+	J+		306 [150] J+	
PACE	L1758446	CACMW-007-060-071524	L1758446-04	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	387		FB	J+	J+		387 [150] J+	
PACE	L1758446	CACMW-007-110-071524	L1758446-05	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	439		FB	J+	J+		439 [150] J+	
PACE	L1758446	CACMW-007-160-071524	L1758446-06	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	235	J	FB	J+	J+		235 [150] J+	
PACE	L1758446	CACMW-008-060-071624	L1758446-07	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	350		FB	J+	J+		350 [150] J+	
PACE	L1758446	CACMW-008-110-071624	L1758446-08	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	443		FB	J+	J+		443 [150] J+	
PACE	L1758446	CACMW-008-160-071624	L1758446-09	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	238	J	FB	J+	J+		238 [150] J+	
PACE	L1758446	CACMW-GW-FD02-071524	L1758446-14	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	378		FB	J+	J+		378 [150] J+	
PACE	L1758446	CACMW-GW-FD03-071624	L1758446-15	Groundwater		SW9056A	FLUORIDE	16984-48-8	ug/l	64	150	300	434		FB	J+	J+		434 [150] J+	
PACE	L1758446	CACMW-006-060-071524	L1758446-01	Groundwater		E353.2	NITRATE-NITRITE	ARC-NO3NO2N	ug/l	50	100	200	ND	J6 U	MS %R, MSD %R	UJ, UJ	UJ		ND [100] UJ	
PACE	L1758446	CACMW-006-060-071524	L1758446-01	Groundwater		SW9056A	Chloride	16887-00-6	ug/l	379	1000	2000	59200	J6	MS %R, MSD %R	J-, J-	J-		59200 [1000] J-	
PACE	L1758446	CACMW-008-110-071624	L1758446-08	Groundwater		E353.2	NITRATE-NITRITE	ARC-NO3NO2N	ug/l	50	100	200	ND	J3 J6 U	MSD %R	UJ	UJ		ND [100] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Initial	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	0.64	2	10	ND	UQ	Low EIS %, R<10%	X	X		ND [2] X	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Initial	E1633	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	ng/l	0.66	2	10	ND	UQ	Low EIS %, R<10%	X	X		ND [2] X	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Initial	E1633	Perfluorotetradecanoic acid (PFTeA)	376-06-7	ng/l	0.28	0.8	1	ND	UQ	Low EIS %R	UJ	UJ		ND [0.8] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Initial	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/l	0.2	0.4	1	ND	US	Low EIS %R, MS %R	UJ, UJ	UJ		ND [0.4] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	ng/l	4.4	12	20	ND	UH	HT	UJ	UJ		ND [12] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	ng/l	3.3	11	20	ND	UH	HT	UJ	UJ		ND [11] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	ng/l	3.3	12	20	ND	UH	HT	UJ	UJ		ND [12] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	8:2FTS	39108-34-4	ng/l	3	7.5	20	9.8	HJM-03	HT	J	J M		9.8 [7.5] J M	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	4:2 FTS	757124-72-4	ng/l	2	7.5	20	ND	UH	HT	UJ	UJ		ND [7.5] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	6:2FTS	27619-97-2	ng/l	10	23	25	40	H	HT	J	J		40 [23] J	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA)	914637-49-3	ng/l	21	52	130	ND	UH	HT	UJ	UJ		ND [52] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA)	13252-13-6	ng/l	5	12	20	ND	UH	HT	UJ	UJ		ND [12] UJ	1.5
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA)	4151-50-2	ng/l	0.64	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	2991-50-6	ng/l	1.5	4	5	ND	UH	HT	UJ	UJ		ND [4] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	3.1	10	50	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	ng/l	1.1	4	5	ND	UH	HT	UJ	UJ		ND [4] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	N-Methylperfluorooctane Sulfonamidoacetic Acid (MeFOSAA)	2355-31-9	ng/l	1.5	4	5	ND	UH	HT	UJ	UJ		ND [4] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	ng/l	3.2	10	50	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA)	151772-58-6	ng/l	2.9	6.5	10	ND	UH	HT	UJ	UJ		ND [6.5] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA)	113507-82-7	ng/l	1.8	5.5	10	ND	UH	HT	UJ	UJ		ND [5.5] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluoro-3-methoxypropanoic aci (PFMPA)	377-73-1	ng/l	0.92	3.2	10	ND	UH	HT	UJ	UJ		ND [3.2] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluoro-4-Methoxybutanic acid (PFMBA)	863090-89-5	ng/l	1.9	6.5	10	ND	UH	HT	UJ	UJ		ND [6.5] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorobutanesulfonic acid (PFBS)	375-73-5	ng/l	0.47	1.8	5	6.2	HM-03	HT	J	J M		6.2 [1.8] J M	600
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorobutanoic acid (PFBA)	375-22-4	ng/l	2.6	8	20	5.1	HJM-03	HT	J	J M		5.1 [8] J M	1800
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorodecanesulfonic acid (PFDS)	335-77-3	ng/l	0.82	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/l	0.68	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	ng/l	0.77	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorododecanoic acid (PFDoA)	307-55-1	ng/l	0.53	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	ng/l	0.95	1.9	5	4.5	HJ	HT	J	J		4.5 [1.9] J	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluoroheptanoic acid (PFHpA)	375-85-9	ng/l	1.1	4	5	7.3	H	HT	J	J		7.3 [4] J	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA)	812-70-4	ng/l	21	52	130	ND	UH	HT	UJ	UJ		ND [52] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/l	0.92	3.7	5	64	HM-03	HT	J	J M		64 [3.7] J M	39
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/l	0.71	2	5	19	H	HT	J	J		19 [2] J	990
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorononanesulfonic acid (PFNS)	68259-12-1	ng/l	0.73	1.9	5	ND	UH	HT	UJ	UJ		ND [1.9] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/l	0.52	2	5	1.8	HJM-03	HT	J	J M		1.8 [2] J M	5.9
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	0.99	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/l	1.2	3.7	5	190	BHM-03	HT	J	J M		190 [3.7] J M	4
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	1	4	5	21	HM-03	HT	J	J M		21 [4] J M	6
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluoropentanesulfonate (PFPeS)	138495-42-8	ng/l	1.3	3.8	5	8.5	HM-03	HT	J	J M		8.5 [3.8] J M	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluoropentanoic acid (PFPA)	2706-90-3	ng/l	0.92	2	10	15	HM-03	HT	J	J M		15 [2] J M	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	ng/l	3	10	25	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorotetradecanoic acid (PFTeA)	376-06-7	ng/l	1.3	4	5	ND	UH	HT	UJ	UJ		ND [4] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/l	0.97	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Reextract	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/l	1.2	4	5	ND	UH	HT	UJ	UJ		ND [4] UJ	

Lab	SDG	Client Sample ID	Lab Sample ID	Matrix	Analysis Run	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag		Final Qualified Result	PSL
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Initial	E1633	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	ng/l	0.92	2.4	4.2	ND	US	MS %R, %R<10%	X	X		ND [2.4] X	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Initial	E1633	Perfluorodecanesulfonic acid (PFDS)	335-77-3	ng/l	0.17	0.39	1	ND	US	MS %R	UJ	UJ		ND [0.39] UJ	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Initial	E1633	Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	ng/l	0.16	0.39	1	ND	US	MS %R, %R<10%	X, UJ	X		ND [0.39] X	
PACE	ZG13006	CACMW-004-060-071124	ZG13006-011	Groundwater	Initial	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/l	0.25	0.8	1	0.35	JM-03	Ion_ratio	J	J M		0.35 [0.8] J M	
PACE	ZG13006	CACMW-003-160-071124	ZG13006-007	Groundwater	Initial	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	0.21	0.4	1	2.2		Ion_ratio	J	J		2.2 [0.4] J	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Initial	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	0.63	2	10	ND	UQ	Low EIS %R	UJ	UJ		ND [2] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	dilution	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	3.1	10	51	ND	UQ	Low EIS %, R<10%	X	X		ND [10] X	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	0.63	2	10	ND	UHQ	Low EIS %, R<10%, HT	X, UJ	X		ND [2] X	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	ng/l	0.65	2	10	ND	UHQ	Low EIS %, R<10%, HT	X, UJ	X		ND [2] X	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorotetradecanoic acid (PFTeA)	376-06-7	ng/l	0.28	0.8	1	ND	UHQ	Low EIS %, R<10%, HT	X, UJ	X		ND [0.8] X	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/l	0.2	0.4	1	ND	UH	Low EIS %, R<10%, HT	X, UJ	X		ND [0.4] X	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Initial	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	0.61	2	10	ND	UQ	Low EIS %, R<10%	X	X		ND [2] X	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Initial	E1633	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	ng/l	0.64	2	10	ND	UQ	Low EIS %R	UJ	UJ		ND [2] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	0.62	2	10	ND	UHQ	Low EIS %, R<10%, HT	X, UJ	X		ND [2] X	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	ng/l	0.64	2	10	ND	UHQ	Low EIS %, R<10%, HT	X, UJ	X		ND [2] X	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Initial	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	0.6	2	9.9	ND	UQ	Low EIS %, R<10%	X	X		ND [2] X	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Initial	E1633	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	ng/l	0.62	2	9.9	ND	UQ	Low EIS %R	UJ			ND [2]	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	0.62	2	10	ND	UHQ	Low EIS %, R<10%, HT	X, UJ	X		ND [2] X	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	ng/l	0.64	2	10	ND	UHQ	Low EIS %, R<10%, HT	X, UJ	X		ND [2] X	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Initial	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	0.61	2	10	ND	UQ	Low EIS %, R<10%	X	X		ND [2] X	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Initial	E1633	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	ng/l	0.63	2	10	ND	UQ	Low EIS %, R<10%	X	X		ND [2] X	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	ng/l	0.9	2.4	4.1	ND	UH	HT	UJ	UJ		ND [2.4] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	ng/l	0.69	2.3	4.1	ND	UH	HT	UJ	UJ		ND [2.3] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	ng/l	0.68	2.4	4.1	ND	UH	HT	UJ	UJ		ND [2.4] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	8:2FTS	39108-34-4	ng/l	0.62	1.5	4.1	26	HM-03	HT	J	J M		26 [1.5] J M	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	4:2 FTS	757124-72-4	ng/l	0.41	1.5	4.1	1	HJM-03	HT	J	J M		1 [1.5] J M	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	6:2FTS	27619-97-2	ng/l	2.1	4.7	5.1	110	H	HT	J	J		110 [4.7] J	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA)	914637-49-3	ng/l	4.4	10	26	6.9	HJ	HT	J	J		6.9 [10] J	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA)	13252-13-6	ng/l	1	2.5	4.1	ND	UH	HT	UJ	UJ		ND [2.5] UJ	1.5
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA)	4151-50-2	ng/l	0.13	0.4	1	ND	UH	HT	UJ	UJ		ND [0.4] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	2991-50-6	ng/l	0.3	0.8	1	15	H	HT	J	J		15 [0.8] J	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	ng/l	0.22	0.8	1	ND	UH	HT	UJ	UJ		ND [0.8] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	N-Methylperfluoroocatane Sulfonamidoacetic Acid (MeFOSAA)	2355-31-9	ng/l	0.3	0.8	1	15	HM-03	HT	J	J M		15 [0.8] J M	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA)	151772-58-6	ng/l	0.59	1.3	2	ND	UH	HT	UJ	UJ		ND [1.3] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA)	113507-82-7	ng/l	0.37	1.1	2	ND	UH	HT	UJ	UJ		ND [1.1] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluoro-3-methoxypropanoic aci (PFMPA)	377-73-1	ng/l	0.19	0.64	2	ND	UH	HT	UJ	UJ		ND [0.64] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluoro-4-Methoxybutanic acid (PFMBA)	863090-89-5	ng/l	0.4	1.3	2	ND	UH	HT	UJ	UJ		ND [1.3] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorobutanesulfonic acid (PFBS)	375-73-5	ng/l	0.096	0.35	1	15	HM-03	HT	J	J M		15 [0.35] J M	600
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorobutanoic acid (PFBA)	375-22-4	ng/l	0.52	1.6	4.1	16	H	HT	J	J		16 [1.6] J	1800
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorodecanesulfonic acid (PFDS)	335-77-3	ng/l	0.17	0.39	1	ND	UHM-03	HT	UJ	UJ M		ND [0.39] UJ M	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/l	0.14	0.4	1	2.2	H	HT	J	J		2.2 [0.4] J	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	ng/l	0.16	0.39	1	ND	UH	HT	UJ	UJ		ND [0.39] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorododecanoic acid (PFDoA)	307-55-1	ng/l	0.11	0.4	1	ND	UH	HT	UJ	UJ		ND [0.4] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	ng/l	0.19	0.38	1	18	H	HT	J	J		18 [0.38] J	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluoroheptanoic acid (PFHpA)	375-85-9	ng/l	0.22	0.8	1	29	H	HT	J	J		29 [0.8] J	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA)	812-70-4	ng/l	4.3	10	26	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/l	0.19	0.73	1	240	H	HT	J	J		240 [0.73] J	39
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/l	0.15	0.4	1	85	H	HT	J	J		85 [0.4] J	990
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorononanesulfonic acid (PFNS)	68259-12-1	ng/l	0.15	0.38	1	1.4	HM-03	HT	J	J M		1.4 [0.38] J M	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/l	0.11	0.4	1	11	HM-03	HT	J	J M		11 [0.4] J M	5.9
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	0.2	0.4	1	9.2	HM-03	HT	J	J M		9.2 [0.4] J M	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/l	0.25	0.74	1	1300	BHEM-03	HT, Cal Exceed	J, J	J M		1300 [0.74] J M	4
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	0.21	0.8	1	89	HM-03	HT	J	J M		89 [0.8] J M	6
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluoropentanesulfonate (PFPeS)	138495-42-8	ng/l	0.26	0.75	1	20	HM-03	HT	J	J M		20 [0.75] J M	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluoropentanoic acid (PFPA)	2706-90-3	ng/l	0.19	0.4	2	52	H	HT	J	J		52 [0.4] J	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	ng/l	0.61	2	5.1	0.89	HJ	HT	J	J		0.89 [2] J	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Reextract	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/l	0.25	0.8	1	0.41	HJ	HT, Ion_ratio	J, J	J		0.41 [0.8] J	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	ng/l	0.88	2.3	4	ND	UH	HT	UJ	UJ		ND [2.3] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	ng/l	0.68	2.2	4	ND	UH	HT	UJ	UJ		ND [2.2] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	ng/l	0.67	2.3	4	ND	UH	HT	UJ	UJ		ND [2.3] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	8:2FTS	39108-34-4	ng/l	0.61	1.5	4	10	HM-03	HT	J	J M		10 [1.5] J M	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	4:2 FTS	757124-72-4	ng/l	0.4	1.5	4	0.72	HJM-03	HT	J	J M		0.72 [1.5] J M	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	6:2FTS	27619-97-2	ng/l	2	4.6	5	41	H	HT	J	J		41 [4.6] J	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA)	914637-49-3	ng/l	4.3	10	25	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA)	13252-13-6	ng/l	1	2.4	4	ND	UH	HT	UJ	UJ		ND [2.4] UJ	1.5
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA)	4151-50-2	ng/l	0.13	0.4	1	ND	UH	HT	UJ	UJ		ND [0.4] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	2991-50-6	ng/l	0.29	0.8	1	2.4	HM-03	HT	J	J M		2.4 [0.8] J M	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	ng/l	0.22	0.8	1	ND	UH	HT	UJ	UJ		ND [0.8] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	N-Methylperfluoroocatane Sulfonamidoacetic Acid (MeFOSAA)	2355-31-9	ng/l	0.3	0.8	1	1.8	HM-03	HT	J	J M		1.8 [0.8] J M	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA)	151772-58-6	ng/l	0.58	1.3	2	ND	UH	HT	UJ	UJ		ND [1.3] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA)	113507-82-7	ng/l	0.36	1.1	2	ND	UH	HT	UJ	UJ		ND [1.1] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluoro-3-methoxypropanoic aci (PFMPA)	377-73-1	ng/l	0.19	0.64	2	ND	UH	HT	UJ	UJ		ND [0.64] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluoro-4-Methoxybutanic acid (PFMBA)	863090-89-5	ng/l	0.39	1.3	2	ND	UH	HT	UJ	UJ		ND [1.3] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorobutanesulfonic acid (PFBS)	375-73-5	ng/l	0.095	0.35	1	7.6	HM-03	HT	J	J M		7.6 [0.35] J M	600
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorobutanoic acid (PFBA)	375-22-4	ng/l	0.51	1.6	4	5	H	HT	J	J		5 [1.6] J	1800
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorodecanesulfonic acid (PFDS)	335-77-3	ng/l	0.17	0.39	1	ND	UH	HT	UJ	UJ		ND [0.39] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/l	0.14	0.4	1	0.2	HJ	HT	J	J		0.2 [0.4] J	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	ng/l	0.16	0.39	1	ND	UH	HT	UJ	UJ		ND [0.39] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorododecanoic acid (PFDoA)	307-55-1	ng/l	0.11	0.4	1	ND	UH	HT	UJ	UJ		ND [0.4] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	ng/l	0.19	0.38	1	4.4	H	HT	J	J		4.4 [0.38] J	

Lab	SDG	Client Sample ID	Lab Sample ID	Matrix	Analysis Run	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag		Final Qualified Result	PSL
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluoroheptanoic acid (PFHpA)	375-85-9	ng/l	0.21	0.8	1	7.1	H	HT	J	J		7.1 [0.8] J	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA)	812-70-4	ng/l	4.2	10	25	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/l	0.19	0.73	1	78	H	HT	J	J		78 [0.73] J	39
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/l	0.14	0.4	1	21	H	HT	J	J		21 [0.4] J	990
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorononanesulfonic acid (PFNS)	68259-12-1	ng/l	0.15	0.38	1	ND	UHM-10	HT	UJ	UJ M		ND [0.38] UJ M	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/l	0.1	0.4	1	1.3	HM-03	HT	J	J M		1.3 [0.4] J M	5.9
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	0.2	0.4	1	2	HM-03	HT	J	J M		2 [0.4] J M	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/l	0.25	0.74	1	250	BHM-03	HT	J	J M		250 [0.74] J M	4
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	0.21	0.8	1	22	HM-03	HT	J	J M		22 [0.8] J M	6
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluoropentanesulfonate (PFPeS)	138495-42-8	ng/l	0.26	0.75	1	9.5	HM-03	HT	J	J M		9.5 [0.75] J M	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluoropentanoic acid (PFPA)	2706-90-3	ng/l	0.19	0.4	2	16	HM-03	HT	J	J M		16 [0.4] J M	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	ng/l	0.6	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorotetradecanoic acid (PFTeA)	376-06-7	ng/l	0.27	0.8	1	ND	UH	HT	UJ	UJ		ND [0.8] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/l	0.2	0.4	1	ND	UH	HT	UJ	UJ		ND [0.4] UJ	
PACE	ZG18020	CACMW-004-160-071224	ZG18020-002	Groundwater	Reextract	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/l	0.25	0.8	1	ND	UH	HT	UJ	UJ		ND [0.8] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	ng/l	0.89	2.4	4.1	ND	UH	HT	UJ	UJ		ND [2.4] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	ng/l	0.68	2.3	4.1	ND	UH	HT	UJ	UJ		ND [2.3] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	ng/l	0.68	2.4	4.1	ND	UH	HT	UJ	UJ		ND [2.4] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	8:2FTS	39108-34-4	ng/l	0.62	1.5	4.1	18	HM-03	HT	J	J M		18 [1.5] J M	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	4:2 FTS	757124-72-4	ng/l	0.4	1.5	4.1	0.53	HJM-03	HT	J	J M		0.53 [1.5] J M	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	6:2FTS	27619-97-2	ng/l	2.1	4.7	5.1	41	H	HT	J	J		41 [4.7] J	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA)	914637-49-3	ng/l	4.4	10	25	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA)	13252-13-6	ng/l	1	2.5	4.1	ND	UH	HT	UJ	UJ		ND [2.5] UJ	1.5
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA)	4151-50-2	ng/l	0.13	0.4	1	ND	UH	HT	UJ	UJ		ND [0.4] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	2991-50-6	ng/l	0.3	0.8	1	2.4	H	HT	J	J		2.4 [0.8] J	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	ng/l	0.22	0.8	1	ND	UH	HT	UJ	UJ		ND [0.8] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	N-Methylperfluorooctane Sulfonamidoacetic Acid (MeFOSAA)	2355-31-9	ng/l	0.3	0.8	1	1.8	HM-03	HT	J	J M		1.8 [0.8] J M	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA)	151772-58-6	ng/l	0.59	1.3	2	ND	UH	HT	UJ	UJ		ND [1.3] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA)	113507-82-7	ng/l	0.37	1.1	2	ND	UH	HT	UJ	UJ		ND [1.1] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluoro-3-methoxypropanoic aci (PFMPA)	377-73-1	ng/l	0.19	0.64	2	ND	UH	HT	UJ	UJ		ND [0.64] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluoro-4-Methoxybutanic acid (PFMBA)	863090-89-5	ng/l	0.4	1.3	2	ND	UH	HT	UJ	UJ		ND [1.3] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorobutanesulfonic acid (PFBS)	375-73-5	ng/l	0.096	0.35	1	7.9	H	HT	J	J		7.9 [0.35] J	600
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorobutanoic acid (PFBA)	375-22-4	ng/l	0.52	1.6	4.1	4.9	H	HT	J	J		4.9 [1.6] J	1800
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorodecanesulfonic acid (PFDS)	335-77-3	ng/l	0.17	0.39	1	ND	UH	HT	UJ	UJ		ND [0.39] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/l	0.14	0.4	1	0.35	HJM-03	HT	J	J M		0.35 [0.4] J M	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	ng/l	0.16	0.39	1	ND	UH	HT	UJ	UJ		ND [0.39] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorododecanoic acid (PFDoA)	307-55-1	ng/l	0.11	0.4	1	ND	UH	HT	UJ	UJ		ND [0.4] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	ng/l	0.19	0.38	1	5.5	H	HT	J	J		5.5 [0.38] J	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluoroheptanoic acid (PFHpA)	375-85-9	ng/l	0.22	0.8	1	6.7	H	HT	J	J		6.7 [0.8] J	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA)	812-70-4	ng/l	4.3	10	25	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/l	0.19	0.73	1	72	H	HT	J	J		72 [0.73] J	39
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/l	0.14	0.4	1	21	H	HT	J	J		21 [0.4] J	990
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorononanesulfonic acid (PFNS)	68259-12-1	ng/l	0.15	0.38	1	ND	UHM-03	HT	UJ	UJ M		ND [0.38] UJ M	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/l	0.1	0.4	1	1.3	HM-03	HT	J	J M		1.3 [0.4] J M	5.9
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	0.2	0.4	1	2.2	H	HT	J	J		2.2 [0.4] J	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/l	0.25	0.74	1	290	BHM-03	HT	J	J M		290 [0.74] J M	4
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	0.21	0.8	1	21	HM-03	HT	J	J M		21 [0.8] J M	6
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluoropentanesulfonate (PFPeS)	138495-42-8	ng/l	0.26	0.75	1	9.4	HM-03	HT	J	J M		9.4 [0.75] J M	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluoropentanoic acid (PFPA)	2706-90-3	ng/l	0.19	0.4	2	15	H	HT	J	J		15 [0.4] J	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	ng/l	0.61	2	5.1	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorotetradecanoic acid (PFTeA)	376-06-7	ng/l	0.27	0.8	1	ND	UH	HT	UJ	UJ		ND [0.8] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/l	0.2	0.4	1	ND	UH	HT	UJ	UJ		ND [0.4] UJ	
PACE	ZG18020	CACMW-005-160-071224	ZG18020-004	Groundwater	Reextract	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/l	0.25	0.8	1	ND	UH	HT	UJ	UJ		ND [0.8] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	ng/l	4.4	12	20	ND	UH	HT	UJ	UJ		ND [12] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	ng/l	3.3	11	20	ND	UH	HT	UJ	UJ		ND [11] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	ng/l	3.3	12	20	ND	UH	HT	UJ	UJ		ND [12] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	8:2FTS	39108-34-4	ng/l	3	7.5	20	7.2	HJM-03	HT	J	J M		7.2 [7.5] J M	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	4:2 FTS	757124-72-4	ng/l	2	7.5	20	ND	UH	HT	UJ	UJ		ND [7.5] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	6:2FTS	27619-97-2	ng/l	10	23	25	40	HM-03	HT	J	J M		40 [23] J M	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA)	914637-49-3	ng/l	21	52	130	ND	UH	HT	UJ	UJ		ND [52] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA)	13252-13-6	ng/l	5	12	20	ND	UH	HT	UJ	UJ		ND [12] UJ	1.5
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA)	4151-50-2	ng/l	0.64	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	2991-50-6	ng/l	1.5	4	5	1.5	HJM-03	HT	J	J M		1.5 [4] J M	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/l	3.1	10	50	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	ng/l	1.1	4	5	ND	UH	HT	UJ	UJ		ND [4] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	N-Methylperfluorooctane Sulfonamidoacetic Acid (MeFOSAA)	2355-31-9	ng/l	1.5	4	5	1.7	HJM-03	HT	J	J M		1.7 [4] J M	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	ng/l	3.2	10	50	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA)	151772-58-6	ng/l	2.9	6.5	10	ND	UH	HT	UJ	UJ		ND [6.5] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA)	113507-82-7	ng/l	1.8	5.5	10	ND	UH	HT	UJ	UJ		ND [5.5] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluoro-3-methoxypropanoic aci (PFMPA)	377-73-1	ng/l	0.92	3.2	10	ND	UH	HT	UJ	UJ		ND [3.2] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluoro-4-Methoxybutanic acid (PFMBA)	863090-89-5	ng/l	1.9	6.5	10	ND	UH	HT	UJ	UJ		ND [6.5] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorobutanesulfonic acid (PFBS)	375-73-5	ng/l	0.47	1.8	5	7.2	HM-03	HT	J	J M		7.2 [1.8] J M	600
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorobutanoic acid (PFBA)	375-22-4	ng/l	2.6	8	20	5	HJM-03	HT	J	J M		5 [8] J M	1800
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorodecanesulfonic acid (PFDS)	335-77-3	ng/l	0.82	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/l	0.68	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	ng/l	0.77	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorododecanoic acid (PFDoA)	307-55-1	ng/l	0.53	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	ng/l	0.95	1.9	5	4.5	HJM-03	HT	J	J M		4.5 [1.9] J M	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluoroheptanoic acid (PFHpA)	375-85-9	ng/l	1.1	4	5	7.5	HM-03	HT	J	J M		7.5 [4] J M	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA)	812-70-4	ng/l	21	52	130	ND	UH	HT	UJ	UJ		ND [52] UJ	

Lab	SDG	Client Sample ID	Lab Sample ID	Matrix	Analysis Run	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag		Final Qualified Result	PSL
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/l	0.92	3.7	5	69	HM-03	HT	J	J M		69 [3.7] J M	39
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/l	0.71	2	5	21	HM-03	HT	J	J M		21 [2] J M	990
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorononanesulfonic acid (PFNS)	68259-12-1	ng/l	0.73	1.9	5	ND	UH	HT	UJ	UJ		ND [1.9] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/l	0.52	2	5	1.7	HJM-03	HT, Ion_ratio	J, J	J M		1.7 [2] J M	5.9
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	0.99	2	5	2.1	HJM-03	HT, FB, Ion_ratio	J, J+, J	J M		2.1 [2] J M	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/l	1.2	3.7	5	230	BHM-03	HT	J	J M		230 [3.7] J M	4
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	1	4	5	18	H	HT	J	J		18 [4] J	6
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluoropentanesulfonate (PFPeS)	138495-42-8	ng/l	1.3	3.8	5	7.7	H	HT	J	J		7.7 [3.8] J	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluoropentanoic acid (PFPA)	2706-90-3	ng/l	0.92	2	10	15	HM-03	HT	J	J M		15 [2] J M	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	ng/l	3	10	25	ND	UH	HT	UJ	UJ		ND [10] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorotetradecanoic acid (PFTeA)	376-06-7	ng/l	1.3	4	5	ND	UH	HT	UJ	UJ		ND [4] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/l	0.97	2	5	ND	UH	HT	UJ	UJ		ND [2] UJ	
PACE	ZG18020	CACMW-GW-FD01-071224	ZG18020-005	Groundwater	Reextract	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/l	1.2	4	5	ND	UH	HT	UJ	UJ		ND [4] UJ	
PACE	ZG18020	CACMW-004-110-071224	ZG18020-001	Groundwater	Initial	E1633	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ng/l	0.25	0.75	1	1500	EM-03	Cal Exceed	J	J M		1500 [0.75] J M	4
PACE	ZG19005	CACMW-007-160-071524	ZG19005-006	Groundwater		E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	0.99	2	5	2.9	JM-03	FB	J+	J+ M		2.9 [2] J+ M	
PACE	ZG19005	CACMW-008-160-071624	ZG19005-009	Groundwater		E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	0.99	2	5	2.8	JM-03	FB, Ion_ratio	J+, J	J M		2.8 [2] J M	
PACE	ZG19005	CACMW-008-060-071624	ZG19005-007	Groundwater		E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/l	0.68	2	5	3.5	JM-03	Ion_ratio	J	J M		3.5 [2] J M	
PACE	ZG19005	CACMW-GW-FD02-071624	ZG19005-015	Groundwater		E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/l	0.68	8	5	4.0	JM-03	Ion_ratio	J	J M		4 [8] J M	
PACE	ZG19005	CACMW-006-160-071524	ZG19005-003	Groundwater		E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	ng/l	0.29	0.8	1	1.8	M-03	Ion_ratio	J	J M		1.8 [0.8] J M	
PACE	ZG19005	CACMW-008-160-071624	ZG19005-009	Groundwater		E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	ng/l	1.5	4	5	3.5	J	Ion_ratio	J	J		3.5 [4] J	

Definitions:

ng/l	nanograms per liter
SDG	sample delivery group
CAS	Chemical Abstract Service registry number
DL	detection limit
LOD	limit of detection
LOQ	limit of quantitiation
QC	quality control

Notes:

FB	Field or equipment blank detection
Ion_ratio	Ion ratio failure
LCS %R	Laboratory control sample percent recovery failure
Cal Exceed	Instrument calibration range was exceeded
HT	Analyzed outside of holding time
Low EIS %R	Extracted internal standard percent recovery below lower control limit
MS %R	Matrix spike sample percent recovery failure
R<10%	Percent recovery less than 10 percent

Flags:

J-	The result is estimated with a low bias.
J+	The result is estimated with a high bias.
J	The result is estimated with an unknown bias.
UJ	Not detected and reported less than limit of detection, estimated.
M	The manual integration laboratory qualifier has been preserved with the data as informational data for the end user; there was no impact on the data usability.

Lab Flags:

B	Detected in the method blank
H	Out of holding time
J	Estimated result < LOQ and > DL
M	Manual integration
Q	Surrogate failure
S	MS/MSD failure
U	Not detected at or above the LOD

Table 2 - Selected 10% of Field Samples

SDG	Method	Client Sample ID	Lab Sample ID
ZG13006	1633	CACMW-001-110-070924	ZG13006-002
ZG13006	1633	CACMW-003-160-071124	ZG13006-007
ZG18020	1633	CACMW-005-110-071224	ZG18020-003
ZG19005	1633	CACMW-006-110-071524	ZG19005-002
ZG19005	1633	CACMW-007-060-071524	ZG19005-004
ZG19005	1633	CACMW-006-060-071524	ZG19005-001
ZG19005	1633	CACMW-EB02-071524	ZG19005-010
ZG19005	1633	CACMW-EB03-071624	ZG19005-011
ZG19005	1633	CACMW-FB03-071524	ZG19005-012
ZG19005	1633	CACMW-FB04-071624	ZG19005-013

Table 3 – 1633 Calibration Recalculations

Calibration: **080624B-1633+ICAL.b**

	Level	1	2	3	4	5	6	7	8	9	10							
	Data File	080624B001.d	080624B002.d	080624B003.d	080624B004.d	080624B005.d	080624B006.d	080624B007.d	080624B008.d	080624B009.d	080624B010.d	Fit	Avg RF	RSD	Calc. Avg RF	Calc. RSD	Match Avg RF	Match RSD
Analyte	**CAS**	**Calculated RF**																
13C4-PFBA	SESI-0111	1.0894	1.1886	1.2196	1.1281	1.1389	1.1673	1.0402	1.0796	1.0877	1.1671	Avg	1.130641	5.0	1.1306	5.0	Yes	Yes
Perfluorobutanoic acid (PFBA)	375-22-4	0.7732	0.7707	0.8289	0.8432	0.7991	0.8193	0.8880	0.8860	0.8818	0.8517	Avg	0.834189	5.3	0.8342	5.3	Yes	Yes
13C5-PFPeA	SESI-0112	0.8281	0.8913	0.9215	0.8359	0.8289	0.8908	0.7872	0.8099	0.7906	0.8178	Avg	0.840200	5.4	0.8402	5.4	Yes	Yes
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	0.8349	0.8499	0.9030	0.9173	0.8203	0.8890	0.9226	0.9425	0.9333	0.9030	Avg	0.891585	4.8	0.8916	4.8	Yes	Yes
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.8934	0.8859	0.8818	0.9436	0.8776	0.8672	0.9424	0.9500	0.9659	0.9636	Avg	0.917127	4.3	0.9171	4.3	Yes	Yes
13C2-4:2FTS	SESI-0104	0.1966	0.1995	0.2163	0.1768	0.1967	0.2167	0.1835	0.1986	0.2055	0.2151	Avg	0.200536	6.7	0.2005	6.7	Yes	Yes
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1.5938	1.7837	1.8308	1.8987	1.8625	1.7614	1.9245	1.9353	1.7912	1.8385	Avg	1.822044	5.5	1.8220	5.5	Yes	Yes
13C5-PFHxA	SESI-0113	1.0438	1.1893	1.1952	1.0977	1.1155	1.1630	1.0237	1.0625	1.0639	1.0882	Avg	1.104288	5.5	1.1043	5.5	Yes	Yes
Perfluorohexanoic acid (PFHxA)	307-24-4	0.8982	0.8067	0.9202	0.9160	0.8646	0.8297	0.9193	0.9490	0.9459	0.9331	Avg	0.898270	5.4	0.8983	5.4	Yes	Yes
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	0.1674	0.1612	0.1678	0.1836	0.1617	0.1580	0.1772	0.1804	0.1712	0.1645	Avg	0.169304	5.1	0.1693	5.1	Yes	Yes
13C3-PFBS	SESI-0116	1.3054	1.3441	1.4012	1.1331	1.2778	1.4237	1.1906	1.2631	1.2990	1.3533	Avg	1.299121	6.9	1.2991	6.9	Yes	Yes
Perfluorobutanesulfonic acid (PFBS)	375-73-5	1.1199	1.0279	1.1615	1.2358	1.1856	1.1548	1.2202	1.2597	1.1874	1.2572	Avg	1.180999	6.0	1.1810	6.0	Yes	Yes
13C3-HFPO-DA	SESI-0121	0.2168	0.2249	0.2255	0.2067	0.2025	0.2200	0.1880	0.1923	0.1884	0.1869	Avg	0.205187	7.7	0.2052	7.7	Yes	Yes
13C4-PFHpA	SESI-0114	1.1472	1.3434	1.2916	1.2338	1.1946	1.2123	1.1354	1.0976	1.1561	1.1712	Avg	1.198314	6.2	1.1983	6.2	Yes	Yes
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.9260	0.9991	1.0701	0.9780	1.0211	1.0062	1.0266	1.1424	1.0536	1.0738	Avg	1.029691	5.8	1.0297	5.8	Yes	Yes
13C2-6:2FTS	SESI-0105	0.2256	0.2376	0.2737	0.2036	0.2345	0.2489	0.2060	0.2398	0.2463	0.2522	Avg	0.236825	8.9	0.2368	8.9	Yes	Yes
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1.5444	1.5899	1.7140	1.8935	1.7521	1.8250	1.9165	1.7558	1.6865	1.7689	Avg	1.744660	6.8	1.7447	6.8	Yes	Yes
13C8-PFOA	SESI-0097	6.4671	7.4885	7.3104	7.1504	6.4242	7.2135	6.2677	5.6748	5.9123	7.0785	Avg	6.698736	9.4	6.6987	9.4	Yes	Yes
Perfluorooctanoic acid (PFOA)	335-67-1	0.9413	0.8529	0.9745	0.8847	1.0078	0.9036	0.9531	1.0199	0.8906	0.8432	Avg	0.927161	6.7	0.9272	6.7	Yes	Yes
13C3-PFHxS	SESI-0096	1.0891	1.1779	1.1616	0.9856	1.3584	1.2451	1.0691	1.1954	1.0999	1.1955	Avg	1.157763	9.0	1.1578	9.0	Yes	Yes
Perfluoropentansulfonic acid (PFPeS)	2706-91-4	1.0690	1.1459	1.2022	1.2626	0.9686	1.1484	1.2289	1.1431	1.1833	1.1643	Avg	1.151629	7.2	1.1516	7.2	Yes	Yes
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1.2213	1.1905	1.2264	1.1405	0.9292	1.1142	1.1826	1.0871	1.1906	1.1598	Avg	1.144236	7.7	1.1442	7.7	Yes	Yes
13C9-PFNA	SESI-0099	1.0044	0.9828	0.9613	1.1909	0.9253	1.0239	0.9186	0.9653	0.9598	0.9536	Avg	0.988588	7.9	0.9886	7.9	Yes	Yes
Perfluorononanoic acid (PFNA)	375-95-1	0.8157	0.8376	0.9161	0.7578	0.8695	0.7564	0.9048	0.8808	0.8949	0.8655	Avg	0.849909	6.7	0.8499	6.7	Yes	Yes
13C2-8:2FTS	SESI-0106	0.1904	0.2153	0.2186	0.1758	0.2165	0.2305	0.1732	0.2125	0.2320	0.2712	Avg	0.213625	13.6	0.2136	13.6	Yes	Yes
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1.7851	1.4369	1.9877	1.9837	1.6013	1.6768	1.9761	1.5829	1.4482	1.4008	Avg	1.687970	13.8	1.6880	13.8	Yes	Yes
D3-NMeFOSAA	SESI-0102	0.5631	0.6026	0.6109	0.5633	0.5618	0.5199	0.5066	0.5093	0.5187	0.5265	Avg	0.548279	6.9	0.5483	6.9	Yes	Yes
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	0.6765	0.6422	0.7295	0.8000	0.8150	0.8081	0.8227	0.8718	0.8976	0.9203	Avg	0.798372	11.4	0.7984	11.4	Yes	Yes
13C6-PFDA	SESI-0115	1.1112	1.4268	1.2446	1.1445	1.2768	1.0924	1.1155	1.1225	1.0401	1.0823	Avg	1.165674	10.0	1.1657	10.0	Yes	Yes
Perfluorodecanoic acid (PFDA)	335-76-2	0.8741	0.8772	0.8246	0.8976	0.7415	0.8682	0.9100	0.8489	0.9306	0.9065	Avg	0.867931	6.2	0.8679	6.2	Yes	Yes
D5-NEtFOSAA	SESI-0110	0.3758	0.4518	0.4753	0.4503	0.4240	0.4154	0.3700	0.4045	0.4194	0.4204	Avg	0.420694	7.8	0.4207	7.8	Yes	Yes
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1.0084	0.8998	0.8892	0.9823	1.0455	1.0257	1.1417	1.0392	1.1542	1.1819	Avg	1.036789	9.7	1.0368	9.7	Yes	Yes
13C8-PFOS	SESI-0098	1.0758	1.0490	0.9895	1.0229	1.0202	0.9597	0.9615	1.0056	0.9333	1.0325	Avg	1.004997	4.4	1.0050	4.4	Yes	Yes
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	0.7688	0.8352	1.0657	1.0073	0.9172	1.0435	0.9094	0.9339	1.0675	1.0001	Avg	0.954873	10.5	0.9549	10.5	Yes	Yes
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	0.8728	0.8728	1.1107	1.0033	0.9255	0.9932	0.9493	0.9897	1.1264	1.0607	Avg	0.990455	9.0	0.9905	9.0	Yes	Yes
Perfluorononanesulfonic acid (PFNS)	68259-12-1	0.9896	1.0492	1.3336	1.1746	1.0817	1.1386	1.1430	1.1404	1.2644	1.2058	Avg	1.152095	8.7	1.1521	8.7	Yes	Yes
13C7-PFUnA	SESI-0117	1.0476	1.2743	1.1865	1.1433	1.1609	1.0815	1.0309	1.0505	1.0728	1.0302	Avg	1.107859	7.3	1.1079	7.3	Yes	Yes
Perfluoroundecanoic acid (PFUnA)	2058-94-8	0.8816	0.8043	0.8887	0.9101	0.8915	0.9391	0.9838	0.9499	0.9090	0.9659	Avg	0.912400	5.6	0.9124	5.6	Yes	Yes
13C2-PFDoA	SESI-0118	0.9779	1.1711	1.1275	0.9888	1.0590	0.9846	0.9710	0.9294	0.9923	0.9842	Avg	1.018582	7.5	1.0186	7.5	Yes	Yes
13C8-PFOSA	SESI-0107	1.7216	1.8585	1.7694	1.7724	1.6437	1.6765	1.5852	1.6301	1.7062	1.8650	Avg	1.722863	5.5	1.7229	5.5	Yes	Yes
Perfluorooctanesulfonamide (PFOSA)	754-91-6	0.8983	0.8719	1.0231	1.0353	0.9435	0.9674	1.0105	1.0130	1.0256	0.9994	Avg	0.978797	5.8	0.9788	5.8	Yes	Yes
13C2-PFTeDA	SESI-0119	0.8670	1.0050	0.9666	0.8751	0.9369	0.9144	0.9168	0.8600	0.8870	0.9166	Avg	0.914538	5.0	0.9145	5.0	Yes	Yes
D7-NMeFOSE	SESI-0129	0.7459	0.7657	0.8092	0.7278	0.7121	0.7274	0.6578	0.6884	0.7055	0.7332	Avg	0.727301	5.7	0.7273	5.7	Yes	Yes
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	0.8604	0.9457	0.9787	1.0504	0.9794	0.9924	1.0708	1.0744	1.0797	1.0639	Avg	1.009590	7.1	1.0096	7.1	Yes	Yes
D3-NMeFOSA	SESI-0109	0.4500	0.4618	0.4672	0.4509	0.4342	0.4369	0.4172	0.4422	0.4827	0.4907	Avg	0.453376	5.0	0.4534	5.0	Yes	Yes
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	0.7766	0.8183	0.9668	0.9808	0.8905	0.9549	0.9430	0.9479	0.9215	0.9651	Avg	0.916555	7.5	0.9166	7.5	Yes	Yes
D9-NEtFOSE	SESI-0130	0.8082	0.8480	0.8969	0.8296	0.7823	0.8045	0.7195	0.7595	0.7603	0.8062	Avg	0.801502	6.3	0.8015	6.3	Yes	Yes
D5-NEtFOSA	SESI-0108	0.4851	0.5171	0.5261	0.4794	0.4658	0.4716	0.4377	0.4783	0.4899	0.5175	Avg	0.486842	5.6	0.4868	5.6	Yes	Yes

Key

	from reported calibration
	from lab report/SEDD
	calculated value/comparison

Avg	average
RF	response factor
Conc.	concentration
Calc.	calculated
RSD	relative standard deviation
IS	internal standard

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2983906	13C3-PFBA	1306841	5000	Avg	1.130641			10097	10097.36	Yes	10000	101	101.0	Yes
080624B011.d	1633 BLK A	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	5785	13C4-PFBA	2983906	10000	Avg	0.834189	0.01	23.241	0.23241	0.2324	Yes				
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1185228	13C2-PFHxA	712513	2500	Avg	0.8402			4949.56	4949.56	Yes	5000	99	99.0	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	168735	18O2-PFHxS	441578	2500	Avg	0.200536			4763.71	4763.71	Yes	5000	95	95.3	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	772312	13C2-PFHxA	712513	2500	Avg	1.104288			2453.91	2453.9	Yes	2500	98	98.2	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	570375	18O2-PFHxS	441578	2500	Avg	1.299121			2485.67	2485.67	Yes	2500	99	99.4	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	583365	13C2-PFHxA	712513	2500	Avg	0.205187			9975.57	9975.57	Yes	10000	100	99.8	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	829491	13C2-PFHxA	712513	2500	Avg	1.198314			2428.78	2428.78	Yes	2500	97	97.2	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	188434	18O2-PFHxS	441578	2500	Avg	0.236825			4504.69	4504.68	Yes	5000	90	90.1	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	982495	13C4-PFOA	138771	2500	Avg	6.698736			2642.28	2642.28	Yes	2500	106	105.7	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	437922	18O2-PFHxS	441578	2500	Avg	1.157763			2141.46	2141.46	Yes	2500	86	85.7	Yes
080624B011.d	1633 BLK A	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2750	13C3-PFHxS	437922	2500	Avg	1.144236	0.01	13.72	0.1372	0.1372	Yes				
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	477187	13C5-PFNA	434696	1250	Avg	0.988588			1388.03	1388.03	Yes	1250	111	111.0	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	170981	18O2-PFHxS	441578	2500	Avg	0.213625			4531.36	4531.36	Yes	5000	91	90.6	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	568424	13C4-PFOS	513859	2500	Avg	0.548279			5043.9	5043.9	Yes	5000	101	100.9	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	502437	13C2-PFDA	394488	1250	Avg	1.165674			1365.78	1365.78	Yes	1250	109	109.3	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	454503	13C4-PFOS	513859	2500	Avg	0.420694			5256.13	5256.13	Yes	5000	105	105.1	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	528382	13C4-PFOS	513859	2500	Avg	1.004997			2557.87	2557.87	Yes	2500	102	102.3	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	412950	13C2-PFDA	394488	1250	Avg	1.107859			1181.11	1181.11	Yes	1250	94	94.5	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	380854	13C2-PFDA	394488	1250	Avg	1.018582			1184.78	1184.78	Yes	1250	95	94.8	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	886755	13C4-PFOS	513859	2500	Avg	1.722863			2504.08	2504.08	Yes	2500	100	100.2	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	337583	13C2-PFDA	394488	1250	Avg	0.914538			1169.65	1169.65	Yes	1250	94	93.6	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3656013	13C4-PFOS	513859	2500	Avg	0.727301			24456	24456.23	Yes	25000	98	97.8	Yes
080624B011.d	1633 BLK A	Instrument_Blank	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	22202	D7-NMeFOSE	3656013	25000	Avg	1.00959	0.01	150.38	1.5038	1.5038	Yes				
080624B011.d	1633 BLK A	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	216774	13C4-PFOS	513859	2500	Avg	0.453376			2326.19	2326.19	Yes	2500	93	93.0	Yes
080624B011.d	1633 BLK A	Instrument_Blank	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1631	D3-NMeFOSA	216774	2500	Avg	0.916555	0.01	20.522	0.20522	0.2052	Yes				
080624B011.d	1633 BLK A	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4022232	13C4-PFOS	513859	2500	Avg	0.801502			24415	24415.1	Yes	25000	98	97.7	Yes
080624B011.d	1633 BLK A	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	240219	13C4-PFOS	513859	2500	Avg	0.486842			2400.57	2400.58	Yes	2500	96	96.0	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2868406	13C3-PFBA	1285262	5000	Avg	1.130641			9869.48	9869.48	Yes	10000	99	98.7	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	200625	13C4-PFBA	2868406	10000	Avg	0.834189			838.46	838.46	Yes	1000	84	83.8	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1137202	13C2-PFHxA	649426	2500	Avg	0.8402			5210.33	5210.33	Yes	5000	104	104.2	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	149795	13C5-PFPeA	1137202	5000	Avg	0.891585			738.7	738.7	Yes	1000	74	73.9	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	173644	13C5-PFPeA	1137202	5000	Avg	0.917127			832.46	832.46	Yes	1000	83	83.2	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	166393	18O2-PFHxS	385576	2500	Avg	0.200536			5379.88	5379.88	Yes	5000	108	107.6	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	58505	13C2-4:2FTS	166393	5000	Avg	1.822044			964.87	964.87	Yes	937.5	103	102.9	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	734658	13C2-PFHxA	649426	2500	Avg	1.104288			2561.02	2561.02	Yes	2500	102	102.4	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	221519	13C5-PFHxA	734658	2500	Avg	0.89827			839.19	839.19	Yes	1000	84	83.9	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	49170	13C5-PFHxA	734658	2500	Avg	0.169304			988.3	988.3	Yes	1000	99	98.8	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	511033	18O2-PFHxS	385576	2500	Avg	1.299121			2550.52	2550.52	Yes	2500	102	102	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	236083	13C3-PFBS	511033	2500	Avg	1.180999			977.93	977.93	Yes	887	110	110.3	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	569073	13C2-PFHxA	649426	2500	Avg	0.205187			10676	10676.49	Yes	10000	107	106.8	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	798252	13C2-PFHxA	649426	2500	Avg	1.198314			2564.36	2564.36	Yes	2500	103	102.6	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	255118	13C4-PFHpA	798252	2500	Avg	1.029691			775.95	775.95	Yes	1000	78	77.6	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	197448	18O2-PFHxS	385576	2500	Avg	0.236825			5405.75	5405.74	Yes	5000	108	108.1	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	66006	13C2-6:2FTS	197448	5000	Avg	1.74466			958.05	958.05	Yes	950	101	100.8	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	870060	13C4-PFOA	128809	2500	Avg	6.698736			2520.87	2520.87	Yes	2500	101	100.8	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	253968	13C8-PFOA	870060	2500	Avg	0.927161			787.07	787.07	Yes	1000	79	78.7	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	447491	18O2-PFHxS	385576	2500	Avg	1.157763			2506.08	2506.08	Yes	2500	100	100.2	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	195024	13C3-PFHxS	447491	2500	Avg	1.151629			946.09	946.09	Yes	941	101	100.5	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	178451	13C3-PFHxS	447491	2500	Avg	1.144236			871.28	871.28	Yes	914	95	95.3	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	438015	13C5-PFNA	449216	1250	Avg	0.988588			1232.9	1232.9	Yes	1250	99	98.6	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	217496	13C9-PFNA	438015	1250	Avg	0.849909			730.3	730.3	Yes	1000	73	73	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	175052	18O2-PFHxS	385576	2500	Avg	0.213625			5313.07	5313.06	Yes	5000	106	106.3	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	62128	13C2-8:2FTS	175052	5000	Avg	1.68797			1051.3	1051.3	Yes	960	110	109.5	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	544706	13C4-PFOS	482367	2500	Avg	0.548279			5149	5149	Yes	5000	103	103	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	70206	D3-NMeFOSAA	544706	5000	Avg	0.798372			807.19	807.19	Yes	1000	81	80.7	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	447228	13C2-PFDA	369844	1250	Avg	1.165674			1296.71	1296.71	Yes	1250	104	103.7	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	253622	13C6-PFDA	447228	1250	Avg	0.867931			816.74	816.74	Yes	1000	82	81.7	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	408255	13C4-PFOS	482367	2500	Avg	0.420694			5029.53	5029.53	Yes	5000	101	100.6	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	68695	D5-NEtFOSAA	408255	5000	Avg	1.036789			811.47	811.47	Yes	1000	81	81.1	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	499075	13C4-PFOS	482367	2500	Avg	1.004997			2573.73	2573.73	Yes	2500	103	102.9	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	165052	13C8-PFOS	499075	2500	Avg	0.954873			865.86	865.86	Yes	953	91	90.9	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	159903	13C8-PFOS	499075	2500	Avg	0.990455			808.72	808.72	Yes	928	87	87.1	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	203320	13C8-PFOS	499075	2500	Avg	1.152095			884.03	884.03	Yes	962	92	91.9	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	413053	13C2-PFDA	369844	1250	Avg	1.107859			1260.12	1260.12	Yes	1250	101	100.8	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	233237	13C7-PFUnA	413053	1250	Avg	0.9124			773.6	773.6	Yes	1000	77	77.4	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	360011	13C2-PFDA	369844	1250	Avg	1.018582			1194.57	1194.57	Yes	1250	96	95.6	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	799196	13C4-PFOS	482367	2500	Avg	1.722863			2404.17	2404.17	Yes	2500	96	96.2	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	258790	13C8-PFOSA	799196	2500	Avg	0.978797			827.07	827.07	Yes	1000	83	82.7	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	326660	13C2-PFDA	369844	1250	Avg	0.914538			1207.22	1207.22	Yes	1250	97	96.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3557328	13C4-PFOS	482367	2500	Avg	0.727301			25350	25349.66	Yes	25000	101	101.4	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	132520	D7-NMeFOSE	3557328	25000	Avg	1.00959			922.47	922.47	Yes	1000	92	92.2	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	214373	13C4-PFOS	482367	2500	Avg	0.453376			2450.61	2450.61	Yes	2500	98	98	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	78277	D3-NMeFOSA	214373	2500	Avg	0.916555			995.97	995.97	Yes	1000	100	99.6	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3993279	13C4-PFOS	482367	2500	Avg	0.801502			25822	25821.86	Yes	25000	103	103.3	Yes
080624B012.d	ICV_SVLC-3915	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	222445	13C4-PFOS	482367	2500	Avg	0.486842			2368.08	2368.08	Yes	2500	95	94.7	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2960656	13C3-PFBA	1348987	5000	Avg	1.130641			9705.67	9705.67	Yes	10000	97	97.1	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	89669	13C4-PFBA	2960656	10000	Avg	0.834189			363.07	363.07	Yes	400	91	90.8	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1184371	13C2-PFHxA	717692	2500	Avg	0.8402			4910.29	4910.29	Yes	5000	98	98.2	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	38163	13C5-PFPeA	1184371	5000	Avg	0.891585			180.7	180.7	Yes	200	90	90.4	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	39374	13C5-PFPeA	1184371	5000	Avg	0.917127			181.24	181.24	Yes	200	91	90.6	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	162386	18O2-PFHxS	421293	2500	Avg	0.200536			4805.2	4805.21	Yes	5000	96	96.1	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	18309	13C2-4:2FTS	162386	5000	Avg	1.822044			309.4	309.4	Yes	375	83	82.5	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	762590	13C2-PFHxA	717692	2500	Avg	1.104288			2405.53	2405.53	Yes	2500	96	96.2	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	24187	13C5-PFHxA	762590	2500	Avg	0.89827			88.272	88.27	Yes	100	88	88.3	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	121881	13C5-PFHxA	762590	2500	Avg	0.169304			2360.03	2360.03	Yes	2500	94	94.4	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	548465	18O2-PFHxS	421293	2500	Avg	1.299121			2505.27	2505.27	Yes	2500	100	100.2	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	19935	13C3-PFBS	548465	2500	Avg	1.180999			76.941	76.94	Yes	88.7	87	86.7	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	558625	13C2-PFHxA	717692	2500	Avg	0.205187			9483.58	9483.58	Yes	10000	95	94.8	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	883193	13C2-PFHxA	717692	2500	Avg	1.198314			2567.36	2567.36	Yes	2500	103	102.7	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	35318	13C4-PFHpA	883193	2500	Avg	1.029691			97.09	97.09	Yes	100	97	97.1	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	194891	18O2-PFHxS	421293	2500	Avg	0.236825			4883.38	4883.37	Yes	5000	98	97.7	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	24111	13C2-6:2FTS	194891	5000	Avg	1.74466			354.55	354.55	Yes	380	93	93.3	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1040477	13C4-PFOA	149420	2500	Avg	6.698736			2598.79	2598.79	Yes	2500	104	104	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	36011	13C8-PFOA	1040477	2500	Avg	0.927161			93.323	93.32	Yes	100	93	93.3	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	490372	18O2-PFHxS	421293	2500	Avg	1.157763			2513.4	2513.4	Yes	2500	101	100.5	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	18501	13C3-PFHxS	490372	2500	Avg	1.151629			81.902	81.9	Yes	94.1	87	87	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	19487	13C3-PFHxS	490372	2500	Avg	1.144236			86.825	86.82	Yes	91.4	95	95	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	472789	13C5-PFNA	526788	1250	Avg	0.988588			1134.82	1134.82	Yes	1250	91	90.8	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	33059	13C9-PFNA	472789	1250	Avg	0.849909			102.84	102.84	Yes	100	103	102.8	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	169414	18O2-PFHxS	421293	2500	Avg	0.213625			4706.02	4706.01	Yes	5000	94	94.1	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	20492	13C2-8:2FTS	169414	5000	Avg	1.68797			358.29	358.29	Yes	384	93	93.3	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	570721	13C4-PFOS	523839	2500	Avg	0.548279			4967.8	4967.8	Yes	5000	99	99.4	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	8114	D3-NMeFOSAA	570721	5000	Avg	0.798372			89.038	89.04	Yes	100	89	89	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	458032	13C2-PFDA	420299	1250	Avg	1.165674			1168.61	1168.61	Yes	1250	93	93.5	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	22667	13C6-PFDA	458032	1250	Avg	0.867931			71.273	71.27	Yes	100	71	71.3	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	459722	13C4-PFOS	523839	2500	Avg	0.420694			5215.2	5215.2	Yes	5000	104	104.3	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	7760	D5-NEtFOSAA	459722	5000	Avg	1.036789			81.404	81.4	Yes	100	81	81.4	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	512300	13C4-PFOS	523839	2500	Avg	1.004997			2432.77	2432.77	Yes	2500	97	97.3	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	15092	13C8-PFOS	512300	2500	Avg	0.954873			77.129	77.13	Yes	95.3	81	80.9	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	17307	13C8-PFOS	512300	2500	Avg	0.990455			85.271	85.27	Yes	92.8	92	91.9	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	19801	13C8-PFOS	512300	2500	Avg	1.152095			83.872	83.87	Yes	96.2	87	87.2	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	428019	13C2-PFDA	420299	1250	Avg	1.107859			1149.03	1149.03	Yes	1250	92	91.9	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	31715	13C7-PFUnA	428019	1250	Avg	0.9124			101.51	101.51	Yes	100	102	101.5	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	390083	13C2-PFDA	420299	1250	Avg	1.018582			1138.97	1138.97	Yes	1250	91	91.1	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	863434	13C4-PFOS	523839	2500	Avg	1.722863			2391.78	2391.78	Yes	2500	96	95.7	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	32560	13C8-PFOSA	863434	2500	Avg	0.978797			96.317	96.32	Yes	100	96	96.3	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	355148	13C2-PFDA	420299	1250	Avg	0.914538			1154.94	1154.94	Yes	1250	92	92.4	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3781175	13C4-PFOS	523839	2500	Avg	0.727301			24812	24811.6	Yes	25000	99	99.2	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	134760	D7-NMeFOSE	3781175	25000	Avg	1.00959			882.53	882.53	Yes	1000	88	88.3	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	221687	13C4-PFOS	523839	2500	Avg	0.453376			2333.58	2333.59	Yes	2500	93	93.3	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	7645	D3-NMeFOSA	221687	2500	Avg	0.916555			94.063	94.06	Yes	100	94	94.1	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4097632	13C4-PFOS	523839	2500	Avg	0.801502			24399	24398.92	Yes	25000	98	97.6	Yes
080724001.d	L1_SVLC-3905	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	241504	13C4-PFOS	523839	2500	Avg	0.486842			2367.44	2367.44	Yes	2500	95	94.7	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3164988	13C3-PFBA	1399656	5000	Avg	1.130641			9999.91	9999.91	Yes	10000	100	100	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2580994	13C4-PFBA	3164988	10000	Avg	0.834189			9775.76	9775.76	Yes	10000	98	97.8	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1263262	13C2-PFHxA	715412	2500	Avg	0.8402			5254.05	5254.05	Yes	5000	105	105.1	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1045630	13C5-PFPeA	1263262	5000	Avg	0.891585			4641.86	4641.86	Yes	5000	93	92.8	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1091125	13C5-PFPeA	1263262	5000	Avg	0.917127			4708.93	4708.92	Yes	5000	94	94.2	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	163944	18O2-PFHxS	413828	2500	Avg	0.200536			4938.82	4938.82	Yes	5000	99	98.8	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	566049	13C2-4:2FTS	163944	5000	Avg	1.822044			9474.79	9474.79	Yes	9375	101	101.1	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	848413	13C2-PFHxA	715412	2500	Avg	1.104288			2684.78	2684.78	Yes	2500	107	107.4	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	726046	13C5-PFHxA	848413	2500	Avg	0.89827			2381.71	2381.72	Yes	2500	95	95.3	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3615718	13C5-PFHxA	848413	2500	Avg	0.169304			62930	62930.33	Yes	62500	101	100.7	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	541744	18O2-PFHxS	413828	2500	Avg	1.299121			2519.21	2519.21	Yes	2500	101	100.8	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	568157	13C3-PFBS	541744	2500	Avg	1.180999			2220.06	2220.06	Yes	2218	100	100.1	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	638003	13C2-PFHxA	715412	2500	Avg	0.205187			10866	10865.67	Yes	10000	109	108.7	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	928994	13C2-PFHxA	715412	2500	Avg	1.198314			2709.11	2709.11	Yes	2500	108	108.4	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	868455	13C4-PFHpA	928994	2500	Avg	1.029691			2269.69	2269.7	Yes	2500	91	90.8	Yes
080724012.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	167379	18O2-PFHxS	413828	2500	Avg	0.236825			4269.67	4269.66	Yes	5000	85	85.4	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	599874	13C2-6:2FTS	167379	5000	Avg	1.74466			10271	10271.13	Yes	9500	108	108.1	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1026461	13C4-PFOA	153926	2500	Avg	6.698736			2488.73	2488.73	Yes	2500	100	99.5	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	995683	13C8-PFOA	1026461	2500	Avg	0.927161			2615.55	2615.55	Yes	2500	105	104.6	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	497543	18O2-PFHxS	413828	2500	Avg	1.157763			2596.16	2596.16	Yes	2500	104	103.8	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	571972	13C3-PFHxS	497543	2500	Avg	1.151629			2495.58	2495.58	Yes	2353	106	106.1	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	474259	13C3-PFHxS	497543	2500	Avg	1.144236			2082.62	2082.62	Yes	2285	91	91.1	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	475944	13C5-PFNA	516306	1250	Avg	0.988588			1165.58	1165.58	Yes	1250	93	93.2	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	774472	13C9-PFNA	475944	1250	Avg	0.849909			2393.25	2393.25	Yes	2500	96	95.7	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	174441	18O2-PFHxS	413828	2500	Avg	0.213625			4933.07	4933.06	Yes	5000	99	98.7	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	598789	13C2-8:2FTS	174441	5000	Avg	1.68797			10168	10167.88	Yes	9600	106	105.9	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	569578	13C4-PFOS	526496	2500	Avg	0.548279			4932.83	4932.83	Yes	5000	99	98.7	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	215596	D3-NMeFOSAA	569578	5000	Avg	0.798372			2370.57	2370.57	Yes	2500	95	94.8	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	480643	13C2-PFDA	383261	1250	Avg	1.165674			1344.81	1344.81	Yes	1250	108	107.6	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	767062	13C6-PFDA	480643	1250	Avg	0.867931			2298.44	2298.44	Yes	2500	92	91.9	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	493214	13C4-PFOS	526496	2500	Avg	0.420694			5566.9	5566.91	Yes	5000	111	111.3	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	233972	D5-NEtFOSAA	493214	5000	Avg	1.036789			2287.75	2287.75	Yes	2500	92	91.5	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	517718	13C4-PFOS	526496	2500	Avg	1.004997			2446.09	2446.1	Yes	2500	98	97.8	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	459836	13C8-PFOS	517718	2500	Avg	0.954873			2325.43	2325.43	Yes	2383	98	97.6	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	450263	13C8-PFOS	517718	2500	Avg	0.990455			2195.22	2195.22	Yes	2320	95	94.6	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	566146	13C8-PFOS	517718	2500	Avg	1.152095			2372.94	2372.94	Yes	2405	99	98.7	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	445275	13C2-PFDA	383261	1250	Avg	1.107859			1310.87	1310.87	Yes	1250	105	104.9	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	816151	13C7-PFUnA	445275	1250	Avg	0.9124			2511.12	2511.12	Yes	2500	100	100.4	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	406748	13C2-PFDA	383261	1250	Avg	1.018582			1302.4	1302.4	Yes	1250	104	104.2	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	927209	13C4-PFOS	526496	2500	Avg	1.722863			2555.48	2555.48	Yes	2500	102	102.2	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	855456	13C8-PFOSA	927209	2500	Avg	0.978797			2356.5	2356.5	Yes	2500	94	94.3	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	353899	13C2-PFDA	383261	1250	Avg	0.914538			1262.1	1262.1	Yes	1250	101	101	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4006415	13C4-PFOS	526496	2500	Avg	0.727301			26157	26156.92	Yes	25000	105	104.6	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3880921	D7-NMeFOSE	4006415	25000	Avg	1.00959			23987	23986.88	Yes	25000	96	95.9	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	240787	13C4-PFOS	526496	2500	Avg	0.453376			2521.85	2521.85	Yes	2500	101	100.9	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	216020	D3-NMeFOSA	240787	2500	Avg	0.916555			2447.05	2447.05	Yes	2500	98	97.9	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4351332	13C4-PFOS	526496	2500	Avg	0.801502			25779	25778.79	Yes	25000	103	103.1	Yes
080724012.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	255314	13C4-PFOS	526496	2500	Avg	0.486842			2490.18	2490.18	Yes	2500	100	99.6	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3092398	13C3-PFBA	1353301	5000	Avg	1.130641			10105	10105.23	Yes	10000	101	101.1	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2474354	13C4-PFBA	3092398	10000	Avg	0.834189			9591.84	9591.84	Yes	10000	96	95.9	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1211938	13C2-PFHxA	731480	2500	Avg	0.8402			4929.87	4929.87	Yes	5000	99	98.6	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1011033	13C5-PFPeA	1211938	5000	Avg	0.891585			4678.34	4678.34	Yes	5000	94	93.6	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1050799	13C5-PFPeA	1211938	5000	Avg	0.917127			4726.94	4726.94	Yes	5000	95	94.5	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	157047	18O2-PFHxS	426990	2500	Avg	0.200536			4585.21	4585.21	Yes	5000	92	91.7	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	564297	13C2-4:2FTS	157047	5000	Avg	1.822044			9860.28	9860.28	Yes	9375	105	105.2	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	791247	13C2-PFHxA	731480	2500	Avg	1.104288			2448.88	2448.88	Yes	2500	98	98	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	663804	13C5-PFHxA	791247	2500	Avg	0.89827			2334.86	2334.86	Yes	2500	93	93.4	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3190695	13C5-PFHxA	791247	2500	Avg	0.169304			59545	59545.1	Yes	62500	95	95.3	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	559058	18O2-PFHxS	426990	2500	Avg	1.299121			2519.59	2519.59	Yes	2500	101	100.8	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	568053	13C3-PFBS	559058	2500	Avg	1.180999			2150.91	2150.91	Yes	2218	97	97	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	578746	13C2-PFHxA	731480	2500	Avg	0.205187			9639.97	9639.97	Yes	10000	96	96.4	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	869946	13C2-PFHxA	731480	2500	Avg	1.198314			2481.19	2481.19	Yes	2500	99	99.2	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	830477	13C4-PFHpA	869946	2500	Avg	1.029691			2317.76	2317.76	Yes	2500	93	92.7	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	185345	18O2-PFHxS	426990	2500	Avg	0.236825			4582.22	4582.22	Yes	5000	92	91.6	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	564523	13C2-6:2FTS	185345	5000	Avg	1.74466			8728.91	8728.91	Yes	9500	92	91.9	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1032870	13C4-PFOA	141394	2500	Avg	6.698736			2726.23	2726.23	Yes	2500	109	109	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	834275	13C8-PFOA	1032870	2500	Avg	0.927161			2177.95	2177.95	Yes	2500	87	87.1	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	512383	18O2-PFHxS	426990	2500	Avg	1.157763			2591.18	2591.18	Yes	2500	104	103.6	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	522701	13C3-PFHxS	512383	2500	Avg	1.151629			2214.55	2214.55	Yes	2353	94	94.1	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	411198	13C3-PFHxS	512383	2500	Avg	1.144236			1753.4	1753.4	Yes	2285	77	76.7	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	496688	13C5-PFNA	480047	1250	Avg	0.988588			1308.26	1308.26	Yes	1250	105	104.7	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	806845	13C9-PFNA	496688	1250	Avg	0.849909			2389.15	2389.15	Yes	2500	96	95.6	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	161295	18O2-PFHxS	426990	2500	Avg	0.213625			4420.71	4420.7	Yes	5000	88	88.4	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	575090	13C2-8:2FTS	161295	5000	Avg	1.68797			10561	10561.37	Yes	9600	110	110	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	566875	13C4-PFOS	549528	2500	Avg	0.548279			4703.66	4703.66	Yes	5000	94	94.1	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	212636	D3-NMeFOSAA	566875	5000	Avg	0.798372			2349.17	2349.17	Yes	2500	94	94	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	440338	13C2-PFDA	391746	1250	Avg	1.165674			1205.35	1205.35	Yes	1250	96	96.4	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	733029	13C6-PFDA	440338	1250	Avg	0.867931			2397.51	2397.51	Yes	2500	96	95.9	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	409090	13C4-PFOS	549528	2500	Avg	0.420694			4423.87	4423.87	Yes	5000	88	88.5	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	212065	D5-NEtFOSAA	409090	5000	Avg	1.036789			2499.94	2499.94	Yes	2500	100	100	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	503346	13C4-PFOS	549528	2500	Avg	1.004997			2278.51	2278.52	Yes	2500	91	91.1	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	450773	13C8-PFOS	503346	2500	Avg	0.954873			2344.69	2344.69	Yes	2383	98	98.4	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	452830	13C8-PFOS	503346	2500	Avg	0.990455			2270.77	2270.77	Yes	2320	98	97.9	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	548139	13C8-PFOS	503346	2500	Avg	1.152095			2363.07	2363.07	Yes	2405	98	98.3	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	418233	13C2-PFDA	391746	1250	Avg	1.107859			1204.59	1204.59	Yes	1250	96	96.4	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	795321	13C7-PFUnA	418233	1250	Avg	0.9124			2605.25	2605.25	Yes	2500	104	104.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	385433	13C2-PFDA	391746	1250	Avg	1.018582			1207.42	1207.42	Yes	1250	97	96.6	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	891122	13C4-PFOS	549528	2500	Avg	1.722863			2353.08	2353.08	Yes	2500	94	94.1	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	809485	13C8-PFOSA	891122	2500	Avg	0.978797			2320.17	2320.17	Yes	2500	93	92.8	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	333440	13C2-PFDA	391746	1250	Avg	0.914538			1163.38	1163.38	Yes	1250	93	93.1	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3891582	13C4-PFOS	549528	2500	Avg	0.727301			24342	24342.33	Yes	25000	97	97.4	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3773415	D7-NMeFOSE	3891582	25000	Avg	1.00959			24011	24010.62	Yes	25000	96	96	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	229039	13C4-PFOS	549528	2500	Avg	0.453376			2298.27	2298.27	Yes	2500	92	91.9	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	202852	D3-NMeFOSA	229039	2500	Avg	0.916555			2415.75	2415.75	Yes	2500	97	96.6	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4219300	13C4-PFOS	549528	2500	Avg	0.801502			23949	23948.92	Yes	25000	96	95.8	Yes
080724029.d	CCVL5B_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	245601	13C4-PFOS	549528	2500	Avg	0.486842			2295.05	2295.05	Yes	2500	92	91.8	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2793178	13C3-PFBA	1234329	5000	Avg	1.130641			10007	10007.21	Yes	10000	100	100.1	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2271874	13C4-PFBA	2793178	10000	Avg	0.834189			9750.37	9750.37	Yes	10000	98	97.5	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1095852	13C2-PFHxA	670357	2500	Avg	0.8402			4864.1	4864.11	Yes	5000	97	97.3	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	910678	13C5-PFPeA	1095852	5000	Avg	0.891585			4660.37	4660.37	Yes	5000	93	93.2	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	979993	13C5-PFPeA	1095852	5000	Avg	0.917127			4875.42	4875.42	Yes	5000	98	97.5	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	164791	18O2-PFHxS	401451	2500	Avg	0.200536			5117.39	5117.39	Yes	5000	102	102.3	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	554985	13C2-4:2FTS	164791	5000	Avg	1.822044			9241.85	9241.85	Yes	9375	99	98.6	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	737592	13C2-PFHxA	670357	2500	Avg	1.104288			2490.97	2490.97	Yes	2500	100	99.6	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	615399	13C5-PFHxA	737592	2500	Avg	0.89827			2322.06	2322.06	Yes	2500	93	92.9	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3269230	13C5-PFHxA	737592	2500	Avg	0.169304			65449	65448.86	Yes	62500	105	104.7	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	523991	18O2-PFHxS	401451	2500	Avg	1.299121			2511.78	2511.78	Yes	2500	100	100.5	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	489117	13C3-PFBS	523991	2500	Avg	1.180999			1975.97	1975.97	Yes	2218	89	89.1	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	552751	13C2-PFHxA	670357	2500	Avg	0.205187			10046	10046.47	Yes	10000	100	100.5	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	819094	13C2-PFHxA	670357	2500	Avg	1.198314			2549.16	2549.16	Yes	2500	102	102	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	750855	13C4-PFHpA	819094	2500	Avg	1.029691			2225.64	2225.64	Yes	2500	89	89	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	217021	18O2-PFHxS	401451	2500	Avg	0.236825			5706.66	5706.66	Yes	5000	114	114.1	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	666629	13C2-6:2FTS	217021	5000	Avg	1.74466			8803.22	8803.22	Yes	9500	93	92.7	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	945092	13C4-PFOA	137760	2500	Avg	6.698736			2560.34	2560.34	Yes	2500	102	102.4	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	764347	13C8-PFOA	945092	2500	Avg	0.927161			2180.73	2180.73	Yes	2500	87	87.2	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	473039	18O2-PFHxS	401451	2500	Avg	1.157763			2544.4	2544.4	Yes	2500	102	101.8	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	467384	13C3-PFHxS	473039	2500	Avg	1.151629			2144.89	2144.89	Yes	2353	91	91.2	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	403521	13C3-PFHxS	473039	2500	Avg	1.144236			1863.78	1863.78	Yes	2285	82	81.6	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	407478	13C5-PFNA	456573	1250	Avg	0.988588			1128.47	1128.47	Yes	1250	90	90.3	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	755982	13C9-PFNA	407478	1250	Avg	0.849909			2728.63	2728.63	Yes	2500	109	109.1	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	174003	18O2-PFHxS	401451	2500	Avg	0.213625			5072.39	5072.38	Yes	5000	101	101.4	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	570377	13C2-8:2FTS	174003	5000	Avg	1.68797			9709.8	9709.81	Yes	9600	101	101.1	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	517505	13C4-PFOS	464562	2500	Avg	0.548279			5079.36	5079.36	Yes	5000	102	101.6	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	213191	D3-NMeFOSAA	517505	5000	Avg	0.798372			2580	2580	Yes	2500	103	103.2	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	416348	13C2-PFDA	360458	1250	Avg	1.165674			1238.61	1238.61	Yes	1250	99	99.1	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	686749	13C6-PFDA	416348	1250	Avg	0.867931			2375.56	2375.56	Yes	2500	95	95	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	426201	13C4-PFOS	464562	2500	Avg	0.420694			5451.85	5451.86	Yes	5000	109	109	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	208636	D5-NEtFOSAA	426201	5000	Avg	1.036789			2360.77	2360.77	Yes	2500	94	94.4	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	462607	13C4-PFOS	464562	2500	Avg	1.004997			2477.1	2477.1	Yes	2500	99	99.1	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	413820	13C8-PFOS	462607	2500	Avg	0.954873			2342.04	2342.04	Yes	2383	98	98.3	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	413946	13C8-PFOS	462607	2500	Avg	0.990455			2258.59	2258.59	Yes	2320	97	97.4	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	514753	13C8-PFOS	462607	2500	Avg	1.152095			2414.56	2414.56	Yes	2405	100	100.4	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	400350	13C2-PFDA	360458	1250	Avg	1.107859			1253.17	1253.17	Yes	1250	100	100.3	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	721199	13C7-PFUnA	400350	1250	Avg	0.9124			2467.97	2467.97	Yes	2500	99	98.7	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	371983	13C2-PFDA	360458	1250	Avg	1.018582			1266.43	1266.43	Yes	1250	101	101.3	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	837767	13C4-PFOS	464562	2500	Avg	1.722863			2616.79	2616.79	Yes	2500	105	104.7	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	775598	13C8-PFOSA	837767	2500	Avg	0.978797			2364.62	2364.62	Yes	2500	95	94.6	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	331800	13C2-PFDA	360458	1250	Avg	0.914538			1258.14	1258.14	Yes	1250	101	100.7	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3614857	13C4-PFOS	464562	2500	Avg	0.727301			26747	26746.89	Yes	25000	107	107	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3530880	D7-NMeFOSE	3614857	25000	Avg	1.00959			24187	24187.27	Yes	25000	97	96.7	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	222646	13C4-PFOS	464562	2500	Avg	0.453376			2642.73	2642.73	Yes	2500	106	105.7	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	194096	D3-NMeFOSA	222646	2500	Avg	0.916555			2377.84	2377.84	Yes	2500	95	95.1	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3964673	13C4-PFOS	464562	2500	Avg	0.801502			26619	26619.45	Yes	25000	106	106.5	Yes
080724041.d	CCVL5C_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	234663	13C4-PFOS	464562	2500	Avg	0.486842			2593.9	2593.9	Yes	2500	104	103.8	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3080657	13C3-PFBA	1401462	5000	Avg	1.130641			9720.92	9720.92	Yes	10000	97	97.2	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	93397	13C4-PFBA	3080657	10000	Avg	0.834189			363.43	363.43	Yes	400	91	90.9	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1215875	13C2-PFHxA	727279	2500	Avg	0.8402			4974.45	4974.45	Yes	5000	99	99.5	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	38575	13C5-PFPeA	1215875	5000	Avg	0.891585			177.92	177.92	Yes	200	89	89	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	40235	13C5-PFPeA	1215875	5000	Avg	0.917127			180.41	180.41	Yes	200	90	90.2	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	164185	18O2-PFHxS	427296	2500	Avg	0.200536			4790.18	4790.19	Yes	5000	96	95.8	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	20886	13C2-4:2FTS	164185	5000	Avg	1.822044			349.09	349.09	Yes	375	93	93.1	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	778179	13C2-PFHxA	727279	2500	Avg	1.104288			2422.35	2422.35	Yes	2500	97	96.9	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	25690	13C5-PFHxA	778179	2500	Avg	0.89827			91.879	91.88	Yes	100	92	91.9	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	129104	13C5-PFHxA	778179	2500	Avg	0.169304			2449.81	2449.81	Yes	2500	98	98	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	528185	18O2-PFHxS	427296	2500	Avg	1.299121			2378.74	2378.74	Yes	2500	95	95.1	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	20360	13C3-PFBS	528185	2500	Avg	1.180999			81.598	81.6	Yes	88.7	92	92	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	596078	13C2-PFHxA	727279	2500	Avg	0.205187			9986.01	9986.01	Yes	10000	100	99.9	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	869935	13C2-PFHxA	727279	2500	Avg	1.198314			2495.49	2495.49	Yes	2500	100	99.8	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	27317	13C4-PFHpA	869935	2500	Avg	1.029691			76.239	76.24	Yes	100	76	76.2	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	207710	18O2-PFHxS	427296	2500	Avg	0.236825			5131.47	5131.46	Yes	5000	103	102.6	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	26626	13C2-6:2FTS	207710	5000	Avg	1.74466			367.37	367.37	Yes	380	97	96.7	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	980749	13C4-PFOA	147873	2500	Avg	6.698736			2475.23	2475.23	Yes	2500	99	99	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	38689	13C8-PFOA	980749	2500	Avg	0.927161			106.37	106.37	Yes	100	106	106.4	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	471601	18O2-PFHxS	427296	2500	Avg	1.157763			2383.23	2383.23	Yes	2500	95	95.3	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	19357	13C3-PFHxS	471601	2500	Avg	1.151629			89.103	89.1	Yes	94.1	95	94.7	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	19683	13C3-PFHxS	471601	2500	Avg	1.144236			91.189	91.19	Yes	91.4	100	99.8	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	509650	13C5-PFNA	516770	1250	Avg	0.988588			1247.01	1247.01	Yes	1250	100	99.8	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	29021	13C9-PFNA	509650	1250	Avg	0.849909			83.749	83.75	Yes	100	84	83.7	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	178006	18O2-PFHxS	427296	2500	Avg	0.213625			4875.22	4875.21	Yes	5000	98	97.5	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	23507	13C2-8:2FTS	178006	5000	Avg	1.68797			391.17	391.17	Yes	384	102	101.9	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	557931	13C4-PFOS	511872	2500	Avg	0.548279			4970.01	4970.01	Yes	5000	99	99.4	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	10367	D3-NMeFOSAA	557931	5000	Avg	0.798372			116.37	116.37	Yes	100	116	116.4	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	458775	13C2-PFDA	398751	1250	Avg	1.165674			1233.76	1233.76	Yes	1250	99	98.7	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	34341	13C6-PFDA	458775	1250	Avg	0.867931			107.8	107.8	Yes	100	108	107.8	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	438175	13C4-PFOS	511872	2500	Avg	0.420694			5086.97	5086.98	Yes	5000	102	101.7	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	7539	D5-NEtFOSAA	438175	5000	Avg	1.036789			82.975	82.97	Yes	100	83	83	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	510771	13C4-PFOS	511872	2500	Avg	1.004997			2482.22	2482.22	Yes	2500	99	99.3	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	16505	13C8-PFOS	510771	2500	Avg	0.954873			84.603	84.6	Yes	95.3	89	88.8	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	18478	13C8-PFOS	510771	2500	Avg	0.990455			91.313	91.31	Yes	92.8	98	98.4	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	20611	13C8-PFOS	510771	2500	Avg	1.152095			87.564	87.56	Yes	96.2	91	91	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	449006	13C2-PFDA	398751	1250	Avg	1.107859			1270.5	1270.5	Yes	1250	102	101.6	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	27202	13C7-PFUnA	449006	1250	Avg	0.9124			82.999	83	Yes	100	83	83	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	396845	13C2-PFDA	398751	1250	Avg	1.018582			1221.33	1221.33	Yes	1250	98	97.7	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	884459	13C4-PFOS	511872	2500	Avg	1.722863			2507.3	2507.3	Yes	2500	100	100.3	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	30198	13C8-PFOSA	884459	2500	Avg	0.978797			87.206	87.21	Yes	100	87	87.2	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	346522	13C2-PFDA	398751	1250	Avg	0.914538			1187.78	1187.78	Yes	1250	95	95	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3951531	13C4-PFOS	511872	2500	Avg	0.727301			26536	26535.66	Yes	25000	106	106.1	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	140630	D7-NMeFOSE	3951531	25000	Avg	1.00959			881.27	881.27	Yes	1000	88	88.1	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	222155	13C4-PFOS	511872	2500	Avg	0.453376			2393.18	2393.18	Yes	2500	96	95.7	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	7048	D3-NMeFOSA	222155	2500	Avg	0.916555			86.535	86.53	Yes	100	87	86.5	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4435276	13C4-PFOS	511872	2500	Avg	0.801502			27027	27026.8	Yes	25000	108	108.1	Yes
080824001.d	L1_SVLC-3905	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	248102	13C4-PFOS	511872	2500	Avg	0.486842			2488.98	2488.98	Yes	2500	100	99.6	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3112472	13C3-PFBA	1379676	5000	Avg	1.130641			9976.39	9976.39	Yes	10000	100	99.8	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2561141	13C4-PFBA	3112472	10000	Avg	0.834189			9864.24	9864.24	Yes	10000	99	98.6	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1244365	13C2-PFHxA	735554	2500	Avg	0.8402			5033.74	5033.74	Yes	5000	101	100.7	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1044557	13C5-PFPeA	1244365	5000	Avg	0.891585			4707.51	4707.51	Yes	5000	94	94.2	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1062664	13C5-PFPeA	1244365	5000	Avg	0.917127			4655.74	4655.74	Yes	5000	93	93.1	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	167858	18O2-PFHxS	426330	2500	Avg	0.200536			4908.44	4908.44	Yes	5000	98	98.2	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	577006	13C2-4:2FTS	167858	5000	Avg	1.822044			9432.99	9432.99	Yes	9375	101	100.6	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	788993	13C2-PFHxA	735554	2500	Avg	1.104288			2428.38	2428.38	Yes	2500	97	97.1	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	684507	13C5-PFHxA	788993	2500	Avg	0.89827			2414.56	2414.56	Yes	2500	97	96.6	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3432060	13C5-PFHxA	788993	2500	Avg	0.169304			64232	64232.45	Yes	62500	103	102.8	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	559646	18O2-PFHxS	426330	2500	Avg	1.299121			2526.14	2526.14	Yes	2500	101	101	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	563424	13C3-PFBS	559646	2500	Avg	1.180999			2131.14	2131.14	Yes	2218	96	96.1	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	636484	13C2-PFHxA	735554	2500	Avg	0.205187			10543	10542.97	Yes	10000	105	105.4	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	922771	13C2-PFHxA	735554	2500	Avg	1.198314			2617.27	2617.27	Yes	2500	105	104.7	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	907674	13C4-PFHpA	922771	2500	Avg	1.029691			2388.19	2388.19	Yes	2500	96	95.5	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	198220	18O2-PFHxS	426330	2500	Avg	0.236825			4908.11	4908.11	Yes	5000	98	98.2	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	675537	13C2-6:2FTS	198220	5000	Avg	1.74466			9766.99	9766.99	Yes	9500	103	102.8	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	994298	13C4-PFOA	159671	2500	Avg	6.698736			2324.01	2324.01	Yes	2500	93	93	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	855083	13C8-PFOA	994298	2500	Avg	0.927161			2318.87	2318.87	Yes	2500	93	92.8	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	540615	18O2-PFHxS	426330	2500	Avg	1.157763			2738.18	2738.18	Yes	2500	110	109.5	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	515042	13C3-PFHxS	540615	2500	Avg	1.151629			2068.15	2068.15	Yes	2353	88	87.9	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	471766	13C3-PFHxS	540615	2500	Avg	1.144236			1906.61	1906.61	Yes	2285	83	83.4	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	519903	13C5-PFNA	528534	1250	Avg	0.988588			1243.78	1243.78	Yes	1250	100	99.5	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	743355	13C9-PFNA	519903	1250	Avg	0.849909			2102.86	2102.87	Yes	2500	84	84.1	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	169821	18O2-PFHxS	426330	2500	Avg	0.213625			4661.59	4661.58	Yes	5000	93	93.2	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	599758	13C2-8:2FTS	169821	5000	Avg	1.68797			10461	10461.4	Yes	9600	109	109	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	681174	13C4-PFOS	565168	2500	Avg	0.548279			5495.65	5495.65	Yes	5000	110	109.9	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	235444	D3-NMeFOSAA	681174	5000	Avg	0.798372			2164.68	2164.68	Yes	2500	87	86.6	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	502919	13C2-PFDA	391103	1250	Avg	1.165674			1378.92	1378.92	Yes	1250	110	110.3	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	759441	13C6-PFDA	502919	1250	Avg	0.867931			2174.81	2174.81	Yes	2500	87	87	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	448580	13C4-PFOS	565168	2500	Avg	0.420694			4716.67	4716.68	Yes	5000	94	94.3	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	241965	D5-NEtFOSAA	448580	5000	Avg	1.036789			2601.31	2601.31	Yes	2500	104	104.1	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	510329	13C4-PFOS	565168	2500	Avg	1.004997			2246.2	2246.2	Yes	2500	90	89.8	Yes
080824020.d	CCV L5A_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	451118	13C8-PFOS	510329	2500	Avg	0.954873			2314.38	2314.38	Yes	2383	97	97.1	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	479686	13C8-PFOS	510329	2500	Avg	0.990455			2372.53	2372.53	Yes	2320	102	102.3	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	564931	13C8-PFOS	510329	2500	Avg	1.152095			2402.13	2402.13	Yes	2405	100	99.9	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	465857	13C2-PFDA	391103	1250	Avg	1.107859			1343.96	1343.96	Yes	1250	108	107.5	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	825874	13C7-PFUnA	465857	1250	Avg	0.9124			2428.77	2428.77	Yes	2500	97	97.2	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	415409	13C2-PFDA	391103	1250	Avg	1.018582			1303.46	1303.46	Yes	1250	104	104.3	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	948976	13C4-PFOS	565168	2500	Avg	1.722863			2436.5	2436.5	Yes	2500	97	97.5	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	853635	13C8-PFOSA	948976	2500	Avg	0.978797			2297.55	2297.55	Yes	2500	92	91.9	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	366990	13C2-PFDA	391103	1250	Avg	0.914538			1282.54	1282.54	Yes	1250	103	102.6	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4044346	13C4-PFOS	565168	2500	Avg	0.727301			24598	24597.82	Yes	25000	98	98.4	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3914036	D7-NMeFOSE	4044346	25000	Avg	1.00959			23965	23964.67	Yes	25000	96	95.9	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	239448	13C4-PFOS	565168	2500	Avg	0.453376			2336.23	2336.23	Yes	2500	93	93.4	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	211272	D3-NMeFOSA	239448	2500	Avg	0.916555			2406.65	2406.65	Yes	2500	96	96.3	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4377809	13C4-PFOS	565168	2500	Avg	0.801502			24161	24160.99	Yes	25000	97	96.6	Yes
080824020.d	CCVL5A_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	255147	13C4-PFOS	565168	2500	Avg	0.486842			2318.27	2318.27	Yes	2500	93	92.7	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3116930	13C3-PFBA	1382032	5000	Avg	1.130641			9973.65	9973.65	Yes	10000	100	99.7	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2521997	13C4-PFBA	3116930	10000	Avg	0.834189			9699.58	9699.58	Yes	10000	97	97	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1263932	13C2-PFHxA	753659	2500	Avg	0.8402			4990.06	4990.06	Yes	5000	100	99.8	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1028878	13C5-PFPeA	1263932	5000	Avg	0.891585			4565.07	4565.07	Yes	5000	91	91.3	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1092226	13C5-PFPeA	1263932	5000	Avg	0.917127			4711.18	4711.18	Yes	5000	94	94.2	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	171643	18O2-PFHxS	463342	2500	Avg	0.200536			4618.19	4618.19	Yes	5000	92	92.4	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	584708	13C2-4:2FTS	171643	5000	Avg	1.822044			9348.12	9348.12	Yes	9375	100	99.7	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	839706	13C2-PFHxA	753659	2500	Avg	1.104288			2522.38	2522.38	Yes	2500	101	100.9	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	712584	13C5-PFHxA	839706	2500	Avg	0.89827			2361.79	2361.79	Yes	2500	94	94.5	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3476784	13C5-PFHxA	839706	2500	Avg	0.169304			61140	61139.69	Yes	62500	98	97.8	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	583051	18O2-PFHxS	463342	2500	Avg	1.299121			2421.56	2421.56	Yes	2500	97	96.9	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	587783	13C3-PFBS	583051	2500	Avg	1.180999			2134.03	2134.03	Yes	2218	96	96.2	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	616822	13C2-PFHxA	753659	2500	Avg	0.205187			9971.83	9971.84	Yes	10000	100	99.7	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	888798	13C2-PFHxA	753659	2500	Avg	1.198314			2460.35	2460.35	Yes	2500	98	98.4	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	881784	13C4-PFHpA	888798	2500	Avg	1.029691			2408.75	2408.75	Yes	2500	96	96.4	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	204294	18O2-PFHxS	463342	2500	Avg	0.236825			4654.43	4654.43	Yes	5000	93	93.1	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	699038	13C2-6:2FTS	204294	5000	Avg	1.74466			9806.28	9806.28	Yes	9500	103	103.2	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1071131	13C4-PFOA	157257	2500	Avg	6.698736			2542.02	2542.02	Yes	2500	102	101.7	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	894843	13C8-PFOA	1071131	2500	Avg	0.927161			2252.63	2252.63	Yes	2500	90	90.1	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	520085	18O2-PFHxS	463342	2500	Avg	1.157763			2423.78	2423.78	Yes	2500	97	97	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	575688	13C3-PFHxS	520085	2500	Avg	1.151629			2402.93	2402.93	Yes	2353	102	102.1	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	465985	13C3-PFHxS	520085	2500	Avg	1.144236			1957.59	1957.59	Yes	2285	86	85.7	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	506306	13C5-PFNA	563290	1250	Avg	0.988588			1136.52	1136.52	Yes	1250	91	90.9	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	864381	13C9-PFNA	506306	1250	Avg	0.849909			2510.9	2510.9	Yes	2500	100	100.4	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	194379	18O2-PFHxS	463342	2500	Avg	0.213625			4909.49	4909.48	Yes	5000	98	98.2	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	639138	13C2-8:2FTS	194379	5000	Avg	1.68797			9739.81	9739.81	Yes	9600	101	101.5	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	644709	13C4-PFOS	508074	2500	Avg	0.548279			5785.96	5785.96	Yes	5000	116	115.7	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	266020	D3-NMeFOSAA	644709	5000	Avg	0.798372			2584.14	2584.14	Yes	2500	103	103.4	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	524931	13C2-PFDA	429238	1250	Avg	1.165674			1311.4	1311.41	Yes	1250	105	104.9	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	836837	13C6-PFDA	524931	1250	Avg	0.867931			2295.96	2295.96	Yes	2500	92	91.8	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	471442	13C4-PFOS	508074	2500	Avg	0.420694			5514.1	5514.1	Yes	5000	110	110.3	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	242142	D5-NEtFOSAA	471442	5000	Avg	1.036789			2476.97	2476.97	Yes	2500	99	99.1	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	530514	13C4-PFOS	508074	2500	Avg	1.004997			2597.44	2597.44	Yes	2500	104	103.9	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	496391	13C8-PFOS	530514	2500	Avg	0.954873			2449.75	2449.75	Yes	2383	103	102.8	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	470672	13C8-PFOS	530514	2500	Avg	0.990455			2239.38	2239.37	Yes	2320	97	96.5	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	624767	13C8-PFOS	530514	2500	Avg	1.152095			2555.48	2555.48	Yes	2405	106	106.3	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	501169	13C2-PFDA	429238	1250	Avg	1.107859			1317.38	1317.38	Yes	1250	105	105.4	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	805728	13C7-PFUnA	501169	1250	Avg	0.9124			2202.57	2202.57	Yes	2500	88	88.1	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	436089	13C2-PFDA	429238	1250	Avg	1.018582			1246.78	1246.78	Yes	1250	100	99.7	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	928168	13C4-PFOS	508074	2500	Avg	1.722863			2650.87	2650.87	Yes	2500	106	106	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	866249	13C8-PFOSA	928168	2500	Avg	0.978797			2383.77	2383.77	Yes	2500	95	95.4	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	393268	13C2-PFDA	429238	1250	Avg	0.914538			1252.27	1252.27	Yes	1250	100	100.2	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4136162	13C4-PFOS	508074	2500	Avg	0.727301			27983	27983.14	Yes	25000	112	111.9	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3957986	D7-NMeFOSE	4136162	25000	Avg	1.00959			23696	23695.82	Yes	25000	95	94.8	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	245139	13C4-PFOS	508074	2500	Avg	0.453376			2660.52	2660.52	Yes	2500	106	106.4	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	217867	D3-NMeFOSA	245139	2500	Avg	0.916555			2424.16	2424.16	Yes	2500	97	97	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4560362	13C4-PFOS	508074	2500	Avg	0.801502			27997	27996.76	Yes	25000	112	112	Yes
080824119.d	CCVL5H_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	262260	13C4-PFOS	508074	2500	Avg	0.486842			2650.68	2650.68	Yes	2500	106	106	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3196099	13C3-PFBA	1400205	5000	Avg	1.130641			10094	10094.25	Yes	10000	101	100.9	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2544107	13C4-PFBA	3196099	10000	Avg	0.834189			9542.25	9542.25	Yes	10000	95	95.4	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1272856	13C2-PFHxA	744235	2500	Avg	0.8402			5088.93	5088.93	Yes	5000	102	101.8	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1033672	13C5-PFPeA	1272856	5000	Avg	0.891585			4554.19	4554.19	Yes	5000	91	91.1	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1107814	13C5-PFPeA	1272856	5000	Avg	0.917127			4744.91	4744.91	Yes	5000	95	94.9	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	182158	18O2-PFHxS	460189	2500	Avg	0.200536			4934.68	4934.69	Yes	5000	99	98.7	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	627470	13C2-4:2FTS	182158	5000	Avg	1.822044			9452.7	9452.7	Yes	9375	101	100.8	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	827300	13C2-PFHxA	744235	2500	Avg	1.104288			2516.58	2516.58	Yes	2500	101	100.7	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	692334	13C5-PFHxA	827300	2500	Avg	0.89827			2329.09	2329.09	Yes	2500	93	93.2	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3215292	13C5-PFHxA	827300	2500	Avg	0.169304			57389	57389.2	Yes	62500	92	91.8	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	598554	18O2-PFHxS	460189	2500	Avg	1.299121			2502.98	2502.98	Yes	2500	100	100.1	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	592312	13C3-PFBS	598554	2500	Avg	1.180999			2094.78	2094.78	Yes	2218	94	94.4	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	631666	13C2-PFHxA	744235	2500	Avg	0.205187			10341	10341.12	Yes	10000	103	103.4	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	909066	13C2-PFHxA	744235	2500	Avg	1.198314			2548.32	2548.32	Yes	2500	102	101.9	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	885718	13C4-PFHpA	909066	2500	Avg	1.029691			2365.55	2365.56	Yes	2500	95	94.6	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	218105	18O2-PFHxS	460189	2500	Avg	0.236825			5003.14	5003.13	Yes	5000	100	100.1	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	706362	13C2-6:2FTS	218105	5000	Avg	1.74466			9281.56	9281.56	Yes	9500	98	97.7	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1089810	13C4-PFOA	147833	2500	Avg	6.698736			2751.23	2751.23	Yes	2500	110	110	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1076744	13C8-PFOA	1089810	2500	Avg	0.927161			2664.08	2664.08	Yes	2500	107	106.6	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	528240	18O2-PFHxS	460189	2500	Avg	1.157763			2478.65	2478.65	Yes	2500	99	99.1	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	560501	13C3-PFHxS	528240	2500	Avg	1.151629			2303.42	2303.42	Yes	2353	98	97.9	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	519213	13C3-PFHxS	528240	2500	Avg	1.144236			2147.53	2147.53	Yes	2285	94	94	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	511173	13C5-PFNA	544553	1250	Avg	0.988588			1186.92	1186.92	Yes	1250	95	95	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	819406	13C9-PFNA	511173	1250	Avg	0.849909			2357.59	2357.59	Yes	2500	94	94.3	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	200186	18O2-PFHxS	460189	2500	Avg	0.213625			5090.8	5090.79	Yes	5000	102	101.8	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	622029	13C2-8:2FTS	200186	5000	Avg	1.68797			9204.12	9204.12	Yes	9600	96	95.9	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	675049	13C4-PFOS	560456	2500	Avg	0.548279			5492.02	5492.02	Yes	5000	110	109.8	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	243922	D3-NMeFOSAA	675049	5000	Avg	0.798372			2262.98	2262.98	Yes	2500	91	90.5	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	502194	13C2-PFDA	424219	1250	Avg	1.165674			1269.45	1269.45	Yes	1250	102	101.6	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	804480	13C6-PFDA	502194	1250	Avg	0.867931			2307.11	2307.11	Yes	2500	92	92.3	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	476360	13C4-PFOS	560456	2500	Avg	0.420694			5050.88	5050.88	Yes	5000	101	101	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	233011	D5-NEtFOSAA	476360	5000	Avg	1.036789			2358.96	2358.96	Yes	2500	94	94.4	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	556120	13C4-PFOS	560456	2500	Avg	1.004997			2468.32	2468.32	Yes	2500	99	98.7	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	505406	13C8-PFOS	556120	2500	Avg	0.954873			2379.39	2379.39	Yes	2383	100	99.8	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	502329	13C8-PFOS	556120	2500	Avg	0.990455			2279.95	2279.95	Yes	2320	98	98.3	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	611537	13C8-PFOS	556120	2500	Avg	1.152095			2386.2	2386.2	Yes	2405	99	99.2	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	468424	13C2-PFDA	424219	1250	Avg	1.107859			1245.88	1245.88	Yes	1250	100	99.7	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	840363	13C7-PFUnA	468424	1250	Avg	0.9124			2457.83	2457.83	Yes	2500	98	98.3	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	425808	13C2-PFDA	424219	1250	Avg	1.018582			1231.79	1231.79	Yes	1250	99	98.5	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	949126	13C4-PFOS	560456	2500	Avg	1.722863			2457.38	2457.38	Yes	2500	98	98.3	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	833705	13C8-PFOSA	949126	2500	Avg	0.978797			2243.55	2243.55	Yes	2500	90	89.7	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	381443	13C2-PFDA	424219	1250	Avg	0.914538			1228.99	1228.99	Yes	1250	98	98.3	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4150927	13C4-PFOS	560456	2500	Avg	0.727301			25458	25458.3	Yes	25000	102	101.8	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4090513	D7-NMeFOSE	4150927	25000	Avg	1.00959			24402	24402.13	Yes	25000	98	97.6	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	256107	13C4-PFOS	560456	2500	Avg	0.453376			2519.77	2519.77	Yes	2500	101	100.8	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	217343	D3-NMeFOSA	256107	2500	Avg	0.916555			2314.76	2314.76	Yes	2500	93	92.6	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4557656	13C4-PFOS	560456	2500	Avg	0.801502			25365	25365.03	Yes	25000	101	101.5	Yes
080824136.d	CCVL5I_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	265546	13C4-PFOS	560456	2500	Avg	0.486842			2433.04	2433.05	Yes	2500	97	97.3	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2854949	13C3-PFBA	1320340	5000	Avg	1.133865			9535.01	9535.01	Yes	10000	95	95.4	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	91055	13C4-PFBA	2854949	10000	Avg	0.85141			374.6	374.6	Yes	400	94	93.6	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1229613	13C2-PFHxA	775740	2500	Avg	0.801471			4944.3	4944.3	Yes	5000	99	98.9	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	38211	13C5-PFPeA	1229613	5000	Avg	0.858289			181.03	181.03	Yes	200	91	90.5	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	39175	13C5-PFPeA	1229613	5000	Avg	0.913924			174.3	174.3	Yes	200	87	87.2	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	169770	18O2-PFHxS	461165	2500	Avg	0.189605			4853.94	4853.94	Yes	5000	97	97.1	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	20617	13C2-4:2FTS	169770	5000	Avg	1.821802			333.3	333.3	Yes	375	89	88.9	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	818374	13C2-PFHxA	775740	2500	Avg	1.08809			2423.88	2423.88	Yes	2500	97	97	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	25037	13C5-PFHxA	818374	2500	Avg	0.896378			85.326	85.33	Yes	100	85	85.3	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	132169	13C5-PFHxA	818374	2500	Avg	0.165672			2437.07	2437.07	Yes	2500	97	97.5	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	577851	18O2-PFHxS	461165	2500	Avg	1.30288			2404.33	2404.34	Yes	2500	96	96.2	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	21996	13C3-PFBS	577851	2500	Avg	1.208343			78.755	78.75	Yes	88.7	89	88.8	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	632471	13C2-PFHxA	775740	2500	Avg	0.196665			10364	10364.24	Yes	10000	104	103.6	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	864816	13C2-PFHxA	775740	2500	Avg	1.160285			2402.05	2402.05	Yes	2500	96	96.1	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	36040	13C4-PFHpA	864816	2500	Avg	1.019994			102.14	102.14	Yes	100	102	102.1	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	194294	18O2-PFHxS	461165	2500	Avg	0.208405			5054	5054	Yes	5000	101	101.1	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	24931	13C2-6:2FTS	194294	5000	Avg	1.837836			349.1	349.09	Yes	380	92	91.9	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1030811	13C4-PFOA	159927	2500	Avg	6.826009			2360.64	2360.64	Yes	2500	94	94.4	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	37047	13C8-PFOA	1030811	2500	Avg	0.882262			101.84	101.84	Yes	100	102	101.8	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	515810	18O2-PFHxS	461165	2500	Avg	1.165116			2399.96	2399.96	Yes	2500	96	96	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	21327	13C3-PFHxS	515810	2500	Avg	1.154897			89.503	89.5	Yes	94.1	95	95.1	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	24880	13C3-PFHxS	515810	2500	Avg	1.142081			105.59	105.59	Yes	91.4	116	115.5	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	513991	13C5-PFNA	525773	1250	Avg	0.9905			1233.71	1233.71	Yes	1250	99	98.7	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	32976	13C9-PFNA	513991	1250	Avg	0.792037			101.25	101.25	Yes	100	101	101.3	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	167540	18O2-PFHxS	461165	2500	Avg	0.190493			4767.85	4767.86	Yes	5000	95	95.4	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	21692	13C2-8:2FTS	167540	5000	Avg	1.879444			344.45	344.45	Yes	384	90	89.7	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	579835	13C4-PFOS	598211	2500	Avg	0.485385			4992.34	4992.33	Yes	5000	100	99.8	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	7427	D3-NMeFOSAA	579835	5000	Avg	0.841107			76.143	76.14	Yes	100	76	76.1	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	473229	13C2-PFDA	431535	1250	Avg	1.111006			1233.81	1233.81	Yes	1250	99	98.7	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	30998	13C6-PFDA	473229	1250	Avg	0.879258			93.123	93.12	Yes	100	93	93.1	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	492610	13C4-PFOS	598211	2500	Avg	0.417912			4926.11	4926.11	Yes	5000	99	98.5	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	8889	D5-NEtFOSAA	492610	5000	Avg	1.061343			85.009	85.01	Yes	100	85	85	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	607758	13C4-PFOS	598211	2500	Avg	1.019176			2492.11	2492.11	Yes	2500	100	99.7	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	17137	13C8-PFOS	607758	2500	Avg	0.936113			75.304	75.3	Yes	95.3	79	79	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	23219	13C8-PFOS	607758	2500	Avg	1.011018			94.47	94.47	Yes	92.8	102	101.8	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	21026	13C8-PFOS	607758	2500	Avg	1.078285			80.211	80.21	Yes	96.2	83	83.4	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	439183	13C2-PFDA	431535	1250	Avg	0.978463			1300.15	1300.15	Yes	1250	104	104	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	27805	13C7-PFUnA	439183	1250	Avg	0.906176			87.332	87.33	Yes	100	87	87.3	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	408670	13C2-PFDA	431535	1250	Avg	0.947371			1249.53	1249.53	Yes	1250	100	100	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	956852	13C4-PFOS	598211	2500	Avg	1.639711			2438.73	2438.73	Yes	2500	98	97.5	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	33152	13C8-PFOSA	956852	2500	Avg	0.96599			89.667	89.67	Yes	100	90	89.7	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	380745	13C2-PFDA	431535	1250	Avg	0.890868			1237.98	1237.98	Yes	1250	99	99	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3837840	13C4-PFOS	598211	2500	Avg	0.665955			24084	24083.94	Yes	25000	96	96.3	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	138449	D7-NMeFOSE	3837840	25000	Avg	1.019907			884.26	884.26	Yes	1000	88	88.4	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	232376	13C4-PFOS	598211	2500	Avg	0.421972			2301.41	2301.41	Yes	2500	92	92.1	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	7667	D3-NMeFOSA	232376	2500	Avg	0.911057			90.538	90.54	Yes	100	91	90.5	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4320747	13C4-PFOS	598211	2500	Avg	0.756241			23877	23877.25	Yes	25000	96	95.5	Yes
081524001.d	L1_SVLC-3905	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	264352	13C4-PFOS	598211	2500	Avg	0.448486			2463.31	2463.31	Yes	2500	99	98.5	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2769555	13C3-PFBA	1243579	5000	Avg	1.133865			9820.76	9820.76	Yes	10000	98	98.2	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2297829	13C4-PFBA	2769555	10000	Avg	0.85141			9744.71	9744.71	Yes	10000	97	97.4	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1148678	13C2-PFHxA	721758	2500	Avg	0.801471			4964.31	4964.31	Yes	5000	99	99.3	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	938772	13C5-PFPeA	1148678	5000	Avg	0.858289			4761	4761	Yes	5000	95	95.2	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1047382	13C5-PFPeA	1148678	5000	Avg	0.913924			4988.46	4988.46	Yes	5000	100	99.8	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	159408	18O2-PFHxS	433670	2500	Avg	0.189605			4846.64	4846.64	Yes	5000	97	96.9	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	555884	13C2-4:2FTS	159408	5000	Avg	1.821802			9570.68	9570.68	Yes	9375	102	102.1	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	775479	13C2-PFHxA	721758	2500	Avg	1.08809			2468.62	2468.62	Yes	2500	99	98.7	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	694079	13C5-PFHxA	775479	2500	Avg	0.896378			2496.25	2496.25	Yes	2500	100	99.8	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3281337	13C5-PFHxA	775479	2500	Avg	0.165672			63851	63851.59	Yes	62500	102	102.2	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	555974	18O2-PFHxS	433670	2500	Avg	1.30288			2459.97	2459.98	Yes	2500	98	98.4	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	556319	13C3-PFBS	555974	2500	Avg	1.208343			2070.23	2070.23	Yes	2218	93	93.3	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	600463	13C2-PFHxA	721758	2500	Avg	0.196665			10576	10575.66	Yes	10000	106	105.8	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	825047	13C2-PFHxA	721758	2500	Avg	1.160285			2462.99	2462.99	Yes	2500	99	98.5	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	816054	13C4-PFHpA	825047	2500	Avg	1.019994			2424.28	2424.28	Yes	2500	97	97	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	177215	18O2-PFHxS	433670	2500	Avg	0.208405			4902	4902	Yes	5000	98	98	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	692199	13C2-6:2FTS	177215	5000	Avg	1.837836			10627	10626.59	Yes	9500	112	111.9	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	964608	13C4-PFOA	152230	2500	Avg	6.826009			2320.73	2320.73	Yes	2500	93	92.8	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	854650	13C8-PFOA	964608	2500	Avg	0.882262			2510.61	2510.61	Yes	2500	100	100.4	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	473893	18O2-PFHxS	433670	2500	Avg	1.165116			2344.72	2344.72	Yes	2500	94	93.8	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	548564	13C3-PFHxS	473893	2500	Avg	1.154897			2505.79	2505.78	Yes	2353	106	106.5	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	492969	13C3-PFHxS	473893	2500	Avg	1.142081			2277.1	2277.1	Yes	2285	100	99.7	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	460136	13C5-PFNA	543463	1250	Avg	0.9905			1068.49	1068.49	Yes	1250	85	85.5	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	824344	13C9-PFNA	460136	1250	Avg	0.792037			2827.4	2827.4	Yes	2500	113	113.1	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	158699	18O2-PFHxS	433670	2500	Avg	0.190493			4802.59	4802.59	Yes	5000	96	96.1	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	542449	13C2-8:2FTS	158699	5000	Avg	1.879444			9093.38	9093.38	Yes	9600	95	94.7	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	564491	13C4-PFOS	568046	2500	Avg	0.485385			5118.32	5118.32	Yes	5000	102	102.4	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	214292	D3-NMeFOSAA	564491	5000	Avg	0.841107			2256.67	2256.67	Yes	2500	90	90.3	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	455485	13C2-PFDA	422421	1250	Avg	1.111006			1213.17	1213.17	Yes	1250	97	97.1	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	772460	13C6-PFDA	455485	1250	Avg	0.879258			2410.99	2410.99	Yes	2500	96	96.4	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	470825	13C4-PFOS	568046	2500	Avg	0.417912			4958.28	4958.28	Yes	5000	99	99.2	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	234524	D5-NEtFOSAA	470825	5000	Avg	1.061343			2346.62	2346.62	Yes	2500	94	93.9	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	548835	13C4-PFOS	568046	2500	Avg	1.019176			2370.01	2370	Yes	2500	95	94.8	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	472859	13C8-PFOS	548835	2500	Avg	0.936113			2300.92	2300.92	Yes	2383	97	96.6	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	493850	13C8-PFOS	548835	2500	Avg	1.011018			2225.02	2225.02	Yes	2320	96	95.9	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	580073	13C8-PFOS	548835	2500	Avg	1.078285			2450.46	2450.46	Yes	2405	102	101.9	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	412181	13C2-PFDA	422421	1250	Avg	0.978463			1246.55	1246.55	Yes	1250	100	99.7	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	750548	13C7-PFUnA	412181	1250	Avg	0.906176			2511.82	2511.82	Yes	2500	100	100.5	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	383262	13C2-PFDA	422421	1250	Avg	0.947371			1197.13	1197.13	Yes	1250	96	95.8	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	884129	13C4-PFOS	568046	2500	Avg	1.639711			2373.04	2373.04	Yes	2500	95	94.9	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	857965	13C8-PFOSA	884129	2500	Avg	0.96599			2511.43	2511.43	Yes	2500	100	100.5	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	356993	13C2-PFDA	422421	1250	Avg	0.890868			1185.8	1185.8	Yes	1250	95	94.9	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3631723	13C4-PFOS	568046	2500	Avg	0.665955			24001	24000.72	Yes	25000	96	96	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3656226	D7-NMeFOSE	3631723	25000	Avg	1.019907			24677	24677.42	Yes	25000	99	98.7	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	223117	13C4-PFOS	568046	2500	Avg	0.421972			2327.05	2327.05	Yes	2500	93	93.1	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	200060	D3-NMeFOSA	223117	2500	Avg	0.911057			2460.49	2460.49	Yes	2500	98	98.4	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4128689	13C4-PFOS	568046	2500	Avg	0.756241			24027	24027.49	Yes	25000	96	96.1	Yes
081524018.d	CCVL5A_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	242563	13C4-PFOS	568046	2500	Avg	0.448486			2380.31	2380.3	Yes	2500	95	95.2	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2954343	13C3-PFBA	1314303	5000	Avg	1.130641			9940.56	9940.56	Yes	10000	99	99.4	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1172049	13C2-PFHxA	684078	2500	Avg	0.8402			5097.97	5097.97	Yes	5000	102	102.0	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	164127	18O2-PFHxS	455380	2500	Avg	0.200536			4493.18	4493.18	Yes	5000	90	89.9	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	773032	13C2-PFHxA	684078	2500	Avg	1.104288			2558.29	2558.29	Yes	2500	102	102.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	530832	18O2-PFHxS	455380	2500	Avg	1.299121			2243.23	2243.23	Yes	2500	90	89.7	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	581226	13C2-PFHxA	684078	2500	Avg	0.205187			10352	10352.13	Yes	10000	104	103.5	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	810163	13C2-PFHxA	684078	2500	Avg	1.198314			2470.79	2470.79	Yes	2500	99	98.8	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	183522	18O2-PFHxS	455380	2500	Avg	0.236825			4254.29	4254.29	Yes	5000	85	85.1	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	941869	13C4-PFOA	136828	2500	Avg	6.698736			2568.99	2568.99	Yes	2500	103	102.8	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	500032	18O2-PFHxS	455380	2500	Avg	1.157763			2371.07	2371.07	Yes	2500	95	94.8	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	439522	13C5-PFNA	441697	1250	Avg	0.988588			1258.2	1258.2	Yes	1250	101	100.7	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	172623	18O2-PFHxS	455380	2500	Avg	0.213625			4436.22	4436.22	Yes	5000	89	88.7	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	533475	13C4-PFOS	518238	2500	Avg	0.548279			4693.79	4693.79	Yes	5000	94	93.9	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	460844	13C2-PFDA	378863	1250	Avg	1.165674			1304.38	1304.38	Yes	1250	104	104.4	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	424148	13C4-PFOS	518238	2500	Avg	0.420694			4863.64	4863.64	Yes	5000	97	97.3	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	513491	13C4-PFOS	518238	2500	Avg	1.004997			2464.78	2464.78	Yes	2500	99	98.6	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	393190	13C2-PFDA	378863	1250	Avg	1.107859			1170.97	1170.97	Yes	1250	94	93.7	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	405139	13C2-PFDA	378863	1250	Avg	1.018582			1312.31	1312.31	Yes	1250	105	105.0	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	864919	13C4-PFOS	518238	2500	Avg	1.722863			2421.78	2421.78	Yes	2500	97	96.9	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	335044	13C2-PFDA	378863	1250	Avg	0.914538			1208.73	1208.73	Yes	1250	97	96.7	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3688268	13C4-PFOS	518238	2500	Avg	0.727301			24464	24463.53	Yes	25000	98	97.9	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	218040	13C4-PFOS	518238	2500	Avg	0.453376			2320	2320	Yes	2500	93	92.8	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4014536	13C4-PFOS	518238	2500	Avg	0.801502			24162	24162.48	Yes	25000	97	96.6	Yes
080724002.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	237757	13C4-PFOS	518238	2500	Avg	0.486842			2355.89	2355.9	Yes	2500	94	94.2	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2988826	13C3-PFBA	1339011	5000	Avg	1.130641			9871.01	9871.01	Yes	10000	99	98.7	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1178889	13C2-PFHxA	713210	2500	Avg	0.8402			4918.27	4918.28	Yes	5000	98	98.4	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	159960	18O2-PFHxS	427925	2500	Avg	0.200536			4660.06	4660.06	Yes	5000	93	93.2	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	763963	13C2-PFHxA	713210	2500	Avg	1.104288			2425.01	2425	Yes	2500	97	97.0	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	522826	18O2-PFHxS	427925	2500	Avg	1.299121			2351.15	2351.15	Yes	2500	94	94.0	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	582500	13C2-PFHxA	713210	2500	Avg	0.205187			9951.04	9951.04	Yes	10000	100	99.5	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	852030	13C2-PFHxA	713210	2500	Avg	1.198314			2492.34	2492.34	Yes	2500	100	99.7	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	180964	18O2-PFHxS	427925	2500	Avg	0.236825			4464.14	4464.13	Yes	5000	89	89.3	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1052962	13C4-PFOA	140079	2500	Avg	6.698736			2805.35	2805.35	Yes	2500	112	112.2	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	462197	18O2-PFHxS	427925	2500	Avg	1.157763			2332.28	2332.28	Yes	2500	93	93.3	Yes
080724013.d	CCB A1	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2779	13C3-PFHxS	462197	2500	Avg	1.144236	0.01	13.137	0.13137	0.1314	Yes				
080724013.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	428127	13C5-PFNA	483103	1250	Avg	0.988588			1120.54	1120.54	Yes	1250	90	89.6	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	172250	18O2-PFHxS	427925	2500	Avg	0.213625			4710.64	4710.64	Yes	5000	94	94.2	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	564266	13C4-PFOS	500493	2500	Avg	0.548279			5140.72	5140.72	Yes	5000	103	102.8	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	441154	13C2-PFDA	400461	1250	Avg	1.165674			1181.31	1181.31	Yes	1250	95	94.5	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	407555	13C4-PFOS	500493	2500	Avg	0.420694			4839.07	4839.07	Yes	5000	97	96.8	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	468231	13C4-PFOS	500493	2500	Avg	1.004997			2327.22	2327.22	Yes	2500	93	93.1	Yes
080724013.d	CCB A1	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2584	13C8-PFOS	468231	2500	Avg	0.990455	0.01	13.93	0.1393	0.1393	Yes				
080724013.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	414316	13C2-PFDA	400461	1250	Avg	1.107859			1167.34	1167.34	Yes	1250	93	93.4	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	370610	13C2-PFDA	400461	1250	Avg	1.018582			1135.72	1135.72	Yes	1250	91	90.9	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	862681	13C4-PFOS	500493	2500	Avg	1.722863			2501.16	2501.16	Yes	2500	100	100.0	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	351389	13C2-PFDA	400461	1250	Avg	0.914538			1199.32	1199.32	Yes	1250	96	95.9	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3660169	13C4-PFOS	500493	2500	Avg	0.727301			25138	25137.9	Yes	25000	101	100.6	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	216779	13C4-PFOS	500493	2500	Avg	0.453376			2388.36	2388.36	Yes	2500	96	95.5	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4028595	13C4-PFOS	500493	2500	Avg	0.801502			25107	25106.78	Yes	25000	100	100.4	Yes
080724013.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	237141	13C4-PFOS	500493	2500	Avg	0.486842			2433.1	2433.1	Yes	2500	97	97.3	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3006611	13C3-PFBA	1358724	5000	Avg	1.130641			9785.69	9785.69	Yes	10000	98	97.9	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1155595	13C2-PFHxA	712215	2500	Avg	0.8402			4827.83	4827.83	Yes	5000	97	96.6	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	159070	18O2-PFHxS	420901	2500	Avg	0.200536			4711.46	4711.47	Yes	5000	94	94.2	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	766633	13C2-PFHxA	712215	2500	Avg	1.104288			2436.88	2436.88	Yes	2500	97	97.5	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	547070	18O2-PFHxS	420901	2500	Avg	1.299121			2501.23	2501.23	Yes	2500	100	100.0	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	580761	13C2-PFHxA	712215	2500	Avg	0.205187			9935.2	9935.2	Yes	10000	99	99.4	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	840034	13C2-PFHxA	712215	2500	Avg	1.198314			2460.68	2460.68	Yes	2500	98	98.4	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	182656	18O2-PFHxS	420901	2500	Avg	0.236825			4581.07	4581.06	Yes	5000	92	91.6	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	950436	13C4-PFOA	153194	2500	Avg	6.698736			2315.41	2315.41	Yes	2500	93	92.6	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	480433	18O2-PFHxS	420901	2500	Avg	1.157763			2464.75	2464.75	Yes	2500	99	98.6	Yes
080724030.d	CCB A2	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2969	13C3-PFHxS	480433	2500	Avg	1.144236	0.01	13.502	0.13502	0.135	Yes				
080724030.d	CCB A2	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	493986	13C5-PFNA	474086	1250	Avg	0.988588			1317.5	1317.5	Yes	1250	105	105.4	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	153434	18O2-PFHxS	420901	2500	Avg	0.213625			4266.09	4266.09	Yes	5000	85	85.3	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	546690	13C4-PFOS	496043	2500	Avg	0.548279			5025.28	5025.28	Yes	5000	101	100.5	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	436436	13C2-PFDA	392107	1250	Avg	1.165674			1193.57	1193.57	Yes	1250	95	95.5	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	406398	13C4-PFOS	496043	2500	Avg	0.420694			4868.62	4868.62	Yes	5000	97	97.4	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	460036	13C4-PFOS	496043	2500	Avg	1.004997			2307	2307	Yes	2500	92	92.3	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	406837	13C2-PFDA	392107	1250	Avg	1.107859			1170.69	1170.69	Yes	1250	94	93.7	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	353140	13C2-PFDA	392107	1250	Avg	1.018582			1105.24	1105.24	Yes	1250	88	88.4	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	860493	13C4-PFOS	496043	2500	Avg	1.722863			2517.2	2517.2	Yes	2500	101	100.7	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	332309	13C2-PFDA	392107	1250	Avg	0.914538			1158.37	1158.37	Yes	1250	93	92.7	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3731231	13C4-PFOS	496043	2500	Avg	0.727301			25856	25855.84	Yes	25000	103	103.4	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	210956	13C4-PFOS	496043	2500	Avg	0.453376			2345.06	2345.06	Yes	2500	94	93.8	Yes
080724030.d	CCB A2	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4014245	13C4-PFOS	496043	2500	Avg	0.801502			25242	25241.78	Yes	25000	101	101.0	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080724030.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	235520	13C4-PFOS	496043	2500	Avg	0.486842			2438.15	2438.15	Yes	2500	98	97.5	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2800052	13C3-PFBA	1240325	5000	Avg	1.130641			9983.34	9983.34	Yes	10000	100	99.8	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1108833	13C2-PFHxA	666166	2500	Avg	0.8402			4952.69	4952.69	Yes	5000	99	99.1	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	166665	18O2-PFHxS	396632	2500	Avg	0.200536			5238.46	5238.47	Yes	5000	105	104.8	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	753688	13C2-PFHxA	666166	2500	Avg	1.104288			2561.34	2561.34	Yes	2500	102	102.5	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	502261	18O2-PFHxS	396632	2500	Avg	1.299121			2436.87	2436.87	Yes	2500	97	97.5	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	535041	13C2-PFHxA	666166	2500	Avg	0.205187			9785.76	9785.76	Yes	10000	98	97.9	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	778199	13C2-PFHxA	666166	2500	Avg	1.198314			2437.12	2437.12	Yes	2500	97	97.5	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	182625	18O2-PFHxS	396632	2500	Avg	0.236825			4860.55	4860.54	Yes	5000	97	97.2	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	835559	13C4-PFOA	129581	2500	Avg	6.698736			2406.48	2406.48	Yes	2500	96	96.3	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	454858	18O2-PFHxS	396632	2500	Avg	1.157763			2476.33	2476.33	Yes	2500	99	99.1	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	444546	13C5-PFNA	475546	1250	Avg	0.988588			1182	1182	Yes	1250	95	94.6	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	187796	18O2-PFHxS	396632	2500	Avg	0.213625			5540.99	5540.98	Yes	5000	111	110.8	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	510658	13C4-PFOS	476964	2500	Avg	0.548279			4881.83	4881.83	Yes	5000	98	97.6	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	398123	13C2-PFDA	372430	1250	Avg	1.165674			1146.32	1146.32	Yes	1250	92	91.7	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	405952	13C4-PFOS	476964	2500	Avg	0.420694			5057.81	5057.81	Yes	5000	101	101.2	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	497844	13C4-PFOS	476964	2500	Avg	1.004997			2596.47	2596.47	Yes	2500	104	103.9	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	388082	13C2-PFDA	372430	1250	Avg	1.107859			1175.72	1175.72	Yes	1250	94	94.1	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	363479	13C2-PFDA	372430	1250	Avg	1.018582			1197.7	1197.7	Yes	1250	96	95.8	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	842389	13C4-PFOS	476964	2500	Avg	1.722863			2562.81	2562.81	Yes	2500	103	102.5	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	335349	13C2-PFDA	372430	1250	Avg	0.914538			1230.72	1230.72	Yes	1250	98	98.5	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3615311	13C4-PFOS	476964	2500	Avg	0.727301			26055	26054.69	Yes	25000	104	104.2	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	207141	13C4-PFOS	476964	2500	Avg	0.453376			2394.76	2394.76	Yes	2500	96	95.8	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3862672	13C4-PFOS	476964	2500	Avg	0.801502			25260	25260.25	Yes	25000	101	101.0	Yes
080724042.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	229191	13C4-PFOS	476964	2500	Avg	0.486842			2467.54	2467.54	Yes	2500	99	98.7	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3072279	13C3-PFBA	1506636	5000	Avg	1.130641			9017.74	9017.74	Yes	10000	90	90.2	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1201110	13C2-PFHxA	808565	2500	Avg	0.8402			4420.03	4420.03	Yes	5000	88	88.4	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	169795	18O2-PFHxS	460731	2500	Avg	0.200536			4594.36	4594.36	Yes	5000	92	91.9	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	803454	13C2-PFHxA	808565	2500	Avg	1.104288			2249.59	2249.59	Yes	2500	90	90.0	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	554823	18O2-PFHxS	460731	2500	Avg	1.299121			2317.38	2317.38	Yes	2500	93	92.7	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	596166	13C2-PFHxA	808565	2500	Avg	0.205187			8983.43	8983.44	Yes	10000	90	89.8	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	970636	13C2-PFHxA	808565	2500	Avg	1.198314			2504.44	2504.44	Yes	2500	100	100.2	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	182477	18O2-PFHxS	460731	2500	Avg	0.236825			4180.94	4180.93	Yes	5000	84	83.6	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1000302	13C4-PFOA	163439	2500	Avg	6.698736			2284.14	2284.14	Yes	2500	91	91.4	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	488827	18O2-PFHxS	460731	2500	Avg	1.157763			2291.02	2291.02	Yes	2500	92	91.6	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	495183	13C5-PFNA	581545	1250	Avg	0.988588			1076.66	1076.66	Yes	1250	86	86.1	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	171653	18O2-PFHxS	460731	2500	Avg	0.213625			4360.06	4360.05	Yes	5000	87	87.2	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	560267	13C4-PFOS	552526	2500	Avg	0.548279			4623.61	4623.6	Yes	5000	92	92.5	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	457305	13C2-PFDA	422270	1250	Avg	1.165674			1161.31	1161.31	Yes	1250	93	92.9	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	436739	13C4-PFOS	552526	2500	Avg	0.420694			4697.24	4697.24	Yes	5000	94	93.9	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	503047	13C4-PFOS	552526	2500	Avg	1.004997			2264.81	2264.81	Yes	2500	91	90.6	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	425091	13C2-PFDA	422270	1250	Avg	1.107859			1135.84	1135.84	Yes	1250	91	90.9	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	386901	13C2-PFDA	422270	1250	Avg	1.018582			1124.41	1124.41	Yes	1250	90	90.0	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	894641	13C4-PFOS	552526	2500	Avg	1.722863			2349.55	2349.55	Yes	2500	94	94.0	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	352251	13C2-PFDA	422270	1250	Avg	0.914538			1140.17	1140.17	Yes	1250	91	91.2	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4070559	13C4-PFOS	552526	2500	Avg	0.727301			25324	25323.7	Yes	25000	101	101.3	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	226723	13C4-PFOS	552526	2500	Avg	0.453376			2262.68	2262.69	Yes	2500	91	90.5	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4414003	13C4-PFOS	552526	2500	Avg	0.801502			24918	24918.12	Yes	25000	100	99.7	Yes
080824002.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	255975	13C4-PFOS	552526	2500	Avg	0.486842			2379.01	2379.01	Yes	2500	95	95.2	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3131971	13C3-PFBA	1534675	5000	Avg	1.130641			9024.99	9024.99	Yes	10000	90	90.2	Yes
080824021.d	CCB A1	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2469	13C4-PFBA	3131971	10000	Avg	0.834189	0.01	9.4502	0.0945	0.0945	Yes				
080824021.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1228641	13C2-PFHxA	799095	2500	Avg	0.8402			4574.92	4574.92	Yes	5000	91	91.5	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	171624	18O2-PFHxS	491573	2500	Avg	0.200536			4352.49	4352.49	Yes	5000	87	87.0	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	822060	13C2-PFHxA	799095	2500	Avg	1.104288			2328.96	2328.96	Yes	2500	93	93.2	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	564345	18O2-PFHxS	491573	2500	Avg	1.299121			2209.26	2209.26	Yes	2500	88	88.4	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	618255	13C2-PFHxA	799095	2500	Avg	0.205187			9426.69	9426.69	Yes	10000	94	94.3	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	907486	13C2-PFHxA	799095	2500	Avg	1.198314			2369.25	2369.25	Yes	2500	95	94.8	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	187684	18O2-PFHxS	491573	2500	Avg	0.236825			4030.44	4030.43	Yes	5000	81	80.6	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1035026	13C4-PFOA	174166	2500	Avg	6.698736			2217.86	2217.86	Yes	2500	89	88.7	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	505681	18O2-PFHxS	491573	2500	Avg	1.157763			2221.31	2221.31	Yes	2500	89	88.9	Yes
080824021.d	CCB A1	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	4088	13C3-PFHxS	505681	2500	Avg	1.144236	0.01	17.663	0.17663	0.1766	Yes				
080824021.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	488887	13C5-PFNA	556658	1250	Avg	0.988588			1110.49	1110.49	Yes	1250	89	88.8	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	179222	18O2-PFHxS	491573	2500	Avg	0.213625			4266.7	4266.69	Yes	5000	85	85.3	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	594060	13C4-PFOS	604639	2500	Avg	0.548279			4479.94	4479.94	Yes	5000	90	89.6	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	492967	13C2-PFDA	466432	1250	Avg	1.165674			1133.35	1133.35	Yes	1250	91	90.7	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	480332	13C4-PFOS	604639	2500	Avg	0.420694			4720.83	4720.84	Yes	5000	94	94.4	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	541939	13C4-PFOS	604639	2500	Avg	1.004997			2229.61	2229.61	Yes	2500	89	89.2	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	454707	13C2-PFDA	466432	1250	Avg	1.107859			1099.94	1099.94	Yes	1250	88	88.0	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	413476	13C2-PFDA	466432	1250	Avg	1.018582			1087.87	1087.87	Yes	1250	87	87.0	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	961421	13C4-PFOS	604639	2500	Avg	1.722863			2307.31	2307.31	Yes	2500	92	92.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080824021.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	372094	13C2-PFDA	466432	1250	Avg	0.914538			1090.37	1090.37	Yes	1250	87	87.2	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4050828	13C4-PFOS	604639	2500	Avg	0.727301			23029	23028.91	Yes	25000	92	92.1	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	234761	13C4-PFOS	604639	2500	Avg	0.453376			2140.97	2140.97	Yes	2500	86	85.6	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4378943	13C4-PFOS	604639	2500	Avg	0.801502			22590	22589.6	Yes	25000	90	90.4	Yes
080824021.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	251975	13C4-PFOS	604639	2500	Avg	0.486842			2140	2140	Yes	2500	86	85.6	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3021754	13C3-PFBA	1495871	5000	Avg	1.130641			8933.26	8933.27	Yes	10000	89	89.3	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1208423	13C2-PFHxA	822907	2500	Avg	0.8402			4369.44	4369.44	Yes	5000	87	87.4	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	166894	18O2-PFHxS	503441	2500	Avg	0.200536			4132.75	4132.76	Yes	5000	83	82.7	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	780832	13C2-PFHxA	822907	2500	Avg	1.104288			2148.15	2148.15	Yes	2500	86	85.9	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	583938	18O2-PFHxS	503441	2500	Avg	1.299121			2232.07	2232.07	Yes	2500	89	89.3	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	602409	13C2-PFHxA	822907	2500	Avg	0.205187			8919.3	8919.3	Yes	10000	89	89.2	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	851324	13C2-PFHxA	822907	2500	Avg	1.198314			2158.31	2158.31	Yes	2500	86	86.3	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	179872	18O2-PFHxS	503441	2500	Avg	0.236825			3771.62	3771.62	Yes	5000	75	75.4	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	973413	13C4-PFOA	147134	2500	Avg	6.698736			2469.06	2469.06	Yes	2500	99	98.8	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	529808	18O2-PFHxS	503441	2500	Avg	1.157763			2272.43	2272.43	Yes	2500	91	90.9	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	519444	13C5-PFNA	557673	1250	Avg	0.988588			1177.75	1177.75	Yes	1250	94	94.2	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	184314	18O2-PFHxS	503441	2500	Avg	0.213625			4284.48	4284.48	Yes	5000	86	85.7	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	560304	13C4-PFOS	619451	2500	Avg	0.548279			4124.35	4124.35	Yes	5000	82	82.5	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	444546	13C2-PFDA	463981	1250	Avg	1.165674			1027.42	1027.42	Yes	1250	82	82.2	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	434551	13C4-PFOS	619451	2500	Avg	0.420694			4168.76	4168.77	Yes	5000	83	83.4	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	537548	13C4-PFOS	619451	2500	Avg	1.004997			2158.67	2158.67	Yes	2500	86	86.3	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	423772	13C2-PFDA	463981	1250	Avg	1.107859			1030.52	1030.52	Yes	1250	82	82.4	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	399349	13C2-PFDA	463981	1250	Avg	1.018582			1056.25	1056.25	Yes	1250	84	84.5	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	941225	13C4-PFOS	619451	2500	Avg	1.722863			2204.83	2204.83	Yes	2500	88	88.2	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	367597	13C2-PFDA	463981	1250	Avg	0.914538			1082.88	1082.88	Yes	1250	87	86.6	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3895117	13C4-PFOS	619451	2500	Avg	0.727301			21614	21614.21	Yes	25000	86	86.5	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	232558	13C4-PFOS	619451	2500	Avg	0.453376			2070.17	2070.17	Yes	2500	83	82.8	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4315504	13C4-PFOS	619451	2500	Avg	0.801502			21730	21730.01	Yes	25000	87	86.9	Yes
080824120.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	258952	13C4-PFOS	619451	2500	Avg	0.486842			2146.66	2146.67	Yes	2500	86	85.9	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3076244	13C3-PFBA	1527312	5000	Avg	1.130641			8907.14	8907.14	Yes	10000	89	89.1	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1239526	13C2-PFHxA	842589	2500	Avg	0.8402			4377.21	4377.21	Yes	5000	88	87.5	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	179722	18O2-PFHxS	475660	2500	Avg	0.200536			4710.34	4710.34	Yes	5000	94	94.2	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	799149	13C2-PFHxA	842589	2500	Avg	1.104288			2147.19	2147.19	Yes	2500	86	85.9	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	585026	18O2-PFHxS	475660	2500	Avg	1.299121			2366.84	2366.84	Yes	2500	95	94.7	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	619712	13C2-PFHxA	842589	2500	Avg	0.205187			8961.16	8961.16	Yes	10000	90	89.6	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	964188	13C2-PFHxA	842589	2500	Avg	1.198314			2387.35	2387.35	Yes	2500	95	95.5	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	214634	18O2-PFHxS	475660	2500	Avg	0.236825			4763.38	4763.37	Yes	5000	95	95.3	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1038900	13C4-PFOA	164388	2500	Avg	6.698736			2358.58	2358.58	Yes	2500	94	94.3	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	563262	18O2-PFHxS	475660	2500	Avg	1.157763			2557.02	2557.02	Yes	2500	102	102.3	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	520106	13C5-PFNA	598954	1250	Avg	0.988588			1097.98	1097.98	Yes	1250	88	87.8	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	215052	18O2-PFHxS	475660	2500	Avg	0.213625			5290.97	5290.96	Yes	5000	106	105.8	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	600654	13C4-PFOS	622688	2500	Avg	0.548279			4398.38	4398.38	Yes	5000	88	88.0	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	472167	13C2-PFDA	444132	1250	Avg	1.165674			1140.03	1140.03	Yes	1250	91	91.2	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	482920	13C4-PFOS	622688	2500	Avg	0.420694			4608.69	4608.7	Yes	5000	92	92.2	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	559764	13C4-PFOS	622688	2500	Avg	1.004997			2236.19	2236.2	Yes	2500	89	89.4	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	443826	13C2-PFDA	444132	1250	Avg	1.107859			1127.53	1127.53	Yes	1250	90	90.2	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	399720	13C2-PFDA	444132	1250	Avg	1.018582			1104.48	1104.48	Yes	1250	88	88.4	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	931715	13C4-PFOS	622688	2500	Avg	1.722863			2171.21	2171.21	Yes	2500	87	86.8	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	374288	13C2-PFDA	444132	1250	Avg	0.914538			1151.87	1151.87	Yes	1250	92	92.1	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3951597	13C4-PFOS	622688	2500	Avg	0.727301			21814	21813.63	Yes	25000	87	87.3	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	240016	13C4-PFOS	622688	2500	Avg	0.453376			2125.45	2125.45	Yes	2500	85	85.0	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4401220	13C4-PFOS	622688	2500	Avg	0.801502			22046	22046.42	Yes	25000	88	88.2	Yes
080824137.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	258901	13C4-PFOS	622688	2500	Avg	0.486842			2135.08	2135.09	Yes	2500	85	85.4	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2172342	13C3-PFBA	901578	5000	Avg	1.133865			10625	10625.11	Yes	10000	106	106.3	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	927927	13C2-PFHxA	561487	2500	Avg	0.801471			5154.97	5154.97	Yes	5000	103	103.1	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	123517	18O2-PFHxS	332434	2500	Avg	0.189605			4899.04	4899.05	Yes	5000	98	98.0	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	611972	13C2-PFHxA	561487	2500	Avg	1.08809			2504.19	2504.19	Yes	2500	100	100.2	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	439977	18O2-PFHxS	332434	2500	Avg	1.30288			2539.57	2539.57	Yes	2500	102	101.6	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	479305	13C2-PFHxA	561487	2500	Avg	0.196665			10851	10851.39	Yes	10000	109	108.5	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	658375	13C2-PFHxA	561487	2500	Avg	1.160285			2526.44	2526.44	Yes	2500	101	101.1	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	134422	18O2-PFHxS	332434	2500	Avg	0.208405			4850.62	4850.61	Yes	5000	97	97.0	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	800413	13C4-PFOA	127321	2500	Avg	6.826009			2302.43	2302.43	Yes	2500	92	92.1	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	403065	18O2-PFHxS	332434	2500	Avg	1.165116			2601.6	2601.6	Yes	2500	104	104.1	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1105	13C3-PFHxS	403065	2500	Avg	1.142081	0.01	6.0011	0.06001	0.0600	Yes				
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	399022	13C5-PFNA	382644	1250	Avg	0.9905			1316	1316	Yes	1250	105	105.3	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	114962	18O2-PFHxS	332434	2500	Avg	0.190493			4538.47	4538.47	Yes	5000	91	90.8	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	417874	13C4-PFOS	424026	2500	Avg	0.485385			5075.83	5075.82	Yes	5000	102	101.5	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	365274	13C2-PFDA	309028	1250	Avg	1.111006			1329.89	1329.89	Yes	1250	106	106.4	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	374541	13C4-PFOS	424026	2500	Avg	0.417912			5283.99	5283.99	Yes	5000	106	105.7	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	430316	13C4-PFOS	424026	2500	Avg	1.019176			2489.35	2489.35	Yes	2500	100	99.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	336083	13C2-PFDA	309028	1250	Avg	0.978463			1389.36	1389.36	Yes	1250	111	111.1	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	304769	13C2-PFDA	309028	1250	Avg	0.947371			1301.26	1301.26	Yes	1250	104	104.1	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	692576	13C4-PFOS	424026	2500	Avg	1.639711			2490.28	2490.28	Yes	2500	100	99.6	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	288960	13C2-PFDA	309028	1250	Avg	0.890868			1312.01	1312.01	Yes	1250	105	105.0	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2809462	13C4-PFOS	424026	2500	Avg	0.665955			24873	24872.86	Yes	25000	99	99.5	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	175231	13C4-PFOS	424026	2500	Avg	0.421972			2448.36	2448.36	Yes	2500	98	97.9	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3186913	13C4-PFOS	424026	2500	Avg	0.756241			24846	24846.06	Yes	25000	99	99.4	Yes
081524002.d	1633 IBLK A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	189997	13C4-PFOS	424026	2500	Avg	0.448486			2497.73	2497.73	Yes	2500	100	99.9	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2318532	13C3-PFBA	951130	5000	Avg	1.133865			10749	10749.34	Yes	10000	107	107.5	Yes
081524019.d	CCB A1	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	5133	13C4-PFBA	2318532	10000	Avg	0.85141	0.01	26.003	0.26003	0.2600	Yes				
081524019.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	932961	13C2-PFHxA	560990	2500	Avg	0.801471			5187.53	5187.53	Yes	5000	104	103.8	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	135700	18O2-PFHxS	331300	2500	Avg	0.189605			5400.68	5400.68	Yes	5000	108	108.0	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	635387	13C2-PFHxA	560990	2500	Avg	1.08809			2602.31	2602.31	Yes	2500	104	104.1	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	441488	18O2-PFHxS	331300	2500	Avg	1.30288			2557.01	2557.01	Yes	2500	102	102.3	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	485083	13C2-PFHxA	560990	2500	Avg	0.196665			10992	10991.93	Yes	10000	110	109.9	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	741198	13C2-PFHxA	560990	2500	Avg	1.160285			2846.78	2846.78	Yes	2500	114	113.9	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	144212	18O2-PFHxS	331300	2500	Avg	0.208405			5221.7	5221.7	Yes	5000	104	104.4	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	818089	13C4-PFOA	116895	2500	Avg	6.826009			2563.17	2563.17	Yes	2500	103	102.5	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	397883	18O2-PFHxS	331300	2500	Avg	1.165116			2576.94	2576.94	Yes	2500	103	103.1	Yes
081524019.d	CCB A1	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2187	13C3-PFHxS	397883	2500	Avg	1.142081	0.01	12.032	0.12032	0.1203	Yes				
081524019.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	387017	13C5-PFNA	407084	1250	Avg	0.9905			1199.78	1199.78	Yes	1250	96	96.0	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	121074	18O2-PFHxS	331300	2500	Avg	0.190493			4796.12	4796.12	Yes	5000	96	95.9	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	456693	13C4-PFOS	443271	2500	Avg	0.485385			5306.51	5306.51	Yes	5000	106	106.1	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	379173	13C2-PFDA	335109	1250	Avg	1.111006			1273.05	1273.05	Yes	1250	102	101.8	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	388839	13C4-PFOS	443271	2500	Avg	0.417912			5247.54	5247.54	Yes	5000	105	105.0	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	446632	13C4-PFOS	443271	2500	Avg	1.019176			2471.56	2471.56	Yes	2500	99	98.9	Yes
081524019.d	CCB A1	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2222	13C8-PFOS	446632	2500	Avg	1.011018	0.01	12.302	0.12302	0.1230	Yes				
081524019.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	318143	13C2-PFDA	335109	1250	Avg	0.978463			1212.84	1212.84	Yes	1250	97	97.0	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	311207	13C2-PFDA	335109	1250	Avg	0.947371			1225.33	1225.33	Yes	1250	98	98.0	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	764912	13C4-PFOS	443271	2500	Avg	1.639711			2630.96	2630.96	Yes	2500	105	105.2	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	312784	13C2-PFDA	335109	1250	Avg	0.890868			1309.65	1309.65	Yes	1250	105	104.8	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3071411	13C4-PFOS	443271	2500	Avg	0.665955			26011	26011.4	Yes	25000	104	104.0	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	180565	13C4-PFOS	443271	2500	Avg	0.421972			2413.35	2413.35	Yes	2500	97	96.5	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3389273	13C4-PFOS	443271	2500	Avg	0.756241			25277	25276.5	Yes	25000	101	101.1	Yes
081524019.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	197882	13C4-PFOS	443271	2500	Avg	0.448486			2488.45	2488.45	Yes	2500	100	99.5	Yes

Key

	from quantitation report
	from reported calibration
	from lab report/EDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
ND	not detected
ng/L	nanograms per liter
RF	response factor

Table 4b – Recalculation Summary: ZG18020 Instrument QC Samples

Arctic Data Services, LLC

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2987880	13C3-PFBA	1330073	5000	Avg	1.130641			9934.2	9934.2	Yes	10000	99	99.3	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2422801	13C4-PFBA	2987880	10000	Avg	0.834189			9720.53	9720.53	Yes	10000	97	97.2	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1195942	13C2-PFHxA	707279	2500	Avg	0.8402			5031.26	5031.26	Yes	5000	101	100.6	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1037814	13C5-PFPeA	1195942	5000	Avg	0.917127			4730.97	4730.97	Yes	5000	95	94.6	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	173896	18O2-PFHxS	426311	2500	Avg	0.200536			5085.23	5085.23	Yes	5000	102	101.7	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	542409	13C2-4:2FTS	173896	5000	Avg	1.822044			8559.5	8559.5	Yes	9375	91	91.3	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	783703	13C2-PFHxA	707279	2500	Avg	1.104288			2508.53	2508.52	Yes	2500	100	100.3	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	687791	13C5-PFHxA	783703	2500	Avg	0.89827			2442.52	2442.52	Yes	2500	98	97.7	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3302627	13C5-PFHxA	783703	2500	Avg	0.169304			62227	62227.28	Yes	62500	100	99.6	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	537867	18O2-PFHxS	426311	2500	Avg	1.299121			2427.95	2427.94	Yes	2500	97	97.1	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	550373	13C3-PFBS	537867	2500	Avg	1.180999			2166.07	2166.07	Yes	2218	98	97.7	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	596554	13C2-PFHxA	707279	2500	Avg	0.205187			10277	10276.59	Yes	10000	103	102.8	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	868346	13C2-PFHxA	707279	2500	Avg	1.198314			2561.36	2561.36	Yes	2500	102	102.5	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	874302	13C4-PFHpA	868346	2500	Avg	1.029691			2444.57	2444.57	Yes	2500	98	97.8	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	203484	18O2-PFHxS	426311	2500	Avg	0.236825			5038.68	5038.67	Yes	5000	101	100.8	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	667014	13C2-6:2FTS	203484	5000	Avg	1.74466			9394.29	9394.29	Yes	9500	99	98.9	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1031229	13C4-PFOA	152121	2500	Avg	6.698736			2529.96	2529.96	Yes	2500	101	101.2	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	859842	13C8-PFOA	1031229	2500	Avg	0.927161			2248.27	2248.27	Yes	2500	90	89.9	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	493629	18O2-PFHxS	426311	2500	Avg	1.157763			2500.31	2500.31	Yes	2500	100	100	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	548241	13C3-PFHxS	493629	2500	Avg	1.151629			2411.01	2411.01	Yes	2353	102	102.5	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	481102	13C3-PFHxS	493629	2500	Avg	1.144236			2129.42	2129.42	Yes	2285	93	93.2	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	490610	13C5-PFNA	481365	1250	Avg	0.988588			1288.71	1288.71	Yes	1250	103	103.1	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	784304	13C9-PFNA	490610	1250	Avg	0.849909			2351.18	2351.18	Yes	2500	94	94	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	172169	18O2-PFHxS	426311	2500	Avg	0.213625			4726.25	4726.25	Yes	5000	95	94.5	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	598836	13C2-8:2FTS	172169	5000	Avg	1.68797			10303	10302.87	Yes	9600	107	107.3	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	600192	13C4-PFOS	544300	2500	Avg	0.548279			5027.94	5027.94	Yes	5000	101	100.6	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	239952	D3-NMeFOSAA	600192	5000	Avg	0.798372			2503.8	2503.8	Yes	2500	100	100.2	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	495086	13C2-PFDA	403402	1250	Avg	1.165674			1316.06	1316.06	Yes	1250	105	105.3	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	736555	13C6-PFDA	495086	1250	Avg	0.867931			2142.64	2142.64	Yes	2500	86	85.7	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	501857	13C4-PFOS	544300	2500	Avg	0.420694			5479.17	5479.18	Yes	5000	110	109.6	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	223410	D5-NEtFOSAA	501857	5000	Avg	1.036789			2146.85	2146.85	Yes	2500	86	85.9	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	545622	13C4-PFOS	544300	2500	Avg	1.004997			2493.61	2493.61	Yes	2500	100	99.7	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	497830	13C8-PFOS	545622	2500	Avg	0.954873			2388.82	2388.82	Yes	2383	100	100.2	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	469414	13C8-PFOS	545622	2500	Avg	0.990455			2171.55	2171.55	Yes	2320	94	93.6	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	570543	13C8-PFOS	545622	2500	Avg	1.152095			2269.07	2269.07	Yes	2405	94	94.3	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	433238	13C2-PFDA	403402	1250	Avg	1.107859			1211.75	1211.75	Yes	1250	97	96.9	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	747449	13C7-PFUnA	433238	1250	Avg	0.9124			2363.63	2363.63	Yes	2500	95	94.5	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	408448	13C2-PFDA	403402	1250	Avg	1.018582			1242.55	1242.55	Yes	1250	99	99.4	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	902513	13C4-PFOS	544300	2500	Avg	1.722863			2406.05	2406.05	Yes	2500	96	96.2	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	817252	13C8-PFOSA	902513	2500	Avg	0.978797			2312.86	2312.86	Yes	2500	93	92.5	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	375379	13C2-PFDA	403402	1250	Avg	0.914538			1271.86	1271.86	Yes	1250	102	101.7	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3614758	13C4-PFOS	544300	2500	Avg	0.727301			22828	22827.94	Yes	25000	91	91.3	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3644551	D7-NMeFOSE	3614758	25000	Avg	1.00959			24967	24966.62	Yes	25000	100	99.9	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	231654	13C4-PFOS	544300	2500	Avg	0.453376			2346.84	2346.84	Yes	2500	94	93.9	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4136804	13C4-PFOS	544300	2500	Avg	0.801502			23706	23706.2	Yes	25000	95	94.8	Yes
080924037.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	244749	13C4-PFOS	544300	2500	Avg	0.486842			2309.06	2309.06	Yes	2500	92	92.4	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3112101	13C3-PFBA	1379311	5000	Avg	1.130641			9977.84	9977.85	Yes	10000	100	99.8	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2478009	13C4-PFBA	3112101	10000	Avg	0.834189			9545.19	9545.19	Yes	10000	95	95.5	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1235576	13C2-PFHxA	753290	2500	Avg	0.8402			4880.5	4880.5	Yes	5000	98	97.6	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1074163	13C5-PFPeA	1235576	5000	Avg	0.917127			4739.6	4739.6	Yes	5000	95	94.8	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	184258	18O2-PFHxS	406423	2500	Avg	0.200536			5651.91	5651.92	Yes	5000	113	113	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	602522	13C2-4:2FTS	184258	5000	Avg	1.822044			8973.42	8973.41	Yes	9375	96	95.7	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	843030	13C2-PFHxA	753290	2500	Avg	1.104288			2533.6	2533.6	Yes	2500	101	101.3	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	703288	13C5-PFHxA	843030	2500	Avg	0.89827			2321.79	2321.79	Yes	2500	93	92.9	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3439995	13C5-PFHxA	843030	2500	Avg	0.169304			60254	60254.23	Yes	62500	96	96.4	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	558324	18O2-PFHxS	406423	2500	Avg	1.299121			2643.62	2643.62	Yes	2500	106	105.7	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	564632	13C3-PFBS	558324	2500	Avg	1.180999			2140.77	2140.77	Yes	2218	97	96.5	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	596901	13C2-PFHxA	753290	2500	Avg	0.205187			9654.51	9654.51	Yes	10000	97	96.5	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	920346	13C2-PFHxA	753290	2500	Avg	1.198314			2548.93	2548.93	Yes	2500	102	102	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	865835	13C4-PFHpA	920346	2500	Avg	1.029691			2284.11	2284.11	Yes	2500	91	91.4	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	218772	18O2-PFHxS	406423	2500	Avg	0.236825			5682.33	5682.32	Yes	5000	114	113.6	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	684738	13C2-6:2FTS	218772	5000	Avg	1.74466			8969.99	8969.99	Yes	9500	94	94.4	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1030942	13C4-PFOA	148070	2500	Avg	6.698736			2598.45	2598.45	Yes	2500	104	103.9	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	853564	13C8-PFOA	1030942	2500	Avg	0.927161			2232.48	2232.48	Yes	2500	89	89.3	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	518485	18O2-PFHxS	406423	2500	Avg	1.157763			2754.73	2754.73	Yes	2500	110	110.2	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	532513	13C3-PFHxS	518485	2500	Avg	1.151629			2229.57	2229.57	Yes	2353	95	94.8	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	474906	13C3-PFHxS	518485	2500	Avg	1.144236			2001.22	2001.22	Yes	2285	88	87.6	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	494747	13C5-PFNA	518646	1250	Avg	0.988588			1206.17	1206.17	Yes	1250	96	96.5	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	813742	13C9-PFNA	494747	1250	Avg	0.849909			2419.03	2419.03	Yes	2500	97	96.8	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	170411	18O2-PFHxS	406423	2500	Avg	0.213625			4906.91	4906.9	Yes	5000	98	98.1	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	588068	13C2-8:2FTS	170411	5000	Avg	1.68797			10222	10221.98	Yes	9600	106	106.5	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	561093	13C4-PFOS	535790	2500	Avg	0.548279			4775.06	4775.06	Yes	5000	96	95.5	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	230038	D3-NMeFOSAA	561093	5000	Avg	0.798372			2567.61	2567.61	Yes	2500	103	102.7	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	437998	13C2-PFDA	413543	1250	Avg	1.165674			1135.75	1135.75	Yes	1250	91	90.9	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	794779	13C6-PFDA	437998	1250	Avg	0.867931			2613.36	2613.36	Yes	2500	105	104.5	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	465350	13C4-PFOS	535790	2500	Avg	0.420694			5161.29	5161.3	Yes	5000	103	103.2	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	225793	D5-NEtFOSAA	465350	5000	Avg	1.036789			2339.97	2339.97	Yes	2500	94	93.6	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	524392	13C4-PFOS	535790	2500	Avg	1.004997			2434.65	2434.65	Yes	2500	97	97.4	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	471670	13C8-PFOS	524392	2500	Avg	0.954873			2354.92	2354.92	Yes	2383	99	98.8	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	457613	13C8-PFOS	524392	2500	Avg	0.990455			2202.66	2202.66	Yes	2320	95	94.9	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	563146	13C8-PFOS	524392	2500	Avg	1.152095			2330.33	2330.33	Yes	2405	97	96.9	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	464221	13C2-PFDA	413543	1250	Avg	1.107859			1266.57	1266.57	Yes	1250	101	101.3	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	798318	13C7-PFUnA	464221	1250	Avg	0.9124			2356	2356	Yes	2500	94	94.2	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	387979	13C2-PFDA	413543	1250	Avg	1.018582			1151.33	1151.33	Yes	1250	92	92.1	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	930088	13C4-PFOS	535790	2500	Avg	1.722863			2518.94	2518.95	Yes	2500	101	100.8	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	831971	13C8-PFOSA	930088	2500	Avg	0.978797			2284.71	2284.71	Yes	2500	91	91.4	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	355353	13C2-PFDA	413543	1250	Avg	0.914538			1174.49	1174.49	Yes	1250	94	94	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3900829	13C4-PFOS	535790	2500	Avg	0.727301			25026	25025.81	Yes	25000	100	100.1	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3728731	D7-NMeFOSE	3900829	25000	Avg	1.00959			23670	23670.05	Yes	25000	95	94.7	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	229486	13C4-PFOS	535790	2500	Avg	0.453376			2361.8	2361.8	Yes	2500	94	94.5	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4218012	13C4-PFOS	535790	2500	Avg	0.801502			24555	24555.49	Yes	25000	98	98.2	Yes
080924054.d	CCV L5D_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	252249	13C4-PFOS	535790	2500	Avg	0.486842			2417.61	2417.61	Yes	2500	97	96.7	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3195651	13C3-PFBA	1422262	5000	Avg	1.130641			9936.31	9936.31	Yes	10000	99	99.4	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2588134	13C4-PFBA	3195651	10000	Avg	0.834189			9708.74	9708.74	Yes	10000	97	97.1	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1277580	13C2-PFHxA	751693	2500	Avg	0.8402			5057.14	5057.14	Yes	5000	101	101.1	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1099953	13C5-PFPeA	1277580	5000	Avg	0.917127			4693.82	4693.82	Yes	5000	94	93.9	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	178195	18O2-PFHxS	440395	2500	Avg	0.200536			5044.3	5044.3	Yes	5000	101	100.9	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	569106	13C2-4:2FTS	178195	5000	Avg	1.822044			8764.13	8764.13	Yes	9375	93	93.5	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	840718	13C2-PFHxA	751693	2500	Avg	1.104288			2532.02	2532.02	Yes	2500	101	101.3	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	718730	13C5-PFHxA	840718	2500	Avg	0.89827			2379.3	2379.3	Yes	2500	95	95.2	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3371032	13C5-PFHxA	840718	2500	Avg	0.169304			59209	59208.67	Yes	62500	95	94.7	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	583132	18O2-PFHxS	440395	2500	Avg	1.299121			2548.09	2548.09	Yes	2500	102	101.9	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	589229	13C3-PFBS	583132	2500	Avg	1.180999			2138.98	2138.98	Yes	2218	96	96.4	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	625842	13C2-PFHxA	751693	2500	Avg	0.205187			10144	10144.12	Yes	10000	101	101.4	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	930989	13C2-PFHxA	751693	2500	Avg	1.198314			2583.89	2583.89	Yes	2500	103	103.4	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	918446	13C4-PFHpA	930989	2500	Avg	1.029691			2395.2	2395.2	Yes	2500	96	95.8	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	199487	18O2-PFHxS	440395	2500	Avg	0.236825			4781.73	4781.73	Yes	5000	96	95.6	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	690622	13C2-6:2FTS	199487	5000	Avg	1.74466			9921.67	9921.68	Yes	9500	104	104.4	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1035621	13C4-PFOA	144320	2500	Avg	6.698736			2678.07	2678.07	Yes	2500	107	107.1	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	901604	13C8-PFOA	1035621	2500	Avg	0.927161			2347.47	2347.47	Yes	2500	94	93.9	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	485766	18O2-PFHxS	440395	2500	Avg	1.157763			2381.8	2381.8	Yes	2500	95	95.3	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	567197	13C3-PFHxS	485766	2500	Avg	1.151629			2534.75	2534.74	Yes	2353	108	107.7	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	524333	13C3-PFHxS	485766	2500	Avg	1.144236			2358.33	2358.33	Yes	2285	103	103.2	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	487729	13C5-PFNA	511884	1250	Avg	0.988588			1204.76	1204.76	Yes	1250	96	96.4	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	821256	13C9-PFNA	487729	1250	Avg	0.849909			2476.49	2476.5	Yes	2500	99	99.1	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	197755	18O2-PFHxS	440395	2500	Avg	0.213625			5255.01	5255	Yes	5000	105	105.1	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	624777	13C2-8:2FTS	197755	5000	Avg	1.68797			9358.43	9358.43	Yes	9600	97	97.5	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	609039	13C4-PFOS	559316	2500	Avg	0.548279			4965.08	4965.08	Yes	5000	99	99.3	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	246026	D3-NMeFOSAA	609039	5000	Avg	0.798372			2529.89	2529.88	Yes	2500	101	101.2	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	498004	13C2-PFDA	425808	1250	Avg	1.165674			1254.16	1254.16	Yes	1250	100	100.3	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	798306	13C6-PFDA	498004	1250	Avg	0.867931			2308.67	2308.67	Yes	2500	92	92.3	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	475864	13C4-PFOS	559316	2500	Avg	0.420694			5055.9	5055.91	Yes	5000	101	101.1	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	265903	D5-NEtFOSAA	475864	5000	Avg	1.036789			2694.76	2694.76	Yes	2500	108	107.8	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	584467	13C4-PFOS	559316	2500	Avg	1.004997			2599.43	2599.43	Yes	2500	104	104	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	477104	13C8-PFOS	584467	2500	Avg	0.954873			2137.21	2137.21	Yes	2383	90	89.7	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	480659	13C8-PFOS	584467	2500	Avg	0.990455			2075.79	2075.78	Yes	2320	89	89.5	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	616914	13C8-PFOS	584467	2500	Avg	1.152095			2290.43	2290.43	Yes	2405	95	95.2	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	484710	13C2-PFDA	425808	1250	Avg	1.107859			1284.38	1284.38	Yes	1250	103	102.8	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	835822	13C7-PFUnA	484710	1250	Avg	0.9124			2362.42	2362.42	Yes	2500	94	94.5	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	406302	13C2-PFDA	425808	1250	Avg	1.018582			1170.98	1170.98	Yes	1250	94	93.7	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	958532	13C4-PFOS	559316	2500	Avg	1.722863			2486.79	2486.79	Yes	2500	99	99.5	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	885327	13C8-PFOSA	958532	2500	Avg	0.978797			2359.09	2359.09	Yes	2500	94	94.4	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	383609	13C2-PFDA	425808	1250	Avg	0.914538			1231.36	1231.35	Yes	1250	99	98.5	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3858025	13C4-PFOS	559316	2500	Avg	0.727301			23710	23710.11	Yes	25000	95	94.8	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3877493	D7-NMeFOSE	3858025	25000	Avg	1.00959			24887	24887.48	Yes	25000	100	99.5	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	240850	13C4-PFOS	559316	2500	Avg	0.453376			2374.49	2374.49	Yes	2500	95	95	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4408947	13C4-PFOS	559316	2500	Avg	0.801502			24587	24587.42	Yes	25000	98	98.3	Yes
080924068.d	CCV L5E_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	260788	13C4-PFOS	559316	2500	Avg	0.486842			2394.32	2394.32	Yes	2500	96	95.8	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3361305	13C3-PFBA	1483037	5000	Avg	1.130641			10023	10023.08	Yes	10000	100	100.2	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2702437	13C4-PFBA	3361305	10000	Avg	0.834189			9637.92	9637.92	Yes	10000	96	96.4	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1377803	13C2-PFHxA	792666	2500	Avg	0.8402			5171.95	5171.95	Yes	5000	103	103.4	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1177506	13C5-PFPeA	1377803	5000	Avg	0.917127			4659.26	4659.26	Yes	5000	93	93.2	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	174980	18O2-PFHxS	500317	2500	Avg	0.200536			4360.04	4360.04	Yes	5000	87	87.2	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	584904	13C2-4:2FTS	174980	5000	Avg	1.822044			9172.92	9172.91	Yes	9375	98	97.8	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	837202	13C2-PFHxA	792666	2500	Avg	1.104288			2391.1	2391.1	Yes	2500	96	95.6	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	775314	13C5-PFHxA	837202	2500	Avg	0.89827			2577.39	2577.39	Yes	2500	103	103.1	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3595780	13C5-PFHxA	837202	2500	Avg	0.169304			63421	63421.37	Yes	62500	101	101.5	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	598778	18O2-PFHxS	500317	2500	Avg	1.299121			2303.09	2303.09	Yes	2500	92	92.1	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	623217	13C3-PFBS	598778	2500	Avg	1.180999			2203.25	2203.25	Yes	2218	99	99.3	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	637618	13C2-PFHxA	792666	2500	Avg	0.205187			9800.78	9800.78	Yes	10000	98	98	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	948949	13C2-PFHxA	792666	2500	Avg	1.198314			2497.6	2497.6	Yes	2500	100	99.9	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	910859	13C4-PFHpA	948949	2500	Avg	1.029691			2330.46	2330.46	Yes	2500	93	93.2	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	184218	18O2-PFHxS	500317	2500	Avg	0.236825			3886.87	3886.86	Yes	5000	78	77.7	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	714297	13C2-6:2FTS	184218	5000	Avg	1.74466			11112	11112.35	Yes	9500	117	117	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1039854	13C4-PFOA	166621	2500	Avg	6.698736			2329.11	2329.11	Yes	2500	93	93.2	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	903584	13C8-PFOA	1039854	2500	Avg	0.927161			2343.05	2343.05	Yes	2500	94	93.7	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	565605	18O2-PFHxS	500317	2500	Avg	1.157763			2441.12	2441.12	Yes	2500	98	97.6	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	577646	13C3-PFHxS	565605	2500	Avg	1.151629			2217.05	2217.05	Yes	2353	94	94.2	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	518373	13C3-PFHxS	565605	2500	Avg	1.144236			2002.41	2002.41	Yes	2285	88	87.6	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	523499	13C5-PFNA	575073	1250	Avg	0.988588			1151.03	1151.03	Yes	1250	92	92.1	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	840683	13C9-PFNA	523499	1250	Avg	0.849909			2361.86	2361.86	Yes	2500	94	94.5	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	183736	18O2-PFHxS	500317	2500	Avg	0.213625			4297.71	4297.71	Yes	5000	86	86	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	591149	13C2-8:2FTS	183736	5000	Avg	1.68797			9530.33	9530.33	Yes	9600	99	99.3	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	538069	13C4-PFOS	597737	2500	Avg	0.548279			4104.56	4104.56	Yes	5000	82	82.1	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	218343	D3-NMeFOSAA	538069	5000	Avg	0.798372			2541.36	2541.36	Yes	2500	102	101.7	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	473532	13C2-PFDA	478407	1250	Avg	1.165674			1061.41	1061.41	Yes	1250	85	84.9	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	850061	13C6-PFDA	473532	1250	Avg	0.867931			2585.39	2585.39	Yes	2500	103	103.4	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	435670	13C4-PFOS	597737	2500	Avg	0.420694			4331.33	4331.33	Yes	5000	87	86.6	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	218277	D5-NEtFOSAA	435670	5000	Avg	1.036789			2416.18	2416.18	Yes	2500	97	96.6	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	626529	13C4-PFOS	597737	2500	Avg	1.004997			2607.39	2607.39	Yes	2500	104	104.3	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	514512	13C8-PFOS	626529	2500	Avg	0.954873			2150.05	2150.05	Yes	2383	90	90.2	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	530083	13C8-PFOS	626529	2500	Avg	0.990455			2135.54	2135.54	Yes	2320	92	92	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	621080	13C8-PFOS	626529	2500	Avg	1.152095			2151.09	2151.09	Yes	2405	89	89.4	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	497800	13C2-PFDA	478407	1250	Avg	1.107859			1174.04	1174.04	Yes	1250	94	93.9	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	885610	13C7-PFUnA	497800	1250	Avg	0.9124			2437.32	2437.32	Yes	2500	97	97.5	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	435142	13C2-PFDA	478407	1250	Avg	1.018582			1116.21	1116.21	Yes	1250	89	89.3	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	996222	13C4-PFOS	597737	2500	Avg	1.722863			2418.44	2418.44	Yes	2500	97	96.7	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	907954	13C8-PFOSA	996222	2500	Avg	0.978797			2327.85	2327.85	Yes	2500	93	93.1	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	389423	13C2-PFDA	478407	1250	Avg	0.914538			1112.58	1112.58	Yes	1250	89	89	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4267358	13C4-PFOS	597737	2500	Avg	0.727301			24540	24540.01	Yes	25000	98	98.2	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3888225	D7-NMeFOSE	4267358	25000	Avg	1.00959			22562	22562.5	Yes	25000	90	90.3	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	245800	13C4-PFOS	597737	2500	Avg	0.453376			2267.53	2267.53	Yes	2500	91	90.7	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4464746	13C4-PFOS	597737	2500	Avg	0.801502			23298	23298.18	Yes	25000	93	93.2	Yes
081224039.d	CCV L5B_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	266403	13C4-PFOS	597737	2500	Avg	0.486842			2288.66	2288.66	Yes	2500	92	91.5	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3559282	13C3-PFBA	1572018	5000	Avg	1.130641			10013	10012.68	Yes	10000	100	100.1	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2902797	13C4-PFBA	3559282	10000	Avg	0.834189			9776.64	9776.64	Yes	10000	98	97.8	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1395760	13C2-PFHxA	832853	2500	Avg	0.8402			4986.54	4986.54	Yes	5000	100	99.7	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1238737	13C5-PFPeA	1395760	5000	Avg	0.917127			4838.48	4838.48	Yes	5000	97	96.8	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	178448	18O2-PFHxS	483197	2500	Avg	0.200536			4603.99	4604	Yes	5000	92	92.1	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	622126	13C2-4:2FTS	178448	5000	Avg	1.822044			9567.05	9567.04	Yes	9375	102	102	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	897825	13C2-PFHxA	832853	2500	Avg	1.104288			2440.51	2440.51	Yes	2500	98	97.6	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	778977	13C5-PFHxA	897825	2500	Avg	0.89827			2414.71	2414.72	Yes	2500	97	96.6	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3742315	13C5-PFHxA	897825	2500	Avg	0.169304			61549	61549.06	Yes	62500	98	98.5	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	614277	18O2-PFHxS	483197	2500	Avg	1.299121			2446.42	2446.42	Yes	2500	98	97.9	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	599289	13C3-PFBS	614277	2500	Avg	1.180999			2065.2	2065.2	Yes	2218	93	93.1	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	686389	13C2-PFHxA	832853	2500	Avg	0.205187			10041	10041.35	Yes	10000	100	100.4	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	991062	13C2-PFHxA	832853	2500	Avg	1.198314			2482.57	2482.57	Yes	2500	99	99.3	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	956210	13C4-PFHpA	991062	2500	Avg	1.029691			2342.53	2342.53	Yes	2500	94	93.7	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	218132	18O2-PFHxS	483197	2500	Avg	0.236825			4765.5	4765.49	Yes	5000	95	95.3	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	680593	13C2-6:2FTS	218132	5000	Avg	1.74466			8941.85	8941.85	Yes	9500	94	94.1	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1166230	13C4-PFOA	164157	2500	Avg	6.698736			2651.38	2651.38	Yes	2500	106	106.1	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	886013	13C8-PFOA	1166230	2500	Avg	0.927161			2048.52	2048.52	Yes	2500	82	81.9	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	575423	18O2-PFHxS	483197	2500	Avg	1.157763			2571.48	2571.48	Yes	2500	103	102.9	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	574301	13C3-PFHxS	575423	2500	Avg	1.151629			2166.61	2166.61	Yes	2353	92	92.1	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	536257	13C3-PFHxS	575423	2500	Avg	1.144236			2036.15	2036.15	Yes	2285	89	89.1	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	533320	13C5-PFNA	530331	1250	Avg	0.988588			1271.56	1271.56	Yes	1250	102	101.7	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	908113	13C9-PFNA	533320	1250	Avg	0.849909			2504.32	2504.32	Yes	2500	100	100.2	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	194915	18O2-PFHxS	483197	2500	Avg	0.213625			4720.73	4720.73	Yes	5000	94	94.4	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	621217	13C2-8:2FTS	194915	5000	Avg	1.68797			9440.68	9440.68	Yes	9600	98	98.3	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	577593	13C4-PFOS	574802	2500	Avg	0.548279			4581.86	4581.86	Yes	5000	92	91.6	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	215246	D3-NMeFOSAA	577593	5000	Avg	0.798372			2333.88	2333.88	Yes	2500	93	93.4	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	506202	13C2-PFDA	414074	1250	Avg	1.165674			1310.93	1310.93	Yes	1250	105	104.9	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	847883	13C6-PFDA	506202	1250	Avg	0.867931			2412.33	2412.33	Yes	2500	96	96.5	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	468736	13C4-PFOS	574802	2500	Avg	0.420694			4846	4846	Yes	5000	97	96.9	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	234798	D5-NEtFOSAA	468736	5000	Avg	1.036789			2415.71	2415.72	Yes	2500	97	96.6	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	592393	13C4-PFOS	574802	2500	Avg	1.004997			2563.7	2563.7	Yes	2500	103	102.5	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	531373	13C8-PFOS	592393	2500	Avg	0.954873			2348.46	2348.46	Yes	2383	99	98.6	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	516211	13C8-PFOS	592393	2500	Avg	0.990455			2199.49	2199.49	Yes	2320	95	94.8	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	626304	13C8-PFOS	592393	2500	Avg	1.152095			2294.18	2294.18	Yes	2405	95	95.4	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	484485	13C2-PFDA	414074	1250	Avg	1.107859			1320.16	1320.16	Yes	1250	106	105.6	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	952952	13C7-PFUnA	484485	1250	Avg	0.9124			2694.73	2694.73	Yes	2500	108	107.8	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	451218	13C2-PFDA	414074	1250	Avg	1.018582			1337.28	1337.28	Yes	1250	107	107	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	1010383	13C4-PFOS	574802	2500	Avg	1.722863			2550.69	2550.69	Yes	2500	102	102	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	912198	13C8-PFOSA	1010383	2500	Avg	0.978797			2305.95	2305.95	Yes	2500	92	92.2	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	390789	13C2-PFDA	414074	1250	Avg	0.914538			1289.95	1289.95	Yes	1250	103	103.2	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4234347	13C4-PFOS	574802	2500	Avg	0.727301			25322	25321.77	Yes	25000	101	101.3	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4146380	D7-NMeFOSE	4234347	25000	Avg	1.00959			24248	24248.09	Yes	25000	97	97	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	256198	13C4-PFOS	574802	2500	Avg	0.453376			2457.76	2457.76	Yes	2500	98	98.3	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4590418	13C4-PFOS	574802	2500	Avg	0.801502			24910	24909.75	Yes	25000	100	99.6	Yes
081224052.d	CCV L5C_SVLC-3909	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	275561	13C4-PFOS	574802	2500	Avg	0.486842			2461.79	2461.79	Yes	2500	98	98.5	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3014199	13C3-PFBA	1330791	5000	Avg	1.133865			9987.82	9987.82	Yes	10000	100	99.9	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2503835	13C4-PFBA	3014199	10000	Avg	0.85141			9756.52	9756.52	Yes	10000	98	97.6	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1218180	13C2-PFHxA	730323	2500	Avg	0.801471			5202.94	5202.94	Yes	5000	104	104.1	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1163210	13C5-PFPeA	1218180	5000	Avg	0.913924			5224.04	5224.04	Yes	5000	104	104.5	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	155485	18O2-PFHxS	444430	2500	Avg	0.189605			4612.91	4612.91	Yes	5000	92	92.3	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	556006	13C2-4:2FTS	155485	5000	Avg	1.821802			9814.31	9814.31	Yes	9375	105	104.7	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	811073	13C2-PFHxA	730323	2500	Avg	1.08809			2551.64	2551.64	Yes	2500	102	102.1	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	718442	13C5-PFHxA	811073	2500	Avg	0.896378			2470.48	2470.48	Yes	2500	99	98.8	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3357837	13C5-PFHxA	811073	2500	Avg	0.165672			62473	62472.74	Yes	62500	100	100	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	543211	18O2-PFHxS	444430	2500	Avg	1.30288			2345.31	2345.31	Yes	2500	94	93.8	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	594862	13C3-PFBS	543211	2500	Avg	1.208343			2265.67	2265.67	Yes	2218	102	102.1	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	589667	13C2-PFHxA	730323	2500	Avg	0.196665			10264	10263.72	Yes	10000	103	102.6	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	849969	13C2-PFHxA	730323	2500	Avg	1.160285			2507.63	2507.63	Yes	2500	100	100.3	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	871024	13C4-PFHpA	849969	2500	Avg	1.019994			2511.71	2511.71	Yes	2500	100	100.5	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	164800	18O2-PFHxS	444430	2500	Avg	0.208405			4448.22	4448.21	Yes	5000	89	89	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	653054	13C2-6:2FTS	164800	5000	Avg	1.837836			10781	10780.9	Yes	9500	113	113.5	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1082919	13C4-PFOA	153382	2500	Avg	6.826009			2585.8	2585.8	Yes	2500	103	103.4	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	827588	13C8-PFOA	1082919	2500	Avg	0.882262			2165.51	2165.51	Yes	2500	87	86.6	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	516925	18O2-PFHxS	444430	2500	Avg	1.165116			2495.72	2495.72	Yes	2500	100	99.8	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	546833	13C3-PFHxS	516925	2500	Avg	1.154897			2289.94	2289.94	Yes	2353	97	97.3	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	485455	13C3-PFHxS	516925	2500	Avg	1.142081			2055.72	2055.72	Yes	2285	90	90	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	521213	13C5-PFNA	501371	1250	Avg	0.9905			1311.93	1311.93	Yes	1250	105	105	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	825434	13C9-PFNA	521213	1250	Avg	0.792037			2499.38	2499.38	Yes	2500	100	100	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	154161	18O2-PFHxS	444430	2500	Avg	0.190493			4552.31	4552.31	Yes	5000	91	91	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	582225	13C2-8:2FTS	154161	5000	Avg	1.879444			10047	10047.48	Yes	9600	105	104.7	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	554427	13C4-PFOS	601050	2500	Avg	0.485385			4751.03	4751.03	Yes	5000	95	95	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	214024	D3-NMeFOSAA	554427	5000	Avg	0.841107			2294.76	2294.76	Yes	2500	92	91.8	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	456740	13C2-PFDA	411601	1250	Avg	1.111006			1248.49	1248.49	Yes	1250	100	99.9	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	784279	13C6-PFDA	456740	1250	Avg	0.879258			2441.15	2441.15	Yes	2500	98	97.6	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	455415	13C4-PFOS	601050	2500	Avg	0.417912			4532.65	4532.65	Yes	5000	91	90.7	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	219077	D5-NEtFOSAA	455415	5000	Avg	1.061343			2266.23	2266.23	Yes	2500	91	90.6	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	542601	13C4-PFOS	601050	2500	Avg	1.019176			2214.42	2214.42	Yes	2500	89	88.6	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	470771	13C8-PFOS	542601	2500	Avg	0.936113			2317.08	2317.08	Yes	2383	97	97.2	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	482177	13C8-PFOS	542601	2500	Avg	1.011018			2197.39	2197.39	Yes	2320	95	94.7	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	605295	13C8-PFOS	542601	2500	Avg	1.078285			2586.38	2586.38	Yes	2405	108	107.5	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	443611	13C2-PFDA	411601	1250	Avg	0.978463			1376.87	1376.87	Yes	1250	110	110.1	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	784540	13C7-PFUnA	443611	1250	Avg	0.906176			2439.55	2439.55	Yes	2500	98	97.6	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	423833	13C2-PFDA	411601	1250	Avg	0.947371			1358.65	1358.65	Yes	1250	109	108.7	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	915898	13C4-PFOS	601050	2500	Avg	1.639711			2323.32	2323.32	Yes	2500	93	92.9	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	884583	13C8-PFOSA	915898	2500	Avg	0.96599			2499.53	2499.53	Yes	2500	100	100	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	411374	13C2-PFDA	411601	1250	Avg	0.890868			1402.35	1402.35	Yes	1250	112	112.2	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4078778	13C4-PFOS	601050	2500	Avg	0.665955			25475	25475.02	Yes	25000	102	101.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4231896	D7-NMeFOSE	4078778	25000	Avg	1.019907			25432	25432.22	Yes	25000	102	101.7	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	235408	13C4-PFOS	601050	2500	Avg	0.421972			2320.42	2320.42	Yes	2500	93	92.8	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4496426	13C4-PFOS	601050	2500	Avg	0.756241			24731	24730.71	Yes	25000	99	98.9	Yes
081924103.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	260156	13C4-PFOS	601050	2500	Avg	0.448486			2412.76	2412.76	Yes	2500	97	96.5	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2919174	13C3-PFBA	1279319	5000	Avg	1.133865			10062	10062.13	Yes	10000	101	100.6	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2452609	13C4-PFBA	2919174	10000	Avg	0.85141			9868.01	9868.01	Yes	10000	99	98.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1183801	13C2-PFHxA	725871	2500	Avg	0.801471			5087.11	5087.11	Yes	5000	102	101.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1065876	13C5-PFPeA	1183801	5000	Avg	0.913924			4925.93	4925.93	Yes	5000	99	98.5	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	142661	18O2-PFHxS	389212	2500	Avg	0.189605			4832.91	4832.92	Yes	5000	97	96.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	535688	13C2-4:2FTS	142661	5000	Avg	1.821802			10306	10305.65	Yes	9375	110	109.9	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	783010	13C2-PFHxA	725871	2500	Avg	1.08809			2478.47	2478.47	Yes	2500	99	99.1	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	697778	13C5-PFHxA	783010	2500	Avg	0.896378			2485.41	2485.41	Yes	2500	99	99.4	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3259672	13C5-PFHxA	783010	2500	Avg	0.165672			62820	62819.94	Yes	62500	101	100.5	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	528290	18O2-PFHxS	389212	2500	Avg	1.30288			2604.48	2604.48	Yes	2500	104	104.2	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	569633	13C3-PFBS	528290	2500	Avg	1.208343			2230.86	2230.86	Yes	2218	101	100.6	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	599195	13C2-PFHxA	725871	2500	Avg	0.196665			10494	10493.53	Yes	10000	105	104.9	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	821120	13C2-PFHxA	725871	2500	Avg	1.160285			2437.38	2437.38	Yes	2500	97	97.5	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	876723	13C4-PFHpA	821120	2500	Avg	1.019994			2616.97	2616.97	Yes	2500	105	104.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	167794	18O2-PFHxS	389212	2500	Avg	0.208405			5171.57	5171.57	Yes	5000	103	103.4	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	645540	13C2-6:2FTS	167794	5000	Avg	1.837836			10467	10466.7	Yes	9500	110	110.2	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	912725	13C4-PFOA	150969	2500	Avg	6.826009			2214.24	2214.24	Yes	2500	89	88.6	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	826642	13C8-PFOA	912725	2500	Avg	0.882262			2566.38	2566.37	Yes	2500	103	102.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	479414	18O2-PFHxS	389212	2500	Avg	1.165116			2642.99	2642.99	Yes	2500	106	105.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	526274	13C3-PFHxS	479414	2500	Avg	1.154897			2376.28	2376.28	Yes	2353	101	101	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	460982	13C3-PFHxS	479414	2500	Avg	1.142081			2104.83	2104.83	Yes	2285	92	92.1	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	470563	13C5-PFNA	527348	1250	Avg	0.9905			1126.1	1126.1	Yes	1250	90	90.1	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	769916	13C9-PFNA	470563	1250	Avg	0.792037			2582.2	2582.2	Yes	2500	103	103.3	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	140595	18O2-PFHxS	389212	2500	Avg	0.190493			4740.72	4740.72	Yes	5000	95	94.8	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	520902	13C2-8:2FTS	140595	5000	Avg	1.879444			9856.59	9856.59	Yes	9600	103	102.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	523027	13C4-PFOS	556760	2500	Avg	0.485385			4838.49	4838.49	Yes	5000	97	96.8	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	216793	D3-NMeFOSAA	523027	5000	Avg	0.841107			2464	2464	Yes	2500	99	98.6	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	468383	13C2-PFDA	409885	1250	Avg	1.111006			1285.68	1285.68	Yes	1250	103	102.9	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	763678	13C6-PFDA	468383	1250	Avg	0.879258			2317.94	2317.94	Yes	2500	93	92.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	389257	13C4-PFOS	556760	2500	Avg	0.417912			4182.38	4182.38	Yes	5000	84	83.6	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	216210	D5-NEtFOSAA	389257	5000	Avg	1.061343			2616.7	2616.7	Yes	2500	105	104.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	534531	13C4-PFOS	556760	2500	Avg	1.019176			2355.03	2355.03	Yes	2500	94	94.2	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	458014	13C8-PFOS	534531	2500	Avg	0.936113			2288.32	2288.32	Yes	2383	96	96	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	510500	13C8-PFOS	534531	2500	Avg	1.011018			2361.59	2361.59	Yes	2320	102	101.8	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	574835	13C8-PFOS	534531	2500	Avg	1.078285			2493.31	2493.31	Yes	2405	104	103.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	408707	13C2-PFDA	409885	1250	Avg	0.978463			1273.84	1273.84	Yes	1250	102	101.9	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	780867	13C7-PFUnA	408707	1250	Avg	0.906176			2635.5	2635.5	Yes	2500	105	105.4	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	367700	13C2-PFDA	409885	1250	Avg	0.947371			1183.65	1183.65	Yes	1250	95	94.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	893172	13C4-PFOS	556760	2500	Avg	1.639711			2445.91	2445.91	Yes	2500	98	97.8	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	843184	13C8-PFOSA	893172	2500	Avg	0.96599			2443.17	2443.18	Yes	2500	98	97.7	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	361972	13C2-PFDA	409885	1250	Avg	0.890868			1239.11	1239.11	Yes	1250	99	99.1	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3728948	13C4-PFOS	556760	2500	Avg	0.665955			25143	25142.79	Yes	25000	101	100.6	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3746770	D7-NMeFOSE	3728948	25000	Avg	1.019907			24629	24629.19	Yes	25000	99	98.5	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	215951	13C4-PFOS	556760	2500	Avg	0.421972			2297.97	2297.97	Yes	2500	92	91.9	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4175302	13C4-PFOS	556760	2500	Avg	0.756241			24791	24791.32	Yes	25000	99	99.2	Yes
081924118.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	234711	13C4-PFOS	556760	2500	Avg	0.448486			2349.94	2349.94	Yes	2500	94	94	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2982163	13C3-PFBA	1325331	5000	Avg	1.130641			9950.67	9950.67	Yes	10000	100	99.5	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1155477	13C2-PFHxA	742441	2500	Avg	0.8402			4630.81	4630.81	Yes	5000	93	92.6	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	164860	18O2-PFHxS	432035	2500	Avg	0.200536			4757.12	4757.12	Yes	5000	95	95.1	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	780157	13C2-PFHxA	742441	2500	Avg	1.104288			2378.91	2378.91	Yes	2500	95	95.2	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	567182	18O2-PFHxS	432035	2500	Avg	1.299121			2526.35	2526.35	Yes	2500	101	101.1	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	582019	13C2-PFHxA	742441	2500	Avg	0.205187			9551.36	9551.36	Yes	10000	96	95.5	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	839889	13C2-PFHxA	742441	2500	Avg	1.198314			2360.09	2360.09	Yes	2500	94	94.4	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	181059	18O2-PFHxS	432035	2500	Avg	0.236825			4423.99	4423.99	Yes	5000	88	88.5	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1010749	13C4-PFOA	156204	2500	Avg	6.698736			2414.9	2414.9	Yes	2500	97	96.6	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	519293	18O2-PFHxS	432035	2500	Avg	1.157763			2595.46	2595.46	Yes	2500	104	103.8	Yes
080924038.d	CCB A3	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2852	13C3-PFHxS	519293	2500	Avg	1.144236	0.01	11.999	0.11999	0.12	Yes				
080924038.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	474775	13C5-PFNA	517401	1250	Avg	0.988588			1160.26	1160.26	Yes	1250	93	92.8	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	176920	18O2-PFHxS	432035	2500	Avg	0.213625			4792.33	4792.32	Yes	5000	96	95.8	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	578517	13C4-PFOS	566569	2500	Avg	0.548279			4655.88	4655.88	Yes	5000	93	93.1	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	495813	13C2-PFDA	418351	1250	Avg	1.165674			1270.9	1270.9	Yes	1250	102	101.7	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	400975	13C4-PFOS	566569	2500	Avg	0.420694			4205.69	4205.7	Yes	5000	84	84.1	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	530619	13C4-PFOS	566569	2500	Avg	1.004997			2329.73	2329.73	Yes	2500	93	93.2	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	423517	13C2-PFDA	418351	1250	Avg	1.107859			1142.24	1142.24	Yes	1250	91	91.4	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
080924038.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	402528	13C2-PFDA	418351	1250	Avg	1.018582			1180.78	1180.78	Yes	1250	94	94.5	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	868046	13C4-PFOS	566569	2500	Avg	1.722863			2223.2	2223.2	Yes	2500	89	88.9	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	350591	13C2-PFDA	418351	1250	Avg	0.914538			1145.43	1145.43	Yes	1250	92	91.6	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3670908	13C4-PFOS	566569	2500	Avg	0.727301			22271	22271.35	Yes	25000	89	89.1	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	227106	13C4-PFOS	566569	2500	Avg	0.453376			2210.33	2210.33	Yes	2500	88	88.4	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4001399	13C4-PFOS	566569	2500	Avg	0.801502			22029	22028.98	Yes	25000	88	88.1	Yes
080924038.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	239301	13C4-PFOS	566569	2500	Avg	0.486842			2168.92	2168.92	Yes	2500	87	86.8	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3001410	13C3-PFBA	1358767	5000	Avg	1.130641			9768.45	9768.45	Yes	10000	98	97.7	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1169741	13C2-PFHxA	733146	2500	Avg	0.8402			4747.41	4747.41	Yes	5000	95	94.9	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	163826	18O2-PFHxS	424131	2500	Avg	0.200536			4815.38	4815.38	Yes	5000	96	96.3	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	770755	13C2-PFHxA	733146	2500	Avg	1.104288			2380.04	2380.04	Yes	2500	95	95.2	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	545268	18O2-PFHxS	424131	2500	Avg	1.299121			2474	2474	Yes	2500	99	99.0	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	591235	13C2-PFHxA	733146	2500	Avg	0.205187			9825.62	9825.62	Yes	10000	98	98.3	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	833886	13C2-PFHxA	733146	2500	Avg	1.198314			2372.93	2372.93	Yes	2500	95	94.9	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	196259	18O2-PFHxS	424131	2500	Avg	0.236825			4884.75	4884.75	Yes	5000	98	97.7	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	967568	13C4-PFOA	149888	2500	Avg	6.698736			2409.14	2409.14	Yes	2500	96	96.4	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	576927	18O2-PFHxS	424131	2500	Avg	1.157763			2937.25	2937.25	Yes	2500	117	117.5	Yes
080924055.d	CCB A4	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1641	13C3-PFHxS	576927	2500	Avg	1.144236	0.01	6.2146	0.06215	0.0621	Yes				
080924055.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	452578	13C5-PFNA	496711	1250	Avg	0.988588			1152.08	1152.08	Yes	1250	92	92.2	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	181312	18O2-PFHxS	424131	2500	Avg	0.213625			5002.82	5002.82	Yes	5000	100	100.1	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	554860	13C4-PFOS	535357	2500	Avg	0.548279			4725.83	4725.83	Yes	5000	95	94.5	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	480880	13C2-PFDA	409783	1250	Avg	1.165674			1258.39	1258.39	Yes	1250	101	100.7	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	443733	13C4-PFOS	535357	2500	Avg	0.420694			4925.51	4925.52	Yes	5000	99	98.5	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	565068	13C4-PFOS	535357	2500	Avg	1.004997			2625.62	2625.62	Yes	2500	105	105.0	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	421449	13C2-PFDA	409783	1250	Avg	1.107859			1160.42	1160.42	Yes	1250	93	92.8	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	374276	13C2-PFDA	409783	1250	Avg	1.018582			1120.86	1120.86	Yes	1250	90	89.7	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	883761	13C4-PFOS	535357	2500	Avg	1.722863			2395.41	2395.41	Yes	2500	96	95.8	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	360339	13C2-PFDA	409783	1250	Avg	0.914538			1201.89	1201.89	Yes	1250	96	96.2	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3729338	13C4-PFOS	535357	2500	Avg	0.727301			23945	23944.96	Yes	25000	96	95.8	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	221434	13C4-PFOS	535357	2500	Avg	0.453376			2280.77	2280.77	Yes	2500	91	91.2	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4026219	13C4-PFOS	535357	2500	Avg	0.801502			23458	23457.91	Yes	25000	94	93.8	Yes
080924055.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	236104	13C4-PFOS	535357	2500	Avg	0.486842			2264.71	2264.71	Yes	2500	91	90.6	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3089306	13C3-PFBA	1376237	5000	Avg	1.130641			9926.88	9926.88	Yes	10000	99	99.3	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1224022	13C2-PFHxA	755763	2500	Avg	0.8402			4819.04	4819.04	Yes	5000	96	96.4	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	162250	18O2-PFHxS	461763	2500	Avg	0.200536			4380.39	4380.39	Yes	5000	88	87.6	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	789914	13C2-PFHxA	755763	2500	Avg	1.104288			2366.2	2366.2	Yes	2500	95	94.6	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	536614	18O2-PFHxS	461763	2500	Avg	1.299121			2236.32	2236.32	Yes	2500	89	89.5	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	603998	13C2-PFHxA	755763	2500	Avg	0.205187			9737.33	9737.33	Yes	10000	97	97.4	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	902809	13C2-PFHxA	755763	2500	Avg	1.198314			2492.18	2492.18	Yes	2500	100	99.7	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	188768	18O2-PFHxS	461763	2500	Avg	0.236825			4315.41	4315.41	Yes	5000	86	86.3	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1016653	13C4-PFOA	149338	2500	Avg	6.698736			2540.68	2540.68	Yes	2500	102	101.6	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	501051	18O2-PFHxS	461763	2500	Avg	1.157763			2343.06	2343.06	Yes	2500	94	93.7	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	488826	13C5-PFNA	533506	1250	Avg	0.988588			1158.54	1158.54	Yes	1250	93	92.7	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	157228	18O2-PFHxS	461763	2500	Avg	0.213625			3984.73	3984.73	Yes	5000	80	79.7	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	563720	13C4-PFOS	590774	2500	Avg	0.548279			4350.91	4350.91	Yes	5000	87	87.0	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	446375	13C2-PFDA	425763	1250	Avg	1.165674			1124.25	1124.26	Yes	1250	90	89.9	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	434040	13C4-PFOS	590774	2500	Avg	0.420694			4365.98	4365.98	Yes	5000	87	87.3	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	550305	13C4-PFOS	590774	2500	Avg	1.004997			2317.17	2317.17	Yes	2500	93	92.7	Yes
080924069.d	CCB A5	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2577	13C8-PFOS	550305	2500	Avg	0.990455	0.01	11.82	0.1182	0.1182	Yes				
080924069.d	CCB A5	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	432606	13C2-PFDA	425763	1250	Avg	1.107859			1146.44	1146.44	Yes	1250	92	91.7	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	425786	13C2-PFDA	425763	1250	Avg	1.018582			1227.26	1227.26	Yes	1250	98	98.2	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	904904	13C4-PFOS	590774	2500	Avg	1.722863			2222.65	2222.65	Yes	2500	89	88.9	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	362253	13C2-PFDA	425763	1250	Avg	0.914538			1162.93	1162.93	Yes	1250	93	93.0	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3826623	13C4-PFOS	590774	2500	Avg	0.727301			22265	22264.87	Yes	25000	89	89.1	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	235343	13C4-PFOS	590774	2500	Avg	0.453376			2196.65	2196.65	Yes	2500	88	87.9	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4167605	13C4-PFOS	590774	2500	Avg	0.801502			22004	22003.95	Yes	25000	88	88.0	Yes
080924069.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	244962	13C4-PFOS	590774	2500	Avg	0.486842			2129.26	2129.26	Yes	2500	85	85.2	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3135909	13C3-PFBA	1333228	5000	Avg	1.130641			10402	10401.7	Yes	10000	104	104.0	Yes
081224040.d	CCB A2	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3787	13C4-PFBA	3135909	10000	Avg	0.834189	0.01	14.477	0.14477	0.1448	Yes				
081224040.d	CCB A2	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1273090	13C2-PFHxA	728474	2500	Avg	0.8402			5199.99	5199.99	Yes	5000	104	104.0	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	159125	18O2-PFHxS	411321	2500	Avg	0.200536			4822.86	4822.87	Yes	5000	96	96.5	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	810281	13C2-PFHxA	728474	2500	Avg	1.104288			2518.14	2518.14	Yes	2500	101	100.7	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	552742	18O2-PFHxS	411321	2500	Avg	1.299121			2586.02	2586.02	Yes	2500	103	103.4	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	614490	13C2-PFHxA	728474	2500	Avg	0.205187			10278	10277.58	Yes	10000	103	102.8	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	928225	13C2-PFHxA	728474	2500	Avg	1.198314			2658.33	2658.33	Yes	2500	106	106.3	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	179904	18O2-PFHxS	411321	2500	Avg	0.236825			4617.14	4617.13	Yes	5000	92	92.3	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	993566	13C4-PFOA	152464	2500	Avg	6.698736			2432.07	2432.07	Yes	2500	97	97.3	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	529600	18O2-PFHxS	411321	2500	Avg	1.157763			2780.27	2780.27	Yes	2500	111	111.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081224040.d	CCB A2	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	476961	13C5-PFNA	457437	1250	Avg	0.988588			1318.4	1318.4	Yes	1250	105	105.5	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	187002	18O2-PFHxS	411321	2500	Avg	0.213625			5320.52	5320.51	Yes	5000	106	106.4	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	515176	13C4-PFOS	508528	2500	Avg	0.548279			4619.33	4619.33	Yes	5000	92	92.4	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	461691	13C2-PFDA	383720	1250	Avg	1.165674			1290.24	1290.24	Yes	1250	13	103.2	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	422197	13C4-PFOS	508528	2500	Avg	0.420694			4933.71	4933.71	Yes	5000	99	98.7	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	522158	13C4-PFOS	508528	2500	Avg	1.004997			2554.24	2554.24	Yes	2500	102	102.2	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	444160	13C2-PFDA	383720	1250	Avg	1.107859			1306.02	1306.02	Yes	1250	104	104.5	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	393845	13C2-PFDA	383720	1250	Avg	1.018582			1259.58	1259.58	Yes	1250	101	100.8	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	904706	13C4-PFOS	508528	2500	Avg	1.722863			2581.56	2581.56	Yes	2500	103	103.3	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	351225	13C2-PFDA	383720	1250	Avg	0.914538			1251.06	1251.06	Yes	1250	100	100.1	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3790361	13C4-PFOS	508528	2500	Avg	0.727301			25621	25620.73	Yes	25000	102	102.5	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	230460	13C4-PFOS	508528	2500	Avg	0.453376			2498.97	2498.98	Yes	2500	100	100.0	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4190112	13C4-PFOS	508528	2500	Avg	0.801502			25701	25700.77	Yes	25000	103	102.8	Yes
081224040.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	246617	13C4-PFOS	508528	2500	Avg	0.486842			2490.35	2490.35	Yes	2500	100	99.6	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3210746	13C3-PFBA	1337030	5000	Avg	1.130641			10620	10619.65	Yes	10000	106	106.2	Yes
081224053.d	CCB A3	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	4285	13C4-PFBA	3210746	10000	Avg	0.834189	0.01	15.999	0.15999	0.16	Yes				
081224053.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1280430	13C2-PFHxA	720665	2500	Avg	0.8402			5286.64	5286.64	Yes	5000	106	105.7	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	162378	18O2-PFHxS	409070	2500	Avg	0.200536			4948.54	4948.54	Yes	5000	99	99.0	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	824755	13C2-PFHxA	720665	2500	Avg	1.104288			2590.89	2590.89	Yes	2500	104	103.6	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	560881	18O2-PFHxS	409070	2500	Avg	1.299121			2638.54	2638.54	Yes	2500	106	105.5	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	619332	13C2-PFHxA	720665	2500	Avg	0.205187			10471	10470.81	Yes	10000	105	104.7	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	954556	13C2-PFHxA	720665	2500	Avg	1.198314			2763.36	2763.36	Yes	2500	111	110.5	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	189719	18O2-PFHxS	409070	2500	Avg	0.236825			4895.83	4895.82	Yes	5000	98	97.9	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	995846	13C4-PFOA	144282	2500	Avg	6.698736			2575.89	2575.89	Yes	2500	103	103.0	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	508241	18O2-PFHxS	409070	2500	Avg	1.157763			2682.83	2682.83	Yes	2500	107	107.3	Yes
081224053.d	CCB A3	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2160	13C3-PFHxS	508241	2500	Avg	1.144236	0.01	9.2856	0.09286	0.0929	Yes				
081224053.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	534612	13C5-PFNA	533371	1250	Avg	0.988588			1267.37	1267.37	Yes	1250	101	101.4	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	168420	18O2-PFHxS	409070	2500	Avg	0.213625			4818.2	4818.19	Yes	5000	96	96.4	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	536117	13C4-PFOS	506734	2500	Avg	0.548279			4824.12	4824.12	Yes	5000	96	96.5	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	444988	13C2-PFDA	397369	1250	Avg	1.165674			1200.85	1200.85	Yes	1250	96	96.1	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	396036	13C4-PFOS	506734	2500	Avg	0.420694			4644.38	4644.39	Yes	5000	93	92.9	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	524557	13C4-PFOS	506734	2500	Avg	1.004997			2575.06	2575.06	Yes	2500	103	103.0	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	420458	13C2-PFDA	397369	1250	Avg	1.107859			1193.86	1193.86	Yes	1250	96	95.5	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	401309	13C2-PFDA	397369	1250	Avg	1.018582			1239.36	1239.36	Yes	1250	99	99.1	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	915955	13C4-PFOS	506734	2500	Avg	1.722863			2622.91	2622.91	Yes	2500	105	104.9	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	362379	13C2-PFDA	397369	1250	Avg	0.914538			1246.46	1246.46	Yes	1250	100	99.7	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3847963	13C4-PFOS	506734	2500	Avg	0.727301			26102	26102.17	Yes	25000	104	104.4	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	231486	13C4-PFOS	506734	2500	Avg	0.453376			2518.99	2518.99	Yes	2500	101	100.8	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4213256	13C4-PFOS	506734	2500	Avg	0.801502			25934	25934.22	Yes	25000	104	103.7	Yes
081224053.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	246508	13C4-PFOS	506734	2500	Avg	0.486842			2498.06	2498.06	Yes	2500	100	99.9	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2206995	13C3-PFBA	979494	5000	Avg	1.133865			9935.92	9935.92	Yes	10000	99	99.4	Yes
081924104.d	CCB A6	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2459	13C4-PFBA	2206995	10000	Avg	0.85141	0.01	13.086	0.13086	0.1309	Yes				
081924104.d	CCB A6	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	930793	13C2-PFHxA	567223	2500	Avg	0.801471			5118.6	5118.6	Yes	5000	102	102.4	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	125513	18O2-PFHxS	333019	2500	Avg	0.189605			4969.46	4969.47	Yes	5000	99	99.4	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	607548	13C2-PFHxA	567223	2500	Avg	1.08809			2460.94	2460.95	Yes	2500	98	98.4	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	414745	18O2-PFHxS	333019	2500	Avg	1.30288			2389.72	2389.72	Yes	2500	96	95.6	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	442725	13C2-PFHxA	567223	2500	Avg	0.196665			9921.84	9921.86	Yes	10000	99	99.2	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	661194	13C2-PFHxA	567223	2500	Avg	1.160285			2511.6	2511.6	Yes	2500	100	100.5	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	124020	18O2-PFHxS	333019	2500	Avg	0.208405			4467.4	4467.4	Yes	5000	89	89.3	Yes
081924104.d	CCB A6	Instrument_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1939	13C2-6:2FTS	124020	5000	Avg	1.837836	0.01	42.535	0.42535	0.4254	Yes				
081924104.d	CCB A6	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	751294	13C4-PFOA	123883	2500	Avg	6.826009			2221.12	2221.12	Yes	2500	89	88.8	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	407301	18O2-PFHxS	333019	2500	Avg	1.165116			2624.32	2624.32	Yes	2500	105	105.0	Yes
081924104.d	CCB A6	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	5297	13C3-PFHxS	407301	2500	Avg	1.142081	0.01	28.468	0.28468	0.2847	Yes				
081924104.d	CCB A6	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	377290	13C5-PFNA	386163	1250	Avg	0.9905			1232.99	1232.99	Yes	1250	99	98.6	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	131180	18O2-PFHxS	333019	2500	Avg	0.190493			5169.62	5169.63	Yes	5000	103	103.4	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	403336	13C4-PFOS	458115	2500	Avg	0.485385			4534.68	4534.67	Yes	5000	91	90.7	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	334870	13C2-PFDA	319158	1250	Avg	1.111006			1180.5	1180.49	Yes	1250	94	94.4	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	341894	13C4-PFOS	458115	2500	Avg	0.417912			4464.49	4464.49	Yes	5000	89	89.3	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	409513	13C4-PFOS	458115	2500	Avg	1.019176			2192.72	2192.72	Yes	2500	88	87.7	Yes
081924104.d	CCB A6	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	8593	13C8-PFOS	409513	2500	Avg	1.011018	0.01	51.887	0.51887	0.5189	Yes				
081924104.d	CCB A6	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	313892	13C2-PFDA	319158	1250	Avg	0.978463			1256.44	1256.44	Yes	1250	101	100.5	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	305773	13C2-PFDA	319158	1250	Avg	0.947371			1264.11	1264.11	Yes	1250	101	101.1	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	708680	13C4-PFOS	458115	2500	Avg	1.639711			2358.57	2358.57	Yes	2500	94	94.3	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	302666	13C2-PFDA	319158	1250	Avg	0.890868			1330.62	1330.62	Yes	1250	106	106.4	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2967770	13C4-PFOS	458115	2500	Avg	0.665955			24319	24319.29	Yes	25000	97	97.3	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	174693	13C4-PFOS	458115	2500	Avg	0.421972			2259.22	2259.21	Yes	2500	90	90.4	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3327365	13C4-PFOS	458115	2500	Avg	0.756241			24011	24010.75	Yes	25000	96	96.0	Yes
081924104.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	186099	13C4-PFOS	458115	2500	Avg	0.448486			2264.44	2264.44	Yes	2500	91	90.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081924119.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2223622	13C3-PFBA	1009914	5000	Avg	1.133865			9709.24	9709.24	Yes	10000	97	97.1	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	907973	13C2-PFHxA	565809	2500	Avg	0.801471			5005.59	5005.59	Yes	5000	100	100.1	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	116071	18O2-PFHxS	328862	2500	Avg	0.189605			4653.71	4653.72	Yes	5000	93	93.1	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	601272	13C2-PFHxA	565809	2500	Avg	1.08809			2441.61	2441.61	Yes	2500	98	97.7	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	396387	18O2-PFHxS	328862	2500	Avg	1.30288			2312.82	2312.82	Yes	2500	93	92.5	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	440391	13C2-PFHxA	565809	2500	Avg	0.196665			9894.2	9894.22	Yes	10000	99	98.9	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	666212	13C2-PFHxA	565809	2500	Avg	1.160285			2536.99	2536.99	Yes	2500	101	101.5	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	131637	18O2-PFHxS	328862	2500	Avg	0.208405			4801.72	4801.71	Yes	5000	96	96.0	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	695723	13C4-PFOA	116118	2500	Avg	6.826009			2194.37	2194.37	Yes	2500	88	87.8	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	403714	18O2-PFHxS	328862	2500	Avg	1.165116			2634.09	2634.09	Yes	2500	105	105.4	Yes
081924119.d	CCB A7	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	5794	13C3-PFHxS	403714	2500	Avg	1.142081	0.01	31.416	0.31416	0.3142	Yes				
081924119.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	409047	13C5-PFNA	389309	1250	Avg	0.9905			1325.97	1325.97	Yes	1250	106	106.1	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	126200	18O2-PFHxS	328862	2500	Avg	0.190493			5036.24	5036.24	Yes	5000	101	100.7	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	405865	13C4-PFOS	450033	2500	Avg	0.485385			4645.06	4645.06	Yes	5000	93	92.9	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	358320	13C2-PFDA	318830	1250	Avg	1.111006			1264.46	1264.46	Yes	1250	101	101.2	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	314607	13C4-PFOS	450033	2500	Avg	0.417912			4181.95	4181.95	Yes	5000	84	83.6	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	453605	13C4-PFOS	450033	2500	Avg	1.019176			2472.43	2472.43	Yes	2500	99	98.9	Yes
081924119.d	CCB A7	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	6110	13C8-PFOS	453605	2500	Avg	1.011018	0.01	33.308	0.33308	0.3331	Yes				
081924119.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	336235	13C2-PFDA	318830	1250	Avg	0.978463			1347.25	1347.25	Yes	1250	108	107.8	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	300356	13C2-PFDA	318830	1250	Avg	0.947371			1242.99	1242.99	Yes	1250	99	99.4	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	700894	13C4-PFOS	450033	2500	Avg	1.639711			2374.55	2374.55	Yes	2500	95	95.0	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	283824	13C2-PFDA	318830	1250	Avg	0.890868			1249.07	1249.07	Yes	1250	100	99.9	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2950808	13C4-PFOS	450033	2500	Avg	0.665955			24615	24614.54	Yes	25000	98	98.5	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	168597	13C4-PFOS	450033	2500	Avg	0.421972			2219.54	2219.53	Yes	2500	89	88.8	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3320820	13C4-PFOS	450033	2500	Avg	0.756241			24394	24393.87	Yes	25000	98	97.6	Yes
081924119.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	181788	13C4-PFOS	450033	2500	Avg	0.448486			2251.71	2251.71	Yes	2500	90	90.1	Yes

Key

	from quantitation report
	from reported calibration
	from lab report/EDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
ND	not detected
ng/L	nanograms per liter
RF	response factor

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3072639	13C3-PFBA	1368815	5000	Avg	1.130641			9926.86	9926.86	Yes	10000	99	99.3	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2624865	13C4-PFBA	3072639	10000	Avg	0.834189			10241	10240.73	Yes	10000	102	102.4	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1238376	13C2-PFHxA	756678	2500	Avg	0.8402			4869.66	4869.66	Yes	5000	97	97.4	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1152195	13C5-PFPeA	1238376	5000	Avg	0.917127			5072.41	5072.41	Yes	5000	101	101.4	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	162840	18O2-PFHxS	445631	2500	Avg	0.200536			4555.47	4555.47	Yes	5000	91	91.1	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	579566	13C2-4:2FTS	162840	5000	Avg	1.822044			9766.82	9766.81	Yes	9375	104	104.2	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	828781	13C2-PFHxA	756678	2500	Avg	1.104288			2479.63	2479.63	Yes	2500	99	99.2	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	739822	13C5-PFHxA	828781	2500	Avg	0.89827			2484.39	2484.39	Yes	2500	99	99.4	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3644599	13C5-PFHxA	828781	2500	Avg	0.169304			64935	64935.58	Yes	62500	104	103.9	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	546709	18O2-PFHxS	445631	2500	Avg	1.299121			2360.87	2360.87	Yes	2500	94	94.4	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	571481	13C3-PFBS	546709	2500	Avg	1.180999			2212.77	2212.77	Yes	2218	100	99.8	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	622570	13C2-PFHxA	756678	2500	Avg	0.205187			10025	10024.6	Yes	10000	100	100.2	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	918425	13C2-PFHxA	756678	2500	Avg	1.198314			2532.22	2532.22	Yes	2500	101	101.3	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1008327	13C4-PFHpA	918425	2500	Avg	1.029691			2665.57	2665.57	Yes	2500	107	106.6	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	196292	18O2-PFHxS	445631	2500	Avg	0.236825			4649.86	4649.86	Yes	5000	93	93	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	685557	13C2-6:2FTS	196292	5000	Avg	1.74466			10009	10009.22	Yes	9500	105	105.4	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	937123	13C4-PFOA	158396	2500	Avg	6.698736			2208	2208	Yes	2500	88	88.3	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	914953	13C8-PFOA	937123	2500	Avg	0.927161			2632.61	2632.61	Yes	2500	105	105.3	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	578825	18O2-PFHxS	445631	2500	Avg	1.157763			2804.74	2804.74	Yes	2500	112	112.2	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	582886	13C3-PFHxS	578825	2500	Avg	1.151629			2186.07	2186.07	Yes	2353	93	92.9	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	553204	13C3-PFHxS	578825	2500	Avg	1.144236			2088.15	2088.15	Yes	2285	91	91.4	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	496038	13C5-PFNA	523456	1250	Avg	0.988588			1198.2	1198.2	Yes	1250	96	95.9	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	882356	13C9-PFNA	496038	1250	Avg	0.849909			2616.17	2616.17	Yes	2500	105	104.6	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	174210	18O2-PFHxS	445631	2500	Avg	0.213625			4574.95	4574.94	Yes	5000	91	91.5	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	589000	13C2-8:2FTS	174210	5000	Avg	1.68797			10015	10014.92	Yes	9600	104	104.3	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	554691	13C4-PFOS	539197	2500	Avg	0.548279			4690.75	4690.75	Yes	5000	94	93.8	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	239950	D3-NMeFOSAA	554691	5000	Avg	0.798372			2709.16	2709.16	Yes	2500	108	108.4	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	472982	13C2-PFDA	422872	1250	Avg	1.165674			1199.41	1199.41	Yes	1250	96	96	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	835110	13C6-PFDA	472982	1250	Avg	0.867931			2542.87	2542.87	Yes	2500	102	101.7	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	456046	13C4-PFOS	539197	2500	Avg	0.420694			5026.14	5026.14	Yes	5000	101	100.5	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	224690	D5-NEtFOSAA	456046	5000	Avg	1.036789			2376.04	2376.05	Yes	2500	95	95	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	599455	13C4-PFOS	539197	2500	Avg	1.004997			2765.57	2765.57	Yes	2500	111	110.6	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	491013	13C8-PFOS	599455	2500	Avg	0.954873			2144.52	2144.52	Yes	2383	90	90	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	505635	13C8-PFOS	599455	2500	Avg	0.990455			2129.05	2129.05	Yes	2320	92	91.8	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	601554	13C8-PFOS	599455	2500	Avg	1.152095			2177.56	2177.56	Yes	2405	91	90.5	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	445379	13C2-PFDA	422872	1250	Avg	1.107859			1188.36	1188.36	Yes	1250	95	95.1	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	847130	13C7-PFUnA	445379	1250	Avg	0.9124			2605.82	2605.82	Yes	2500	104	104.2	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	414764	13C2-PFDA	422872	1250	Avg	1.018582			1203.67	1203.67	Yes	1250	96	96.3	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	965357	13C4-PFOS	539197	2500	Avg	1.722863			2597.94	2597.94	Yes	2500	104	103.9	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	936355	13C8-PFOSA	965357	2500	Avg	0.978797			2477.42	2477.42	Yes	2500	99	99.1	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	373987	13C2-PFDA	422872	1250	Avg	0.914538			1208.8	1208.8	Yes	1250	97	96.7	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4048526	13C4-PFOS	539197	2500	Avg	0.727301			25809	25809.24	Yes	25000	103	103.2	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4159240	D7-NMeFOSE	4048526	25000	Avg	1.00959			25440	25439.7	Yes	25000	102	101.8	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	238298	13C4-PFOS	539197	2500	Avg	0.453376			2436.99	2436.99	Yes	2500	97	97.5	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4378991	13C4-PFOS	539197	2500	Avg	0.801502			25332	25331.56	Yes	25000	101	101.3	Yes
081324105.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	254462	13C4-PFOS	539197	2500	Avg	0.486842			2423.41	2423.41	Yes	2500	97	96.9	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2862499	13C3-PFBA	1247361	5000	Avg	1.130641			10148	10148.42	Yes	10000	101	101.5	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2464070	13C4-PFBA	2862499	10000	Avg	0.834189			10319	10319.13	Yes	10000	103	103.2	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1189152	13C2-PFHxA	692468	2500	Avg	0.8402			5109.69	5109.7	Yes	5000	102	102.2	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1110557	13C5-PFPeA	1189152	5000	Avg	0.917127			5091.48	5091.48	Yes	5000	102	101.8	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	153815	18O2-PFHxS	439661	2500	Avg	0.200536			4361.42	4361.42	Yes	5000	87	87.2	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	547609	13C2-4:2FTS	153815	5000	Avg	1.822044			9769.74	9769.74	Yes	9375	104	104.2	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	777828	13C2-PFHxA	692468	2500	Avg	1.104288			2542.97	2542.97	Yes	2500	102	101.7	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	664563	13C5-PFHxA	777828	2500	Avg	0.89827			2377.86	2377.86	Yes	2500	95	95.1	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3314212	13C5-PFHxA	777828	2500	Avg	0.169304			62917	62917.22	Yes	62500	101	100.7	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	546737	18O2-PFHxS	439661	2500	Avg	1.299121			2393.05	2393.05	Yes	2500	96	95.7	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	552373	13C3-PFBS	546737	2500	Avg	1.180999			2138.67	2138.67	Yes	2218	96	96.4	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	565845	13C2-PFHxA	692468	2500	Avg	0.205187			9956.07	9956.07	Yes	10000	100	99.6	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	814897	13C2-PFHxA	692468	2500	Avg	1.198314			2455.12	2455.12	Yes	2500	98	98.2	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	880531	13C4-PFHpA	814897	2500	Avg	1.029691			2623.46	2623.46	Yes	2500	105	104.9	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	180883	18O2-PFHxS	439661	2500	Avg	0.236825			4343.03	4343.02	Yes	5000	87	86.9	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	634001	13C2-6:2FTS	180883	5000	Avg	1.74466			10045	10045.03	Yes	9500	106	105.7	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	995449	13C4-PFOA	156789	2500	Avg	6.698736			2369.47	2369.47	Yes	2500	95	94.8	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	791846	13C8-PFOA	995449	2500	Avg	0.927161			2144.9	2144.9	Yes	2500	86	85.8	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	490512	18O2-PFHxS	439661	2500	Avg	1.157763			2409.08	2409.08	Yes	2500	96	96.4	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	568658	13C3-PFHxS	490512	2500	Avg	1.151629			2516.69	2516.69	Yes	2353	107	107	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	542405	13C3-PFHxS	490512	2500	Avg	1.144236			2416.01	2416.01	Yes	2285	106	105.7	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	484466	13C5-PFNA	509473	1250	Avg	0.988588			1202.37	1202.37	Yes	1250	96	96.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	814295	13C9-PFNA	484466	1250	Avg	0.849909			2472.04	2472.04	Yes	2500	99	98.9	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	178885	18O2-PFHxS	439661	2500	Avg	0.213625			4761.51	4761.5	Yes	5000	95	95.2	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	635096	13C2-8:2FTS	178885	5000	Avg	1.68797			10516	10516.49	Yes	9600	110	109.5	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	536959	13C4-PFOS	516373	2500	Avg	0.548279			4741.5	4741.5	Yes	5000	95	94.8	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	227358	D3-NMeFOSAA	536959	5000	Avg	0.798372			2651.76	2651.76	Yes	2500	106	106.1	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	424852	13C2-PFDA	388503	1250	Avg	1.165674			1172.67	1172.67	Yes	1250	94	93.8	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	728466	13C6-PFDA	424852	1250	Avg	0.867931			2469.43	2469.43	Yes	2500	99	98.8	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	421744	13C4-PFOS	516373	2500	Avg	0.420694			4853.54	4853.55	Yes	5000	97	97.1	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	228782	D5-NEtFOSAA	421744	5000	Avg	1.036789			2616.09	2616.09	Yes	2500	105	104.6	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	535960	13C4-PFOS	516373	2500	Avg	1.004997			2581.93	2581.93	Yes	2500	103	103.3	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	490403	13C8-PFOS	535960	2500	Avg	0.954873			2395.6	2395.6	Yes	2383	101	100.5	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	525360	13C8-PFOS	535960	2500	Avg	0.990455			2474.17	2474.17	Yes	2320	107	106.6	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	597936	13C8-PFOS	535960	2500	Avg	1.152095			2420.88	2420.88	Yes	2405	101	100.7	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	411240	13C2-PFDA	388503	1250	Avg	1.107859			1194.34	1194.34	Yes	1250	96	95.5	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	814033	13C7-PFUnA	411240	1250	Avg	0.9124			2711.88	2711.89	Yes	2500	108	108.5	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	390536	13C2-PFDA	388503	1250	Avg	1.018582			1233.62	1233.62	Yes	1250	99	98.7	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	882931	13C4-PFOS	516373	2500	Avg	1.722863			2481.15	2481.15	Yes	2500	99	99.2	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	847313	13C8-PFOSA	882931	2500	Avg	0.978797			2451.12	2451.12	Yes	2500	98	98	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	354523	13C2-PFDA	388503	1250	Avg	0.914538			1247.26	1247.26	Yes	1250	100	99.8	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3750733	13C4-PFOS	516373	2500	Avg	0.727301			24968	24967.69	Yes	25000	100	99.9	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3849500	D7-NMeFOSE	3750733	25000	Avg	1.00959			25415	25414.59	Yes	25000	102	101.7	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	232467	13C4-PFOS	516373	2500	Avg	0.453376			2482.44	2482.44	Yes	2500	99	99.3	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4073299	13C4-PFOS	516373	2500	Avg	0.801502			24605	24604.71	Yes	25000	98	98.4	Yes
081324124.d	CCV L5H_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	243679	13C4-PFOS	516373	2500	Avg	0.486842			2423.3	2423.3	Yes	2500	97	96.9	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2959061	13C3-PFBA	1287449	5000	Avg	1.130641			10164	10164.11	Yes	10000	102	101.6	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2528709	13C4-PFBA	2959061	10000	Avg	0.834189			10244	10244.26	Yes	10000	102	102.4	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1222031	13C2-PFHxA	720442	2500	Avg	0.8402			5047.08	5047.08	Yes	5000	101	100.9	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1098957	13C5-PFPeA	1222031	5000	Avg	0.917127			4902.74	4902.74	Yes	5000	98	98.1	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	161379	18O2-PFHxS	449337	2500	Avg	0.200536			4477.36	4477.36	Yes	5000	90	89.5	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	555772	13C2-4:2FTS	161379	5000	Avg	1.822044			9450.63	9450.63	Yes	9375	101	100.8	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	759523	13C2-PFHxA	720442	2500	Avg	1.104288			2386.71	2386.71	Yes	2500	95	95.5	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	711085	13C5-PFHxA	759523	2500	Avg	0.89827			2605.63	2605.64	Yes	2500	104	104.2	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3377241	13C5-PFHxA	759523	2500	Avg	0.169304			65659	65658.95	Yes	62500	105	105.1	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	525102	18O2-PFHxS	449337	2500	Avg	1.299121			2248.86	2248.86	Yes	2500	90	90	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	580314	13C3-PFBS	525102	2500	Avg	1.180999			2339.43	2339.43	Yes	2218	105	105.5	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	578422	13C2-PFHxA	720442	2500	Avg	0.205187			9782.19	9782.19	Yes	10000	98	97.8	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	885206	13C2-PFHxA	720442	2500	Avg	1.198314			2563.39	2563.39	Yes	2500	103	102.5	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	915663	13C4-PFHpA	885206	2500	Avg	1.029691			2511.45	2511.45	Yes	2500	100	100.5	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	188971	18O2-PFHxS	449337	2500	Avg	0.236825			4439.52	4439.51	Yes	5000	89	88.8	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	668616	13C2-6:2FTS	188971	5000	Avg	1.74466			10140	10140.07	Yes	9500	107	106.7	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	984011	13C4-PFOA	158689	2500	Avg	6.698736			2314.2	2314.2	Yes	2500	93	92.6	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	817351	13C8-PFOA	984011	2500	Avg	0.927161			2239.72	2239.72	Yes	2500	90	89.6	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	504693	18O2-PFHxS	449337	2500	Avg	1.157763			2425.36	2425.36	Yes	2500	97	97	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	569762	13C3-PFHxS	504693	2500	Avg	1.151629			2450.72	2450.72	Yes	2353	104	104.2	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	541457	13C3-PFHxS	504693	2500	Avg	1.144236			2344.02	2344.02	Yes	2285	103	102.6	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	497710	13C5-PFNA	505359	1250	Avg	0.988588			1245.29	1245.29	Yes	1250	100	99.6	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	826947	13C9-PFNA	497710	1250	Avg	0.849909			2443.65	2443.65	Yes	2500	98	97.7	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	178261	18O2-PFHxS	449337	2500	Avg	0.213625			4642.72	4642.72	Yes	5000	93	92.9	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	598146	13C2-8:2FTS	178261	5000	Avg	1.68797			9939.31	9939.31	Yes	9600	104	103.5	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	561556	13C4-PFOS	533247	2500	Avg	0.548279			4801.79	4801.79	Yes	5000	96	96	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	231938	D3-NMeFOSAA	561556	5000	Avg	0.798372			2586.69	2586.68	Yes	2500	103	103.5	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	477030	13C2-PFDA	416112	1250	Avg	1.165674			1229.33	1229.33	Yes	1250	98	98.3	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	763731	13C6-PFDA	477030	1250	Avg	0.867931			2305.79	2305.79	Yes	2500	92	92.2	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	410387	13C4-PFOS	533247	2500	Avg	0.420694			4573.39	4573.4	Yes	5000	91	91.5	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	223681	D5-NEtFOSAA	410387	5000	Avg	1.036789			2628.54	2628.54	Yes	2500	105	105.1	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	552868	13C4-PFOS	533247	2500	Avg	1.004997			2579.1	2579.1	Yes	2500	103	103.2	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	481864	13C8-PFOS	552868	2500	Avg	0.954873			2281.9	2281.9	Yes	2383	96	95.8	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	516010	13C8-PFOS	552868	2500	Avg	0.990455			2355.82	2355.82	Yes	2320	102	101.5	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	593401	13C8-PFOS	552868	2500	Avg	1.152095			2329.05	2329.05	Yes	2405	97	96.8	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	424039	13C2-PFDA	416112	1250	Avg	1.107859			1149.8	1149.8	Yes	1250	92	92	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	846001	13C7-PFUnA	424039	1250	Avg	0.9124			2733.31	2733.32	Yes	2500	109	109.3	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	410472	13C2-PFDA	416112	1250	Avg	1.018582			1210.56	1210.56	Yes	1250	97	96.8	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	872416	13C4-PFOS	533247	2500	Avg	1.722863			2374.02	2374.02	Yes	2500	95	95	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	893464	13C8-PFOSA	872416	2500	Avg	0.978797			2615.78	2615.78	Yes	2500	105	104.6	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	370396	13C2-PFDA	416112	1250	Avg	0.914538			1216.65	1216.65	Yes	1250	97	97.3	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3732565	13C4-PFOS	533247	2500	Avg	0.727301			24060	24060.51	Yes	25000	96	96.2	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3881731	D7-NMeFOSE	3732565	25000	Avg	1.00959			25752	25752.12	Yes	25000	103	103	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	224135	13C4-PFOS	533247	2500	Avg	0.453376			2317.73	2317.73	Yes	2500	93	92.7	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4199269	13C4-PFOS	533247	2500	Avg	0.801502			24563	24562.96	Yes	25000	98	98.3	Yes
081324138.d	CCV L5I_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	243713	13C4-PFOS	533247	2500	Avg	0.486842			2346.94	2346.94	Yes	2500	94	93.9	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3051084	13C3-PFBA	1359138	5000	Avg	1.130641			9927.41	9927.41	Yes	10000	99	99.3	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2623025	13C4-PFBA	3051084	10000	Avg	0.834189			10306	10305.85	Yes	10000	103	103.1	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1263184	13C2-PFHxA	740930	2500	Avg	0.8402			5072.79	5072.79	Yes	5000	101	101.5	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1140545	13C5-PFPeA	1263184	5000	Avg	0.917127			4922.51	4922.51	Yes	5000	98	98.5	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	159880	18O2-PFHxS	426916	2500	Avg	0.200536			4668.73	4668.74	Yes	5000	93	93.4	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	585076	13C2-4:2FTS	159880	5000	Avg	1.822044			10042	10042.21	Yes	9375	107	107.1	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	783622	13C2-PFHxA	740930	2500	Avg	1.104288			2394.35	2394.35	Yes	2500	96	95.8	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	711104	13C5-PFHxA	783622	2500	Avg	0.89827			2525.57	2525.57	Yes	2500	101	101	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3629788	13C5-PFHxA	783622	2500	Avg	0.169304			68398	68398.63	Yes	62500	109	109.4	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	586071	18O2-PFHxS	426916	2500	Avg	1.299121			2641.79	2641.79	Yes	2500	106	105.7	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	578260	13C3-PFBS	586071	2500	Avg	1.180999			2088.64	2088.64	Yes	2218	94	94.2	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	589945	13C2-PFHxA	740930	2500	Avg	0.205187			9701.18	9701.18	Yes	10000	97	97	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	920077	13C2-PFHxA	740930	2500	Avg	1.198314			2590.7	2590.7	Yes	2500	104	103.6	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	936444	13C4-PFHpA	920077	2500	Avg	1.029691			2471.1	2471.1	Yes	2500	99	98.8	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	192872	18O2-PFHxS	426916	2500	Avg	0.236825			4769.14	4769.13	Yes	5000	95	95.4	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	721285	13C2-6:2FTS	192872	5000	Avg	1.74466			10718	10717.58	Yes	9500	113	112.8	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1073810	13C4-PFOA	152212	2500	Avg	6.698736			2632.85	2632.85	Yes	2500	105	105.3	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	895027	13C8-PFOA	1073810	2500	Avg	0.927161			2247.47	2247.47	Yes	2500	90	89.9	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	523098	18O2-PFHxS	426916	2500	Avg	1.157763			2645.82	2645.82	Yes	2500	106	105.8	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	612248	13C3-PFHxS	523098	2500	Avg	1.151629			2540.81	2540.81	Yes	2353	108	108	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	537449	13C3-PFHxS	523098	2500	Avg	1.144236			2244.8	2244.8	Yes	2285	98	98.2	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	492337	13C5-PFNA	482649	1250	Avg	0.988588			1289.81	1289.81	Yes	1250	103	103.2	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	853130	13C9-PFNA	492337	1250	Avg	0.849909			2548.53	2548.53	Yes	2500	102	101.9	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	180097	18O2-PFHxS	426916	2500	Avg	0.213625			4936.88	4936.87	Yes	5000	99	98.7	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	627040	13C2-8:2FTS	180097	5000	Avg	1.68797			10313	10313.21	Yes	9600	107	107.4	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	572410	13C4-PFOS	551037	2500	Avg	0.548279			4736.58	4736.58	Yes	5000	95	94.7	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	248503	D3-NMeFOSAA	572410	5000	Avg	0.798372			2718.88	2718.87	Yes	2500	109	108.8	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	496035	13C2-PFDA	412411	1250	Avg	1.165674			1289.78	1289.78	Yes	1250	103	103.2	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	805266	13C6-PFDA	496035	1250	Avg	0.867931			2338.04	2338.04	Yes	2500	94	93.5	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	427616	13C4-PFOS	551037	2500	Avg	0.420694			4611.54	4611.55	Yes	5000	92	92.2	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	230318	D5-NEtFOSAA	427616	5000	Avg	1.036789			2597.49	2597.49	Yes	2500	104	103.9	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	578427	13C4-PFOS	551037	2500	Avg	1.004997			2611.22	2611.22	Yes	2500	104	104.4	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	523077	13C8-PFOS	578427	2500	Avg	0.954873			2367.62	2367.62	Yes	2383	99	99.4	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	522223	13C8-PFOS	578427	2500	Avg	0.990455			2278.83	2278.83	Yes	2320	98	98.2	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	621253	13C8-PFOS	578427	2500	Avg	1.152095			2330.62	2330.62	Yes	2405	97	96.9	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	453400	13C2-PFDA	412411	1250	Avg	1.107859			1240.44	1240.44	Yes	1250	99	99.2	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	884840	13C7-PFUnA	453400	1250	Avg	0.9124			2673.67	2673.67	Yes	2500	107	106.9	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	405036	13C2-PFDA	412411	1250	Avg	1.018582			1205.25	1205.25	Yes	1250	96	96.4	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	920608	13C4-PFOS	551037	2500	Avg	1.722863			2424.28	2424.28	Yes	2500	97	97	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	886177	13C8-PFOSA	920608	2500	Avg	0.978797			2458.63	2458.63	Yes	2500	98	98.3	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	361366	13C2-PFDA	412411	1250	Avg	0.914538			1197.64	1197.64	Yes	1250	96	95.8	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3902007	13C4-PFOS	551037	2500	Avg	0.727301			24341	24340.7	Yes	25000	97	97.4	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4043990	D7-NMeFOSE	3902007	25000	Avg	1.00959			25664	25663.57	Yes	25000	103	102.7	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	246907	13C4-PFOS	551037	2500	Avg	0.453376			2470.78	2470.78	Yes	2500	99	98.8	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4267692	13C4-PFOS	551037	2500	Avg	0.801502			24157	24157.26	Yes	25000	97	96.6	Yes
081324146.d	CCV L5J_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	257883	13C4-PFOS	551037	2500	Avg	0.486842			2403.22	2403.22	Yes	2500	96	96.1	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2904887	13C3-PFBA	1285948	5000	Avg	1.133865			9961.26	9961.26	Yes	10000	100	99.6	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2429861	13C4-PFBA	2904887	10000	Avg	0.85141			9824.56	9824.57	Yes	10000	98	98.2	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1211155	13C2-PFHxA	752299	2500	Avg	0.801471			5021.82	5021.82	Yes	5000	100	100.4	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1091348	13C5-PFPeA	1211155	5000	Avg	0.913924			4929.73	4929.73	Yes	5000	99	98.6	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	161647	18O2-PFHxS	414627	2500	Avg	0.189605			5140.43	5140.44	Yes	5000	103	102.8	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	557202	13C2-4:2FTS	161647	5000	Avg	1.821802			9460.49	9460.49	Yes	9375	101	100.9	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	809547	13C2-PFHxA	752299	2500	Avg	1.08809			2472.45	2472.45	Yes	2500	99	98.9	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	728673	13C5-PFHxA	809547	2500	Avg	0.896378			2510.38	2510.38	Yes	2500	100	100.4	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3327377	13C5-PFHxA	809547	2500	Avg	0.165672			62023	62022.72	Yes	62500	99	99.2	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	544846	18O2-PFHxS	414627	2500	Avg	1.30288			2521.46	2521.46	Yes	2500	101	100.9	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	560288	13C3-PFBS	544846	2500	Avg	1.208343			2127.59	2127.59	Yes	2218	96	95.9	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	601180	13C2-PFHxA	752299	2500	Avg	0.196665			10158	10158.44	Yes	10000	102	101.6	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	879611	13C2-PFHxA	752299	2500	Avg	1.160285			2519.27	2519.27	Yes	2500	101	100.8	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	867872	13C4-PFHpA	879611	2500	Avg	1.019994			2418.28	2418.28	Yes	2500	97	96.7	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	183712	18O2-PFHxS	414627	2500	Avg	0.208405			5315.11	5315.1	Yes	5000	106	106.3	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	710868	13C2-6:2FTS	183712	5000	Avg	1.837836			10527	10527.24	Yes	9500	111	110.8	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	907194	13C4-PFOA	162778	2500	Avg	6.826009			2041.16	2041.16	Yes	2500	82	81.6	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	904273	13C8-PFOA	907194	2500	Avg	0.882262			2824.5	2824.5	Yes	2500	113	113	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	472699	18O2-PFHxS	414627	2500	Avg	1.165116			2446.23	2446.23	Yes	2500	98	97.8	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	573149	13C3-PFHxS	472699	2500	Avg	1.154897			2624.7	2624.7	Yes	2353	112	111.5	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	490275	13C3-PFHxS	472699	2500	Avg	1.142081			2270.38	2270.38	Yes	2285	99	99.4	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	500051	13C5-PFNA	508401	1250	Avg	0.9905			1241.26	1241.26	Yes	1250	99	99.3	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	842299	13C9-PFNA	500051	1250	Avg	0.792037			2658.38	2658.38	Yes	2500	106	106.3	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	168038	18O2-PFHxS	414627	2500	Avg	0.190493			5318.76	5318.77	Yes	5000	106	106.4	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	596617	13C2-8:2FTS	168038	5000	Avg	1.879444			9445.58	9445.58	Yes	9600	98	98.4	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	573396	13C4-PFOS	527043	2500	Avg	0.485385			5603.54	5603.54	Yes	5000	112	112.1	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	228751	D3-NMeFOSAA	573396	5000	Avg	0.841107			2371.52	2371.52	Yes	2500	95	94.9	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	435437	13C2-PFDA	420651	1250	Avg	1.111006			1164.65	1164.65	Yes	1250	93	93.2	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	801622	13C6-PFDA	435437	1250	Avg	0.879258			2617.21	2617.21	Yes	2500	105	104.7	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	466541	13C4-PFOS	527043	2500	Avg	0.417912			5295.4	5295.4	Yes	5000	106	105.9	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	235515	D5-NEtFOSAA	466541	5000	Avg	1.061343			2378.17	2378.17	Yes	2500	95	95.1	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	576609	13C4-PFOS	527043	2500	Avg	1.019176			2683.65	2683.65	Yes	2500	107	107.3	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	487260	13C8-PFOS	576609	2500	Avg	0.936113			2256.79	2256.79	Yes	2383	95	94.7	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	523750	13C8-PFOS	576609	2500	Avg	1.011018			2246.07	2246.07	Yes	2320	97	96.8	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	628642	13C8-PFOS	576609	2500	Avg	1.078285			2527.72	2527.72	Yes	2405	105	105.1	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	428539	13C2-PFDA	420651	1250	Avg	0.978463			1301.47	1301.47	Yes	1250	104	104.1	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	775305	13C7-PFUnA	428539	1250	Avg	0.906176			2495.63	2495.63	Yes	2500	100	99.8	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	400341	13C2-PFDA	420651	1250	Avg	0.947371			1255.74	1255.74	Yes	1250	100	100.5	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	949466	13C4-PFOS	527043	2500	Avg	1.639711			2746.67	2746.67	Yes	2500	110	109.9	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	902427	13C8-PFOSA	949466	2500	Avg	0.96599			2459.8	2459.8	Yes	2500	98	98.4	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	384488	13C2-PFDA	420651	1250	Avg	0.890868			1282.5	1282.5	Yes	1250	103	102.6	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3889527	13C4-PFOS	527043	2500	Avg	0.665955			27704	27704.22	Yes	25000	111	110.8	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3856655	D7-NMeFOSE	3889527	25000	Avg	1.019907			24305	24304.88	Yes	25000	97	97.2	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	233420	13C4-PFOS	527043	2500	Avg	0.421972			2623.91	2623.91	Yes	2500	105	105	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4382274	13C4-PFOS	527043	2500	Avg	0.756241			27487	27487.38	Yes	25000	110	109.9	Yes
081524090.d	CCV L5F_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	254883	13C4-PFOS	527043	2500	Avg	0.448486			2695.79	2695.79	Yes	2500	108	107.8	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2769855	13C3-PFBA	1218991	5000	Avg	1.133865			10020	10019.94	Yes	10000	100	100.2	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2362572	13C4-PFBA	2769855	10000	Avg	0.85141			10018	10018.19	Yes	10000	100	100.2	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1158118	13C2-PFHxA	727305	2500	Avg	0.801471			4966.94	4966.93	Yes	5000	99	99.3	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1060147	13C5-PFPeA	1158118	5000	Avg	0.913924			5008.1	5008.1	Yes	5000	100	100.2	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	156325	18O2-PFHxS	395241	2500	Avg	0.189605			5215.02	5215.03	Yes	5000	104	104.3	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	555073	13C2-4:2FTS	156325	5000	Avg	1.821802			9745.19	9745.19	Yes	9375	104	103.9	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	784823	13C2-PFHxA	727305	2500	Avg	1.08809			2479.31	2479.31	Yes	2500	99	99.2	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	720053	13C5-PFHxA	784823	2500	Avg	0.896378			2558.83	2558.83	Yes	2500	102	102.4	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3207113	13C5-PFHxA	784823	2500	Avg	0.165672			61664	61664.25	Yes	62500	99	98.7	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	543316	18O2-PFHxS	395241	2500	Avg	1.30288			2637.7	2637.7	Yes	2500	106	105.5	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	583461	13C3-PFBS	543316	2500	Avg	1.208343			2221.82	2221.82	Yes	2218	100	100.2	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	573758	13C2-PFHxA	727305	2500	Avg	0.196665			10028	10028.25	Yes	10000	100	100.3	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	785468	13C2-PFHxA	727305	2500	Avg	1.160285			2326.95	2326.95	Yes	2500	93	93.1	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	836893	13C4-PFHpA	785468	2500	Avg	1.019994			2611.46	2611.46	Yes	2500	104	104.5	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	186243	18O2-PFHxS	395241	2500	Avg	0.208405			5652.62	5652.62	Yes	5000	113	113.1	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	679784	13C2-6:2FTS	186243	5000	Avg	1.837836			9930.12	9930.11	Yes	9500	105	104.5	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1042307	13C4-PFOA	175527	2500	Avg	6.826009			2174.83	2174.83	Yes	2500	87	87	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	779569	13C8-PFOA	1042307	2500	Avg	0.882262			2119.34	2119.34	Yes	2500	85	84.8	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	491184	18O2-PFHxS	395241	2500	Avg	1.165116			2666.57	2666.57	Yes	2500	107	106.7	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	538061	13C3-PFHxS	491184	2500	Avg	1.154897			2371.29	2371.29	Yes	2353	101	100.8	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	493775	13C3-PFHxS	491184	2500	Avg	1.142081			2200.53	2200.53	Yes	2285	96	96.3	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	467163	13C5-PFNA	483538	1250	Avg	0.9905			1219.25	1219.25	Yes	1250	98	97.5	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	808390	13C9-PFNA	467163	1250	Avg	0.792037			2730.97	2730.97	Yes	2500	109	109.2	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	168065	18O2-PFHxS	395241	2500	Avg	0.190493			5580.53	5580.54	Yes	5000	112	111.6	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	582522	13C2-8:2FTS	168065	5000	Avg	1.879444			9220.95	9220.95	Yes	9600	96	96.1	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	528506	13C4-PFOS	567189	2500	Avg	0.485385			4799.28	4799.28	Yes	5000	96	96	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	215270	D3-NMeFOSAA	528506	5000	Avg	0.841107			2421.32	2421.32	Yes	2500	97	96.9	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	457222	13C2-PFDA	409119	1250	Avg	1.111006			1257.39	1257.39	Yes	1250	101	100.6	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	770260	13C6-PFDA	457222	1250	Avg	0.879258			2394.99	2394.99	Yes	2500	96	95.8	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	434176	13C4-PFOS	567189	2500	Avg	0.417912			4579.24	4579.24	Yes	5000	92	91.6	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	209804	D5-NEtFOSAA	434176	5000	Avg	1.061343			2276.47	2276.47	Yes	2500	91	91.1	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	554934	13C4-PFOS	567189	2500	Avg	1.019176			2399.96	2399.96	Yes	2500	96	96	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	483130	13C8-PFOS	554934	2500	Avg	0.936113			2325.06	2325.06	Yes	2383	98	97.6	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	503719	13C8-PFOS	554934	2500	Avg	1.011018			2244.54	2244.54	Yes	2320	97	96.7	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	582187	13C8-PFOS	554934	2500	Avg	1.078285			2432.36	2432.36	Yes	2405	101	101.1	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	410980	13C2-PFDA	409119	1250	Avg	0.978463			1283.32	1283.32	Yes	1250	103	102.7	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	772230	13C7-PFUnA	410980	1250	Avg	0.906176			2591.93	2591.93	Yes	2500	104	103.7	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	371373	13C2-PFDA	409119	1250	Avg	0.947371			1197.71	1197.71	Yes	1250	96	95.8	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	912186	13C4-PFOS	567189	2500	Avg	1.639711			2452.04	2452.04	Yes	2500	98	98.1	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	853305	13C8-PFOSA	912186	2500	Avg	0.96599			2420.96	2420.96	Yes	2500	97	96.8	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	364913	13C2-PFDA	409119	1250	Avg	0.890868			1251.52	1251.52	Yes	1250	100	100.1	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3650557	13C4-PFOS	567189	2500	Avg	0.665955			24162	24161.64	Yes	25000	97	96.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3685833	D7-NMeFOSE	3650557	25000	Avg	1.019907			24749	24748.9	Yes	25000	99	99	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	218824	13C4-PFOS	567189	2500	Avg	0.421972			2285.72	2285.72	Yes	2500	91	91.4	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4194194	13C4-PFOS	567189	2500	Avg	0.756241			24446	24445.59	Yes	25000	98	97.8	Yes
081524111.d	CCV L5G_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	238800	13C4-PFOS	567189	2500	Avg	0.448486			2346.92	2346.92	Yes	2500	94	93.9	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2853344	13C3-PFBA	1241790	5000	Avg	1.133865			10132	10132.45	Yes	10000	101	101.3	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2388431	13C4-PFBA	2853344	10000	Avg	0.85141			9831.5	9831.5	Yes	10000	98	98.3	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1141299	13C2-PFHxA	708865	2500	Avg	0.801471			5022.13	5022.13	Yes	5000	100	100.4	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1036611	13C5-PFPeA	1141299	5000	Avg	0.913924			4969.08	4969.08	Yes	5000	99	99.4	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	147919	18O2-PFHxS	404273	2500	Avg	0.189605			4824.35	4824.36	Yes	5000	96	96.5	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	530110	13C2-4:2FTS	147919	5000	Avg	1.821802			9835.82	9835.83	Yes	9375	105	104.9	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	739901	13C2-PFHxA	708865	2500	Avg	1.08809			2398.2	2398.2	Yes	2500	96	95.9	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	670040	13C5-PFHxA	739901	2500	Avg	0.896378			2525.67	2525.67	Yes	2500	101	101	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3183701	13C5-PFHxA	739901	2500	Avg	0.165672			64930	64930.62	Yes	62500	104	103.9	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	538274	18O2-PFHxS	404273	2500	Avg	1.30288			2554.84	2554.84	Yes	2500	102	102.2	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	546013	13C3-PFBS	538274	2500	Avg	1.208343			2098.7	2098.7	Yes	2218	95	94.6	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	559722	13C2-PFHxA	708865	2500	Avg	0.196665			10037	10037.41	Yes	10000	100	100.4	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	801448	13C2-PFHxA	708865	2500	Avg	1.160285			2436.06	2436.06	Yes	2500	97	97.4	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	820061	13C4-PFHpA	801448	2500	Avg	1.019994			2507.92	2507.92	Yes	2500	100	100.3	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	171437	18O2-PFHxS	404273	2500	Avg	0.208405			5087	5087	Yes	5000	102	101.7	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	629973	13C2-6:2FTS	171437	5000	Avg	1.837836			9997.25	9997.25	Yes	9500	105	105.2	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	953943	13C4-PFOA	136195	2500	Avg	6.826009			2565.28	2565.28	Yes	2500	103	102.6	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	838304	13C8-PFOA	953943	2500	Avg	0.882262			2490.13	2490.13	Yes	2500	100	99.6	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	492323	18O2-PFHxS	404273	2500	Avg	1.165116			2613.04	2613.04	Yes	2500	105	104.5	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	491830	13C3-PFHxS	492323	2500	Avg	1.154897			2162.53	2162.53	Yes	2353	92	91.9	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	468715	13C3-PFHxS	492323	2500	Avg	1.142081			2084.02	2084.02	Yes	2285	91	91.2	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	473981	13C5-PFNA	484377	1250	Avg	0.9905			1234.9	1234.9	Yes	1250	99	98.8	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	779785	13C9-PFNA	473981	1250	Avg	0.792037			2596.44	2596.44	Yes	2500	104	103.9	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	154812	18O2-PFHxS	404273	2500	Avg	0.190493			5025.63	5025.63	Yes	5000	101	100.5	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	520852	13C2-8:2FTS	154812	5000	Avg	1.879444			8950.56	8950.56	Yes	9600	93	93.2	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	475346	13C4-PFOS	504965	2500	Avg	0.485385			4848.45	4848.44	Yes	5000	97	97	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	198831	D3-NMeFOSAA	475346	5000	Avg	0.841107			2486.53	2486.53	Yes	2500	99	99.5	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	505436	13C2-PFDA	386689	1250	Avg	1.111006			1470.61	1470.61	Yes	1250	118	117.6	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	724310	13C6-PFDA	505436	1250	Avg	0.879258			2037.29	2037.29	Yes	2500	81	81.5	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	403948	13C4-PFOS	504965	2500	Avg	0.417912			4785.41	4785.41	Yes	5000	96	95.7	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	196931	D5-NEtFOSAA	403948	5000	Avg	1.061343			2296.69	2296.69	Yes	2500	92	91.9	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	520830	13C4-PFOS	504965	2500	Avg	1.019176			2530.03	2530.03	Yes	2500	101	101.2	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	446423	13C8-PFOS	520830	2500	Avg	0.936113			2289.09	2289.09	Yes	2383	96	96.1	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	462913	13C8-PFOS	520830	2500	Avg	1.011018			2197.78	2197.78	Yes	2320	95	94.7	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	552319	13C8-PFOS	520830	2500	Avg	1.078285			2458.67	2458.67	Yes	2405	102	102.2	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	403255	13C2-PFDA	386689	1250	Avg	0.978463			1332.24	1332.24	Yes	1250	107	106.6	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	692230	13C7-PFUnA	403255	1250	Avg	0.906176			2367.92	2367.93	Yes	2500	95	94.7	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	410698	13C2-PFDA	386689	1250	Avg	0.947371			1401.36	1401.36	Yes	1250	112	112.1	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	897881	13C4-PFOS	504965	2500	Avg	1.639711			2711	2711	Yes	2500	108	108.4	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	800740	13C8-PFOSA	897881	2500	Avg	0.96599			2308.02	2308.02	Yes	2500	92	92.3	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	337911	13C2-PFDA	386689	1250	Avg	0.890868			1226.13	1226.13	Yes	1250	98	98.1	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3549655	13C4-PFOS	504965	2500	Avg	0.665955			26389	26388.82	Yes	25000	106	105.6	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3463964	D7-NMeFOSE	3549655	25000	Avg	1.019907			23920	23920.3	Yes	25000	96	95.7	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	213704	13C4-PFOS	504965	2500	Avg	0.421972			2507.31	2507.31	Yes	2500	100	100.3	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3919478	13C4-PFOS	504965	2500	Avg	0.756241			25659	25659.41	Yes	25000	103	102.6	Yes
081924045.d	CCV L5B_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	233047	13C4-PFOS	504965	2500	Avg	0.448486			2572.61	2572.61	Yes	2500	103	102.9	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2883253	13C3-PFBA	1273148	5000	Avg	1.133865			9986.48	9986.48	Yes	10000	100	99.9	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2462390	13C4-PFBA	2883253	10000	Avg	0.85141			10031	10030.79	Yes	10000	100	100.3	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1212578	13C2-PFHxA	746845	2500	Avg	0.801471			5064.44	5064.44	Yes	5000	101	101.3	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1173700	13C5-PFPeA	1212578	5000	Avg	0.913924			5295.5	5295.5	Yes	5000	106	105.9	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	164447	18O2-PFHxS	433885	2500	Avg	0.189605			4997.36	4997.37	Yes	5000	100	99.9	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	566554	13C2-4:2FTS	164447	5000	Avg	1.821802			9455.49	9455.49	Yes	9375	101	100.9	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	818880	13C2-PFHxA	746845	2500	Avg	1.08809			2519.21	2519.21	Yes	2500	101	100.8	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	699344	13C5-PFHxA	818880	2500	Avg	0.896378			2381.88	2381.88	Yes	2500	95	95.3	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3365766	13C5-PFHxA	818880	2500	Avg	0.165672			62023	62023.25	Yes	62500	99	99.2	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	542609	18O2-PFHxS	433885	2500	Avg	1.30288			2399.65	2399.65	Yes	2500	96	96	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	595108	13C3-PFBS	542609	2500	Avg	1.208343			2269.13	2269.13	Yes	2218	102	102.3	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	591481	13C2-PFHxA	746845	2500	Avg	0.196665			10068	10067.54	Yes	10000	101	100.7	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	874538	13C2-PFHxA	746845	2500	Avg	1.160285			2523.04	2523.04	Yes	2500	101	100.9	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	880054	13C4-PFHpA	874538	2500	Avg	1.019994			2466.45	2466.45	Yes	2500	99	98.7	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	178286	18O2-PFHxS	433885	2500	Avg	0.208405			4929.18	4929.18	Yes	5000	99	98.6	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	658930	13C2-6:2FTS	178286	5000	Avg	1.837836			10055	10055.07	Yes	9500	106	105.8	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1016806	13C4-PFOA	155074	2500	Avg	6.826009			2401.44	2401.44	Yes	2500	96	96.1	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	844821	13C8-PFOA	1016806	2500	Avg	0.882262			2354.34	2354.34	Yes	2500	94	94.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	512974	18O2-PFHxS	433885	2500	Avg	1.165116			2536.83	2536.83	Yes	2500	101	101.5	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	556792	13C3-PFHxS	512974	2500	Avg	1.154897			2349.6	2349.6	Yes	2353	100	99.9	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	507534	13C3-PFHxS	512974	2500	Avg	1.142081			2165.77	2165.77	Yes	2285	95	94.8	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	500846	13C5-PFNA	538443	1250	Avg	0.9905			1173.87	1173.87	Yes	1250	94	93.9	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	824262	13C9-PFNA	500846	1250	Avg	0.792037			2597.32	2597.32	Yes	2500	104	103.9	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	160379	18O2-PFHxS	433885	2500	Avg	0.190493			4851.02	4851.03	Yes	5000	97	97	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	560371	13C2-8:2FTS	160379	5000	Avg	1.879444			9295.42	9295.41	Yes	9600	97	96.8	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	539888	13C4-PFOS	584626	2500	Avg	0.485385			4756.41	4756.41	Yes	5000	95	95.1	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	216753	D3-NMeFOSAA	539888	5000	Avg	0.841107			2386.6	2386.6	Yes	2500	95	95.5	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	438883	13C2-PFDA	433558	1250	Avg	1.111006			1138.93	1138.93	Yes	1250	91	91.1	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	787634	13C6-PFDA	438883	1250	Avg	0.879258			2551.35	2551.35	Yes	2500	102	102.1	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	407712	13C4-PFOS	584626	2500	Avg	0.417912			4171.87	4171.87	Yes	5000	83	83.4	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	225089	D5-NEtFOSAA	407712	5000	Avg	1.061343			2600.85	2600.85	Yes	2500	104	104	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	602911	13C4-PFOS	584626	2500	Avg	1.019176			2529.68	2529.68	Yes	2500	101	101.2	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	483314	13C8-PFOS	602911	2500	Avg	0.936113			2140.86	2140.86	Yes	2383	90	89.8	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	497762	13C8-PFOS	602911	2500	Avg	1.011018			2041.5	2041.5	Yes	2320	88	88	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	589765	13C8-PFOS	602911	2500	Avg	1.078285			2267.94	2267.94	Yes	2405	94	94.3	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	443648	13C2-PFDA	433558	1250	Avg	0.978463			1307.24	1307.24	Yes	1250	105	104.6	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	780484	13C7-PFUnA	443648	1250	Avg	0.906176			2426.74	2426.74	Yes	2500	97	97.1	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	401083	13C2-PFDA	433558	1250	Avg	0.947371			1220.61	1220.61	Yes	1250	98	97.6	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	941203	13C4-PFOS	584626	2500	Avg	1.639711			2454.58	2454.58	Yes	2500	98	98.2	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	904353	13C8-PFOSA	941203	2500	Avg	0.96599			2486.69	2486.69	Yes	2500	99	99.5	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	374092	13C2-PFDA	433558	1250	Avg	0.890868			1210.68	1210.68	Yes	1250	97	96.9	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3917401	13C4-PFOS	584626	2500	Avg	0.665955			25154	25154.46	Yes	25000	101	100.6	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3892104	D7-NMeFOSE	3917401	25000	Avg	1.019907			24354	24353.75	Yes	25000	97	97.4	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	228783	13C4-PFOS	584626	2500	Avg	0.421972			2318.47	2318.47	Yes	2500	93	92.7	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4287596	13C4-PFOS	584626	2500	Avg	0.756241			24245	24244.63	Yes	25000	97	97	Yes
081924062.d	CCV L5C_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	245544	13C4-PFOS	584626	2500	Avg	0.448486			2341.22	2341.22	Yes	2500	94	93.6	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2976987	13C3-PFBA	1304565	5000	Avg	1.133865			10063	10062.82	Yes	10000	101	100.6	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2504778	13C4-PFBA	2976987	10000	Avg	0.85141			9882.2	9882.2	Yes	10000	99	98.8	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1231494	13C2-PFHxA	757236	2500	Avg	0.801471			5072.87	5072.86	Yes	5000	101	101.5	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1089114	13C5-PFPeA	1231494	5000	Avg	0.913924			4838.39	4838.39	Yes	5000	97	96.8	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	153900	18O2-PFHxS	439295	2500	Avg	0.189605			4619.26	4619.26	Yes	5000	92	92.4	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	568007	13C2-4:2FTS	153900	5000	Avg	1.821802			10129	10129.4	Yes	9375	108	108	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	788268	13C2-PFHxA	757236	2500	Avg	1.08809			2391.76	2391.76	Yes	2500	96	95.7	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	707653	13C5-PFHxA	788268	2500	Avg	0.896378			2503.78	2503.77	Yes	2500	100	100.2	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3261679	13C5-PFHxA	788268	2500	Avg	0.165672			62439	62439.33	Yes	62500	100	99.9	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	550350	18O2-PFHxS	439295	2500	Avg	1.30288			2403.91	2403.91	Yes	2500	96	96.2	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	582283	13C3-PFBS	550350	2500	Avg	1.208343			2189	2189	Yes	2218	99	98.7	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	581183	13C2-PFHxA	757236	2500	Avg	0.196665			9756.49	9756.51	Yes	10000	98	97.6	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	870969	13C2-PFHxA	757236	2500	Avg	1.160285			2478.26	2478.26	Yes	2500	99	99.1	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	869836	13C4-PFHpA	870969	2500	Avg	1.019994			2447.81	2447.81	Yes	2500	98	97.9	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	175918	18O2-PFHxS	439295	2500	Avg	0.208405			4803.81	4803.81	Yes	5000	96	96.1	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	626980	13C2-6:2FTS	175918	5000	Avg	1.837836			9696.32	9696.31	Yes	9500	102	102.1	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	977096	13C4-PFOA	154760	2500	Avg	6.826009			2312.34	2312.34	Yes	2500	92	92.5	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	858483	13C8-PFOA	977096	2500	Avg	0.882262			2489.64	2489.64	Yes	2500	100	99.6	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	521513	18O2-PFHxS	439295	2500	Avg	1.165116			2547.3	2547.3	Yes	2500	102	101.9	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	535217	13C3-PFHxS	521513	2500	Avg	1.154897			2221.58	2221.58	Yes	2353	94	94.4	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	504279	13C3-PFHxS	521513	2500	Avg	1.142081			2116.65	2116.65	Yes	2285	93	92.6	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	496623	13C5-PFNA	509639	1250	Avg	0.9905			1229.76	1229.76	Yes	1250	98	98.4	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	822704	13C9-PFNA	496623	1250	Avg	0.792037			2614.46	2614.46	Yes	2500	105	104.6	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	151113	18O2-PFHxS	439295	2500	Avg	0.190493			4514.46	4514.47	Yes	5000	90	90.3	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	563160	13C2-8:2FTS	151113	5000	Avg	1.879444			9914.5	9914.49	Yes	9600	103	103.3	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	537834	13C4-PFOS	577634	2500	Avg	0.485385			4795.67	4795.67	Yes	5000	96	95.9	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	204090	D3-NMeFOSAA	537834	5000	Avg	0.841107			2255.76	2255.76	Yes	2500	90	90.2	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	470040	13C2-PFDA	405475	1250	Avg	1.111006			1304.26	1304.26	Yes	1250	104	104.3	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	755394	13C6-PFDA	470040	1250	Avg	0.879258			2284.72	2284.72	Yes	2500	91	91.4	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	409592	13C4-PFOS	577634	2500	Avg	0.417912			4241.84	4241.84	Yes	5000	85	84.8	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	216724	D5-NEtFOSAA	409592	5000	Avg	1.061343			2492.7	2492.7	Yes	2500	100	99.7	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	568246	13C4-PFOS	577634	2500	Avg	1.019176			2413.1	2413.1	Yes	2500	97	96.5	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	431062	13C8-PFOS	568246	2500	Avg	0.936113			2025.89	2025.89	Yes	2383	85	85	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	502776	13C8-PFOS	568246	2500	Avg	1.011018			2187.86	2187.86	Yes	2320	94	94.3	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	611120	13C8-PFOS	568246	2500	Avg	1.078285			2493.43	2493.43	Yes	2405	104	103.7	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	435263	13C2-PFDA	405475	1250	Avg	0.978463			1371.37	1371.37	Yes	1250	110	109.7	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	789853	13C7-PFUnA	435263	1250	Avg	0.906176			2503.18	2503.18	Yes	2500	100	100.1	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	397271	13C2-PFDA	405475	1250	Avg	0.947371			1292.74	1292.74	Yes	1250	103	103.4	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	891791	13C4-PFOS	577634	2500	Avg	1.639711			2353.87	2353.87	Yes	2500	94	94.2	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	882355	13C8-PFOSA	891791	2500	Avg	0.96599			2560.63	2560.63	Yes	2500	102	102.4	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	364466	13C2-PFDA	405475	1250	Avg	0.890868			1261.22	1261.22	Yes	1250	101	100.9	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3760168	13C4-PFOS	577634	2500	Avg	0.665955			24437	24437.1	Yes	25000	98	97.7	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3667371	D7-NMeFOSE	3760168	25000	Avg	1.019907			23907	23907.11	Yes	25000	96	95.6	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	227648	13C4-PFOS	577634	2500	Avg	0.421972			2334.9	2334.9	Yes	2500	93	93.4	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4217712	13C4-PFOS	577634	2500	Avg	0.756241			24138	24138.15	Yes	25000	97	96.6	Yes
081924074.d	CCV L5D_SVLC-3981	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	251753	13C4-PFOS	577634	2500	Avg	0.448486			2429.48	2429.48	Yes	2500	97	97.2	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3141754	13C3-PFBA	1264240	5000	Avg	1.130641			10990	10989.75	Yes	10000	110	109.9	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1309795	13C2-PFHxA	697337	2500	Avg	0.8402			5588.79	5588.79	Yes	5000	112	111.8	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	172048	18O2-PFHxS	398291	2500	Avg	0.200536			5385.13	5385.14	Yes	5000	108	107.7	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	855909	13C2-PFHxA	697337	2500	Avg	1.104288			2778.71	2778.71	Yes	2500	111	111.1	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	548888	18O2-PFHxS	398291	2500	Avg	1.299121			2652	2652	Yes	2500	106	106.1	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	626524	13C2-PFHxA	697337	2500	Avg	0.205187			10947	10946.75	Yes	10000	109	109.5	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	923675	13C2-PFHxA	697337	2500	Avg	1.198314			2763.41	2763.41	Yes	2500	111	110.5	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	186409	18O2-PFHxS	398291	2500	Avg	0.236825			4940.6	4940.59	Yes	5000	99	98.8	Yes
081324106.d	CCB A7	Instrument_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1998	13C2-6:2FTS	186409	5000	Avg	1.74466	0.01	30.718	0.30718	0.3072	Yes				
081324106.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1023818	13C4-PFOA	152409	2500	Avg	6.698736			2507.03	2507.03	Yes	2500	100	100.3	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	532874	18O2-PFHxS	398291	2500	Avg	1.157763			2888.98	2888.98	Yes	2500	116	115.6	Yes
081324106.d	CCB A7	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2710	13C3-PFHxS	532874	2500	Avg	1.144236	0.01	11.111	0.11111	0.1111	Yes				
081324106.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	507559	13C5-PFNA	478558	1250	Avg	0.988588			1341.06	1341.06	Yes	1250	107	107.3	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	173482	18O2-PFHxS	398291	2500	Avg	0.213625			5097.33	5097.32	Yes	5000	102	101.9	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	572500	13C4-PFOS	549772	2500	Avg	0.548279			4748.23	4748.22	Yes	5000	95	95.0	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	498151	13C2-PFDA	376566	1250	Avg	1.165674			1418.58	1418.58	Yes	1250	113	113.5	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	397784	13C4-PFOS	549772	2500	Avg	0.420694			4299.7	4299.7	Yes	5000	86	86.0	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	564226	13C4-PFOS	549772	2500	Avg	1.004997			2552.97	2552.97	Yes	2500	102	102.1	Yes
081324106.d	CCB A7	Instrument_Blank	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	165	13C8-PFOS	564226	2500	Avg	0.954873	0.01	0.76564	0.007656	0.0077	Yes				
081324106.d	CCB A7	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4012	13C8-PFOS	564226	2500	Avg	0.990455	0.01	17.948	0.17948	0.1795	Yes				
081324106.d	CCB A7	Instrument_Blank	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	444	13C8-PFOS	564226	2500	Avg	1.152095	0.01	1.7076	0.01708	0.0171	Yes				
081324106.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	418931	13C2-PFDA	376566	1250	Avg	1.107859			1255.24	1255.24	Yes	1250	100	100.4	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	401880	13C2-PFDA	376566	1250	Avg	1.018582			1309.69	1309.69	Yes	1250	105	104.8	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	967245	13C4-PFOS	549772	2500	Avg	1.722863			2552.95	2552.95	Yes	2500	102	102.1	Yes
081324106.d	CCB A7	Instrument_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	2750	13C8-PFOSA	967245	2500	Avg	0.978797	0.01	7.2618	0.07262	0.0726	Yes				
081324106.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	374378	13C2-PFDA	376566	1250	Avg	0.914538			1358.87	1358.87	Yes	1250	109	108.7	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3960444	13C4-PFOS	549772	2500	Avg	0.727301			24762	24762.08	Yes	25000	99	99.0	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	230501	13C4-PFOS	549772	2500	Avg	0.453376			2311.91	2311.91	Yes	2500	92	92.5	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4376920	13C4-PFOS	549772	2500	Avg	0.801502			24833	24832.55	Yes	25000	99	99.3	Yes
081324106.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	256341	13C4-PFOS	549772	2500	Avg	0.486842			2394.35	2394.35	Yes	2500	96	95.8	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3115904	13C3-PFBA	1253826	5000	Avg	1.130641			10990	10989.86	Yes	10000	110	109.9	Yes
081324125.d	CCB A8	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2110	13C4-PFBA	3115904	10000	Avg	0.834189	0.01	8.1177	0.08118	0.0812	Yes				
081324125.d	CCB A8	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1279334	13C2-PFHxA	694056	2500	Avg	0.8402			5484.62	5484.62	Yes	5000	110	109.7	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	167057	18O2-PFHxS	441106	2500	Avg	0.200536			4721.38	4721.38	Yes	5000	94	94.4	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	839215	13C2-PFHxA	694056	2500	Avg	1.104288			2737.39	2737.39	Yes	2500	109	109.5	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	562705	18O2-PFHxS	441106	2500	Avg	1.299121			2454.87	2454.87	Yes	2500	98	98.2	Yes
081324125.d	CCB A8	Instrument_Blank	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	231	13C3-PFBS	562705	2500	Avg	1.180999	0.01	0.869	0.00869	0.0087	Yes				
081324125.d	CCB A8	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	604787	13C2-PFHxA	694056	2500	Avg	0.205187			10617	10616.91	Yes	10000	106	106.2	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	915613	13C2-PFHxA	694056	2500	Avg	1.198314			2752.24	2752.24	Yes	2500	110	110.1	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	199551	18O2-PFHxS	441106	2500	Avg	0.236825			4775.56	4775.55	Yes	5000	96	95.5	Yes
081324125.d	CCB A8	Instrument_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	2443	13C2-6:2FTS	199551	5000	Avg	1.74466	0.01	35.086	0.35086	0.3509	Yes				
081324125.d	CCB A8	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	958661	13C4-PFOA	144369	2500	Avg	6.698736			2478.21	2478.21	Yes	2500	99	99.1	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	553181	18O2-PFHxS	441106	2500	Avg	1.157763			2707.98	2707.97	Yes	2500	108	108.3	Yes
081324125.d	CCB A8	Instrument_Blank	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	168	13C3-PFHxS	553181	2500	Avg	1.151629	0.01	0.65928	0.006593	0.0066	Yes				
081324125.d	CCB A8	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3367	13C3-PFHxS	553181	2500	Avg	1.144236	0.01	13.298	0.13298	0.133	Yes				
081324125.d	CCB A8	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	529753	13C5-PFNA	478612	1250	Avg	0.988588			1399.54	1399.54	Yes	1250	112	112.0	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	174729	18O2-PFHxS	441106	2500	Avg	0.213625			4635.65	4635.64	Yes	5000	93	92.7	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	584875	13C4-PFOS	508286	2500	Avg	0.548279			5246.79	5246.79	Yes	5000	105	104.9	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	437259	13C2-PFDA	376215	1250	Avg	1.165674			1246.34	1246.34	Yes	1250	100	99.7	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	497333	13C4-PFOS	508286	2500	Avg	0.420694			5814.5	5814.51	Yes	5000	116	116.3	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	565739	13C4-PFOS	508286	2500	Avg	1.004997			2768.75	2768.75	Yes	2500	111	110.8	Yes
081324125.d	CCB A8	Instrument_Blank	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	513	13C8-PFOS	565739	2500	Avg	0.954873	0.01	2.3741	0.02374	0.0237	Yes				
081324125.d	CCB A8	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2463	13C8-PFOS	565739	2500	Avg	0.990455	0.01	10.989	0.10989	0.1099	Yes				
081324125.d	CCB A8	Instrument_Blank	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	1037	13C8-PFOS	565739	2500	Avg	1.152095	0.01	3.9775	0.03978	0.0398	Yes				
081324125.d	CCB A8	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	427499	13C2-PFDA	376215	1250	Avg	1.107859			1282.11	1282.11	Yes	1250	103	102.6	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	412227	13C2-PFDA	376215	1250	Avg	1.018582			1344.67	1344.67	Yes	1250	108	107.6	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	942715	13C4-PFOS	508286	2500	Avg	1.722863			2691.3	2691.3	Yes	2500	108	107.7	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	379813	13C2-PFDA	376215	1250	Avg	0.914538			1379.88	1379.88	Yes	1250	110	110.4	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3981766	13C4-PFOS	508286	2500	Avg	0.727301			26927	26927.34	Yes	25000	108	107.7	Yes
081324125.d	CCB A8	Instrument_Blank	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	2638	D7-NMeFOSE	3981766	25000	Avg	1.00959	0.01	16.406	0.16406	0.1641	Yes				
081324125.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	248835	13C4-PFOS	508286	2500	Avg	0.453376			2699.51	2699.51	Yes	2500	108	108.0	Yes
081324125.d	CCB A8	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4335351	13C4-PFOS	508286	2500	Avg	0.801502			26604	26604.28	Yes	25000	106	106.4	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081324125.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	259078	13C4-PFOS	508286	2500	Avg	0.486842			2617.42	2617.43	Yes	2500	105	104.7	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3056019	13C3-PFBA	1227721	5000	Avg	1.130641			11008	11007.83	Yes	10000	110	110.1	Yes
081324139.d	CCB A9	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	4402	13C4-PFBA	3056019	10000	Avg	0.834189	0.01	17.268	0.17268	0.1727	Yes				
081324139.d	CCB A9	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1236867	13C2-PFHxA	690279	2500	Avg	0.8402			5331.58	5331.58	Yes	5000	107	106.6	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	159912	18O2-PFHxS	427384	2500	Avg	0.200536			4664.55	4664.56	Yes	5000	93	93.3	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	767853	13C2-PFHxA	690279	2500	Avg	1.104288			2518.32	2518.32	Yes	2500	101	100.7	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	528297	18O2-PFHxS	427384	2500	Avg	1.299121			2378.76	2378.76	Yes	2500	95	95.2	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	618342	13C2-PFHxA	690279	2500	Avg	0.205187			10914	10914.26	Yes	10000	109	109.1	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	986560	13C2-PFHxA	690279	2500	Avg	1.198314			2981.73	2981.73	Yes	2500	119	119.3	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	194309	18O2-PFHxS	427384	2500	Avg	0.236825			4799.41	4799.4	Yes	5000	96	96.0	Yes
081324139.d	CCB A9	Instrument_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	2174	13C2-6:2FTS	194309	5000	Avg	1.74466	0.01	32.065	0.32065	0.3206	Yes				
081324139.d	CCB A9	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1000495	13C4-PFOA	144343	2500	Avg	6.698736			2586.82	2586.82	Yes	2500	103	103.5	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	539194	18O2-PFHxS	427384	2500	Avg	1.157763			2724.25	2724.25	Yes	2500	109	109.0	Yes
081324139.d	CCB A9	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2171	13C3-PFHxS	539194	2500	Avg	1.144236	0.01	8.7971	0.08797	0.088	Yes				
081324139.d	CCB A9	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	528688	13C5-PFNA	526448	1250	Avg	0.988588			1269.81	1269.81	Yes	1250	102	101.6	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	179915	18O2-PFHxS	427384	2500	Avg	0.213625			4926.49	4926.48	Yes	5000	99	98.5	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	533161	13C4-PFOS	502534	2500	Avg	0.548279			4837.62	4837.62	Yes	5000	97	96.8	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	495828	13C2-PFDA	390673	1250	Avg	1.165674			1360.98	1360.98	Yes	1250	109	108.9	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	453072	13C4-PFOS	502534	2500	Avg	0.420694			5357.66	5357.66	Yes	5000	107	107.2	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	555950	13C4-PFOS	502534	2500	Avg	1.004997			2751.98	2751.98	Yes	2500	110	110.1	Yes
081324139.d	CCB A9	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2432	13C8-PFOS	555950	2500	Avg	0.990455	0.01	11.042	0.11042	0.1104	Yes				
081324139.d	CCB A9	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	460311	13C2-PFDA	390673	1250	Avg	1.107859			1329.42	1329.42	Yes	1250	106	106.4	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	410162	13C2-PFDA	390673	1250	Avg	1.018582			1288.42	1288.42	Yes	1250	103	103.1	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	961435	13C4-PFOS	502534	2500	Avg	1.722863			2776.15	2776.16	Yes	2500	111	111.0	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	374965	13C2-PFDA	390673	1250	Avg	0.914538			1311.85	1311.85	Yes	1250	105	104.9	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3951672	13C4-PFOS	502534	2500	Avg	0.727301			27030	27029.7	Yes	25000	108	108.1	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	244089	13C4-PFOS	502534	2500	Avg	0.453376			2678.33	2678.33	Yes	2500	107	107.1	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4323297	13C4-PFOS	502534	2500	Avg	0.801502			26834	26833.98	Yes	25000	107	107.3	Yes
081324139.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	266958	13C4-PFOS	502534	2500	Avg	0.486842			2727.91	2727.91	Yes	2500	109	109.1	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3150735	13C3-PFBA	1269978	5000	Avg	1.130641			10971	10971.37	Yes	10000	110	109.7	Yes
081324147.d	CCB A10	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	5165	13C4-PFBA	3150735	10000	Avg	0.834189	0.01	19.651	0.19651	0.1965	Yes				
081324147.d	CCB A10	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1290467	13C2-PFHxA	661149	2500	Avg	0.8402			5807.71	5807.71	Yes	5000	116	116.2	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	168507	18O2-PFHxS	410182	2500	Avg	0.200536			5121.4	5121.4	Yes	5000	102	102.4	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	840112	13C2-PFHxA	661149	2500	Avg	1.104288			2876.71	2876.71	Yes	2500	115	115.1	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	546139	18O2-PFHxS	410182	2500	Avg	1.299121			2562.22	2562.22	Yes	2500	102	102.5	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	622818	13C2-PFHxA	661149	2500	Avg	0.205187			11478	11477.62	Yes	10000	115	114.8	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	934469	13C2-PFHxA	661149	2500	Avg	1.198314			2948.73	2948.73	Yes	2500	118	117.9	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	199417	18O2-PFHxS	410182	2500	Avg	0.236825			5132.14	5132.13	Yes	5000	103	102.6	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1054944	13C4-PFOA	142214	2500	Avg	6.698736			2768.43	2768.43	Yes	2500	111	110.7	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	539878	18O2-PFHxS	410182	2500	Avg	1.157763			2842.1	2842.1	Yes	2500	114	113.7	Yes
081324147.d	CCB A10	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1638	13C3-PFHxS	539878	2500	Avg	1.144236	0.01	6.6289	0.06629	0.0663	Yes				
081324147.d	CCB A10	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	574760	13C5-PFNA	492890	1250	Avg	0.988588			1474.45	1474.45	Yes	1250	118	118.0	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	196039	18O2-PFHxS	410182	2500	Avg	0.213625			5593.12	5593.12	Yes	5000	112	111.9	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	583929	13C4-PFOS	533212	2500	Avg	0.548279			4993.43	4993.42	Yes	5000	100	99.9	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	479799	13C2-PFDA	418441	1250	Avg	1.165674			1229.58	1229.58	Yes	1250	98	98.4	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	466225	13C4-PFOS	533212	2500	Avg	0.420694			5196	5196	Yes	5000	104	103.9	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	581884	13C4-PFOS	533212	2500	Avg	1.004997			2714.64	2714.64	Yes	2500	109	108.6	Yes
081324147.d	CCB A10	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3738	13C8-PFOS	581884	2500	Avg	0.990455	0.01	16.215	0.16215	0.1621	Yes				
081324147.d	CCB A10	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	449666	13C2-PFDA	418441	1250	Avg	1.107859			1212.5	1212.5	Yes	1250	97	97.0	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	403392	13C2-PFDA	418441	1250	Avg	1.018582			1183.06	1183.06	Yes	1250	95	94.6	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	927453	13C4-PFOS	533212	2500	Avg	1.722863			2523.95	2523.95	Yes	2500	101	101.0	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	386213	13C2-PFDA	418441	1250	Avg	0.914538			1261.54	1261.54	Yes	1250	101	100.9	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3822393	13C4-PFOS	533212	2500	Avg	0.727301			24641	24641.17	Yes	25000	99	98.6	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	244597	13C4-PFOS	533212	2500	Avg	0.453376			2529.49	2529.49	Yes	2500	101	101.2	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4474140	13C4-PFOS	533212	2500	Avg	0.801502			26173	26172.49	Yes	25000	105	104.7	Yes
081324147.d	CCB A10	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	259728	13C4-PFOS	533212	2500	Avg	0.486842			2501.33	2501.33	Yes	2500	100	100.1	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2282236	13C3-PFBA	961684	5000	Avg	1.133865			10465	10464.94	Yes	10000	105	104.6	Yes
081524091.d	CCB A6	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3950	13C4-PFBA	2282236	10000	Avg	0.85141	0.01	20.328	0.20328	0.2033	Yes				
081524091.d	CCB A6	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	963503	13C2-PFHxA	592801	2500	Avg	0.801471			5069.87	5069.86	Yes	5000	101	101.4	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	132601	18O2-PFHxS	334019	2500	Avg	0.189605			5234.38	5234.39	Yes	5000	105	104.7	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	654740	13C2-PFHxA	592801	2500	Avg	1.08809			2537.67	2537.67	Yes	2500	102	101.5	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	427165	18O2-PFHxS	334019	2500	Avg	1.30288			2453.92	2453.92	Yes	2500	98	98.2	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	487766	13C2-PFHxA	592801	2500	Avg	0.196665			10460	10459.61	Yes	10000	105	104.6	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	708793	13C2-PFHxA	592801	2500	Avg	1.160285			2576.24	2576.24	Yes	2500	103	103.0	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	136345	18O2-PFHxS	334019	2500	Avg	0.208405			4896.66	4896.66	Yes	5000	98	97.9	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	690592	13C4-PFOA	122565	2500	Avg	6.826009			2063.61	2063.61	Yes	2500	83	82.5	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	402007	18O2-PFHxS	334019	2500	Avg	1.165116			2582.46	2582.46	Yes	2500	103	103.3	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	411826	13C5-PFNA	394238	1250	Avg	0.9905			1318.29	1318.29	Yes	1250	105	105.5	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081524091.d	CCB A6	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	137773	18O2-PFHxS	334019	2500	Avg	0.190493			5413.19	5413.2	Yes	5000	108	108.3	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	417588	13C4-PFOS	443097	2500	Avg	0.485385			4854.04	4854.03	Yes	5000	97	97.1	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	427146	13C2-PFDA	289289	1250	Avg	1.111006			1661.26	1661.26	Yes	1250	133	132.9	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	416650	13C4-PFOS	443097	2500	Avg	0.417912			5625.07	5625.07	Yes	5000	113	112.5	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	461645	13C4-PFOS	443097	2500	Avg	1.019176			2555.64	2555.64	Yes	2500	102	102.2	Yes
081524091.d	CCB A6	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3489	13C8-PFOS	461645	2500	Avg	1.011018	0.01	18.688	0.18688	0.1869	Yes				
081524091.d	CCB A6	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	335007	13C2-PFDA	289289	1250	Avg	0.978463			1479.41	1479.41	Yes	1250	118	118.4	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	319644	13C2-PFDA	289289	1250	Avg	0.947371			1457.89	1457.89	Yes	1250	117	116.6	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	729959	13C4-PFOS	443097	2500	Avg	1.639711			2511.73	2511.73	Yes	2500	100	100.5	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	313293	13C2-PFDA	289289	1250	Avg	0.890868			1519.55	1519.55	Yes	1250	122	121.6	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3081852	13C4-PFOS	443097	2500	Avg	0.665955			26110	26110.07	Yes	25000	104	104.4	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	181933	13C4-PFOS	443097	2500	Avg	0.421972			2432.59	2432.59	Yes	2500	97	97.3	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3518847	13C4-PFOS	443097	2500	Avg	0.756241			26253	26253.15	Yes	25000	105	105.0	Yes
081524091.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	201058	13C4-PFOS	443097	2500	Avg	0.448486			2529.38	2529.38	Yes	2500	101	101.2	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2292605	13C3-PFBA	969596	5000	Avg	1.133865			10427	10426.7	Yes	10000	104	104.3	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	969314	13C2-PFHxA	587648	2500	Avg	0.801471			5145.17	5145.17	Yes	5000	103	102.9	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	131589	18O2-PFHxS	343520	2500	Avg	0.189605			5050.77	5050.77	Yes	5000	101	101.0	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	654837	13C2-PFHxA	587648	2500	Avg	1.08809			2560.3	2560.3	Yes	2500	102	102.4	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	450437	18O2-PFHxS	343520	2500	Avg	1.30288			2516.04	2516.04	Yes	2500	101	100.6	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	471822	13C2-PFHxA	587648	2500	Avg	0.196665			10206	10206.43	Yes	10000	102	102.1	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	670854	13C2-PFHxA	587648	2500	Avg	1.160285			2459.72	2459.72	Yes	2500	98	98.4	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	149636	18O2-PFHxS	343520	2500	Avg	0.208405			5225.36	5225.36	Yes	5000	105	104.5	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	788535	13C4-PFOA	123251	2500	Avg	6.826009			2343.17	2343.17	Yes	2500	94	93.7	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	465652	18O2-PFHxS	343520	2500	Avg	1.165116			2908.58	2908.58	Yes	2500	116	116.3	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	419216	13C5-PFNA	372117	1250	Avg	0.9905			1421.72	1421.72	Yes	1250	114	113.7	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	125145	18O2-PFHxS	343520	2500	Avg	0.190493			4781.03	4781.04	Yes	5000	96	95.6	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	464554	13C4-PFOS	420380	2500	Avg	0.485385			5691.78	5691.78	Yes	5000	114	113.8	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	367732	13C2-PFDA	327267	1250	Avg	1.111006			1264.22	1264.22	Yes	1250	101	101.1	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	328677	13C4-PFOS	420380	2500	Avg	0.417912			4677.16	4677.16	Yes	5000	94	93.5	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	476704	13C4-PFOS	420380	2500	Avg	1.019176			2781.62	2781.62	Yes	2500	111	111.3	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	316945	13C2-PFDA	327267	1250	Avg	0.978463			1237.22	1237.22	Yes	1250	99	99.0	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	327789	13C2-PFDA	327267	1250	Avg	0.947371			1321.55	1321.55	Yes	1250	106	105.7	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	740853	13C4-PFOS	420380	2500	Avg	1.639711			2686.97	2686.97	Yes	2500	107	107.5	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	302545	13C2-PFDA	327267	1250	Avg	0.890868			1297.13	1297.13	Yes	1250	104	103.8	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3073645	13C4-PFOS	420380	2500	Avg	0.665955			27448	27447.75	Yes	25000	110	109.8	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	187035	13C4-PFOS	420380	2500	Avg	0.421972			2635.95	2635.95	Yes	2500	105	105.4	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3507240	13C4-PFOS	420380	2500	Avg	0.756241			27581	27580.57	Yes	25000	110	110.3	Yes
081524112.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	201123	13C4-PFOS	420380	2500	Avg	0.448486			2666.93	2666.93	Yes	2500	107	106.7	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2244335	13C3-PFBA	1009564	5000	Avg	1.133865			9803.07	9803.08	Yes	10000	98	98.0	Yes
081924046.d	CCB A2	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3765	13C4-PFBA	2244335	10000	Avg	0.85141	0.01	19.703	0.19703	0.197	Yes				
081924046.d	CCB A2	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	890610	13C2-PFHxA	559343	2500	Avg	0.801471			4966.63	4966.63	Yes	5000	99	99.3	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	117756	18O2-PFHxS	338750	2500	Avg	0.189605			4583.46	4583.47	Yes	5000	92	91.7	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	586358	13C2-PFHxA	559343	2500	Avg	1.08809			2408.57	2408.57	Yes	2500	96	96.3	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	421090	18O2-PFHxS	338750	2500	Avg	1.30288			2385.23	2385.24	Yes	2500	95	95.4	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	432164	13C2-PFHxA	559343	2500	Avg	0.196665			9821.6	9821.62	Yes	10000	98	98.2	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	613709	13C2-PFHxA	559343	2500	Avg	1.160285			2364.07	2364.07	Yes	2500	95	94.6	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	137956	18O2-PFHxS	338750	2500	Avg	0.208405			4885.32	4885.32	Yes	5000	98	97.7	Yes
081924046.d	CCB A2	Instrument_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1022	13C2-6:2FTS	137956	5000	Avg	1.837836	0.01	20.155	0.20155	0.2015	Yes				
081924046.d	CCB A2	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	706132	13C4-PFOA	117900	2500	Avg	6.826009			2193.54	2193.54	Yes	2500	88	87.7	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	373416	18O2-PFHxS	338750	2500	Avg	1.165116			2365.29	2365.29	Yes	2500	95	94.6	Yes
081924046.d	CCB A2	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2022	13C3-PFHxS	373416	2500	Avg	1.142081	0.01	11.853	0.11853	0.1185	Yes				
081924046.d	CCB A2	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	374972	13C5-PFNA	398125	1250	Avg	0.9905			1188.6	1188.6	Yes	1250	95	95.1	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	114464	18O2-PFHxS	338750	2500	Avg	0.190493			4434.55	4434.56	Yes	5000	89	88.7	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	386753	13C4-PFOS	449399	2500	Avg	0.485385			4432.57	4432.57	Yes	5000	89	88.7	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	361754	13C2-PFDA	284898	1250	Avg	1.111006			1428.62	1428.62	Yes	1250	114	114.3	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	308176	13C4-PFOS	449399	2500	Avg	0.417912			4102.25	4102.25	Yes	5000	82	82.0	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	404479	13C4-PFOS	449399	2500	Avg	1.019176			2207.78	2207.77	Yes	2500	88	88.3	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	310997	13C2-PFDA	284898	1250	Avg	0.978463			1394.54	1394.54	Yes	1250	112	111.6	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	295255	13C2-PFDA	284898	1250	Avg	0.947371			1367.41	1367.41	Yes	1250	109	109.4	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	645255	13C4-PFOS	449399	2500	Avg	1.639711			2189.13	2189.13	Yes	2500	88	87.6	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	272303	13C2-PFDA	284898	1250	Avg	0.890868			1341.1	1341.1	Yes	1250	107	107.3	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2747865	13C4-PFOS	449399	2500	Avg	0.665955			22954	22954	Yes	25000	92	91.8	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	164474	13C4-PFOS	449399	2500	Avg	0.421972			2168.31	2168.31	Yes	2500	87	86.7	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3145768	13C4-PFOS	449399	2500	Avg	0.756241			23141	23140.59	Yes	25000	93	92.6	Yes
081924046.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	178907	13C4-PFOS	449399	2500	Avg	0.448486			2219.15	2219.15	Yes	2500	89	88.8	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2215244	13C3-PFBA	997795	5000	Avg	1.133865			9790.14	9790.14	Yes	10000	98	97.9	Yes
081924063.d	CCB A3	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2982	13C4-PFBA	2215244	10000	Avg	0.85141	0.01	15.811	0.15811	0.1581	Yes				
081924063.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	916334	13C2-PFHxA	565458	2500	Avg	0.801471			5054.82	5054.82	Yes	5000	101	101.1	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
081924063.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	119467	18O2-PFHxS	345071	2500	Avg	0.189605			4564.88	4564.88	Yes	5000	91	91.3	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	600846	13C2-PFHxA	565458	2500	Avg	1.08809			2441.39	2441.39	Yes	2500	98	97.7	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	403931	18O2-PFHxS	345071	2500	Avg	1.30288			2246.13	2246.13	Yes	2500	90	89.8	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	443131	13C2-PFHxA	565458	2500	Avg	0.196665			9961.94	9961.96	Yes	10000	100	99.6	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	634454	13C2-PFHxA	565458	2500	Avg	1.160285			2417.55	2417.55	Yes	2500	97	96.7	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	135776	18O2-PFHxS	345071	2500	Avg	0.208405			4720.05	4720.05	Yes	5000	94	94.4	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	692604	13C4-PFOA	112238	2500	Avg	6.826009			2260.05	2260.05	Yes	2500	90	90.4	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	347336	18O2-PFHxS	345071	2500	Avg	1.165116			2159.79	2159.79	Yes	2500	86	86.4	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	338756	13C5-PFNA	373387	1250	Avg	0.9905			1144.94	1144.94	Yes	1250	92	91.6	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	120712	18O2-PFHxS	345071	2500	Avg	0.190493			4590.95	4590.95	Yes	5000	92	91.8	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	399208	13C4-PFOS	420467	2500	Avg	0.485385			4890.14	4890.14	Yes	5000	98	97.8	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	349719	13C2-PFDA	319658	1250	Avg	1.111006			1230.91	1230.91	Yes	1250	98	98.5	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	317601	13C4-PFOS	420467	2500	Avg	0.417912			4518.61	4518.61	Yes	5000	90	90.4	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	435539	13C4-PFOS	420467	2500	Avg	1.019176			2540.89	2540.89	Yes	2500	102	101.6	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	284621	13C2-PFDA	319658	1250	Avg	0.978463			1137.49	1137.49	Yes	1250	91	91.0	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	300690	13C2-PFDA	319658	1250	Avg	0.947371			1241.15	1241.15	Yes	1250	99	99.3	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	675537	13C4-PFOS	420467	2500	Avg	1.639711			2449.57	2449.57	Yes	2500	98	98.0	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	270558	13C2-PFDA	319658	1250	Avg	0.890868			1187.6	1187.6	Yes	1250	95	95.0	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2870060	13C4-PFOS	420467	2500	Avg	0.665955			25624	25624.43	Yes	25000	102	102.5	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	167965	13C4-PFOS	420467	2500	Avg	0.421972			2366.7	2366.7	Yes	2500	95	94.7	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3150931	13C4-PFOS	420467	2500	Avg	0.756241			24773	24773.47	Yes	25000	99	99.1	Yes
081924063.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	178209	13C4-PFOS	420467	2500	Avg	0.448486			2362.6	2362.59	Yes	2500	95	94.5	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2140008	13C3-PFBA	960346	5000	Avg	1.133865			9826.44	9826.44	Yes	10000	98	98.3	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	894002	13C2-PFHxA	552706	2500	Avg	0.801471			5045.41	5045.41	Yes	5000	101	100.9	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	119835	18O2-PFHxS	305539	2500	Avg	0.189605			5171.38	5171.39	Yes	5000	103	103.4	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	595302	13C2-PFHxA	552706	2500	Avg	1.08809			2474.68	2474.68	Yes	2500	99	99.0	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	417998	18O2-PFHxS	305539	2500	Avg	1.30288			2625.08	2625.08	Yes	2500	105	105.0	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	429037	13C2-PFHxA	552706	2500	Avg	0.196665			9867.62	9867.64	Yes	10000	99	98.7	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	604032	13C2-PFHxA	552706	2500	Avg	1.160285			2354.73	2354.73	Yes	2500	94	94.2	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	134294	18O2-PFHxS	305539	2500	Avg	0.208405			5272.57	5272.56	Yes	5000	105	105.5	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	694213	13C4-PFOA	114502	2500	Avg	6.826009			2220.51	2220.51	Yes	2500	89	88.8	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	384493	18O2-PFHxS	305539	2500	Avg	1.165116			2700.18	2700.18	Yes	2500	108	108.0	Yes
081924075.d	CCB A4	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2517	13C3-PFHxS	384493	2500	Avg	1.142081	0.01	14.33	0.1433	0.1433	Yes				
081924075.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	361028	13C5-PFNA	387123	1250	Avg	0.9905			1176.92	1176.92	Yes	1250	94	94.2	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	110814	18O2-PFHxS	305539	2500	Avg	0.190493			4759.8	4759.8	Yes	5000	95	95.2	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	381739	13C4-PFOS	397195	2500	Avg	0.485385			4950.13	4950.13	Yes	5000	99	99.0	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	342042	13C2-PFDA	295685	1250	Avg	1.111006			1301.5	1301.5	Yes	1250	104	104.1	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	314698	13C4-PFOS	397195	2500	Avg	0.417912			4739.64	4739.64	Yes	5000	95	94.8	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	423892	13C4-PFOS	397195	2500	Avg	1.019176			2617.84	2617.83	Yes	2500	105	104.7	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	322805	13C2-PFDA	295685	1250	Avg	0.978463			1394.69	1394.69	Yes	1250	112	111.6	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	287729	13C2-PFDA	295685	1250	Avg	0.947371			1283.94	1283.94	Yes	1250	103	102.7	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	678812	13C4-PFOS	397195	2500	Avg	1.639711			2605.66	2605.66	Yes	2500	104	104.2	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	267457	13C2-PFDA	295685	1250	Avg	0.890868			1269.17	1269.17	Yes	1250	102	101.5	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2777037	13C4-PFOS	397195	2500	Avg	0.665955			26247	26246.6	Yes	25000	105	105.0	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	169869	13C4-PFOS	397195	2500	Avg	0.421972			2533.77	2533.77	Yes	2500	101	101.4	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3077518	13C4-PFOS	397195	2500	Avg	0.756241			25614	25613.95	Yes	25000	102	102.5	Yes
081924075.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	181292	13C4-PFOS	397195	2500	Avg	0.448486			2544.29	2544.29	Yes	2500	102	101.8	Yes

Key

	from quantitation report
	from reported calibration
	from lab report/EDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
ND	not detected
ng/L	nanograms per liter
RF	response factor

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
080724022.d	ZQ15603-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3234032	13C3-PFBA	1537734	5000	Avg	1.130641					9300.54	9300.5444				10000	93	93	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1326299	13C2-PFHxA	815183	2500	Avg	0.8402					4841.09	4841.0956				5000	97	97	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	180746	18O2-PFHxS	491489	2500	Avg	0.200536					4584.61	4584.6116				5000	92	92	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	821143	13C2-PFHxA	815183	2500	Avg	1.104288					2280.45	2280.4541				2500	91	91	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	619845	18O2-PFHxS	491489	2500	Avg	1.299121					2426.94	2426.9437				2500	97	97	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	652401	13C2-PFHxA	815183	2500	Avg	0.205187					9751.01	9751.0115				10000	98	98	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	948158	13C2-PFHxA	815183	2500	Avg	1.198314					2426.58	2426.582				2500	97	97	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	195712	18O2-PFHxS	491489	2500	Avg	0.236825					4203.55	4203.549				5000	84	84	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1039695	13C4-PFOA	168430	2500	Avg	6.698736					2303.74	2303.741				2500	92	92	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	530270	18O2-PFHxS	491489	2500	Avg	1.157763					2329.72	2329.7193				2500	93	93	Yes			
080724022.d	ZQ15603-001		Method_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2146	13C3-PFHxS	530270	2500	Avg	1.144236	8.8421	5	500	1	0.08842	0.0884	ND	0.088	Yes							
080724022.d	ZQ15603-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	500192	13C5-PFNA	601823	1250	Avg	0.988588					1050.9	1050.903				1250	84	84	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	175216	18O2-PFHxS	491489	2500	Avg	0.213625					4172.04	4172.0345				5000	83	83	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	546430	13C4-PFOS	584888	2500	Avg	0.548279					4259.91	4259.908				5000	85	85	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	470473	13C2-PFDA	461542	1250	Avg	1.165674					1093.09	1093.0912				1250	87	87	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	432163	13C4-PFOS	584888	2500	Avg	0.420694					4390.85	4390.8496				5000	88	88	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	568416	13C4-PFOS	584888	2500	Avg	1.004997					2417.51	2417.513				2500	97	97	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	417942	13C2-PFDA	461542	1250	Avg	1.107859					1021.72	1021.7163				1250	82	82	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	380340	13C2-PFDA	461542	1250	Avg	1.018582					1011.29	1011.2879				1250	81	81	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	880589	13C4-PFOS	584888	2500	Avg	1.722863					2184.69	2184.6899				2500	87	87	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	326029	13C2-PFDA	461542	1250	Avg	0.914538					965.5	965.5022				1250	77	77	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	3614218	13C4-PFOS	584888	2500	Avg	0.727301					21241	21240.6331				25000	85	85	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	169294	13C4-PFOS	584888	2500	Avg	0.453376					1596.06	1596.0641				2500	64	64	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	3907598	13C4-PFOS	584888	2500	Avg	0.801502					20839	20838.7932				25000	83	83	Yes			
080724022.d	ZQ15603-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	185521	13C4-PFOS	584888	2500	Avg	0.486842					1628.82	1628.8172				2500	65	65	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3009740	13C3-PFBA	1481726	5000	Avg	1.130641					8982.69	8982.6888				10000	90	90	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2765078	13C4-PFBA	3009740	10000	Avg	0.834189	11013	5	500	1	110.13	110.1321	110	110	Yes	96	115	115	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1215757	13C2-PFHxA	815017	2500	Avg	0.8402					4438.51	4438.5125				5000	89	89	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1211625	13C5-PFPeA	1215757	5000	Avg	0.891585	5588.93	5	500	1	55.889	55.8893	56	56	Yes	48	116	116	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1220985	13C5-PFPeA	1215757	5000	Avg	0.917127	5475.25	5	500	1	54.753	54.7525	55	55	Yes	48	114	114	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	164668	18O2-PFHxS	478395	2500	Avg	0.200536					4291.11	4291.1158				5000	86	86	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	643559	13C2-4:2FTS	164668	5000	Avg	1.822044	10725	5	500	1	107.25	107.2483	110	110	Yes	90	119	119	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	802995	13C2-PFHxA	815017	2500	Avg	1.104288					2230.51	2230.5082				2500	89	89	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	780429	13C5-PFHxA	802995	2500	Avg	0.89827	2704.91	5	500	1	27.049	27.0492	27	27	Yes	24	113	113	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3574101	13C5-PFHxA	802995	2500	Avg	0.169304	65724	5	500	1	657.24	657.2442	660	660	Yes	600	110	110	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	560508	18O2-PFHxS	478395	2500	Avg	1.299121					2254.68	2254.6835				2500	90	90	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	640989	13C3-PFBS	560508	2500	Avg	1.180999	2420.8	5	500	1	24.208	24.208	24	24	Yes	21	114	115	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	585137	13C2-PFHxA	815017	2500	Avg	0.205187					8747.44	8747.4418				10000	87	87	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	881906	13C2-PFHxA	815017	2500	Avg	1.198314					2257.49	2257.4857				2500	90	90	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	943400	13C4-PFHpA	881906	2500	Avg	1.029691	2597.21	5	500	1	25.972	25.9721	26	26	Yes	24	108	108	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	179907	18O2-PFHxS	478395	2500	Avg	0.236825					3969.85	3969.8481				5000	79	79	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	761127	13C2-6:2FTS	179907	5000	Avg	1.74466	12125	5	500	1	121.25	121.2462	120	120	Yes	91	133	133	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	991193	13C4-PFOA	170082	2500	Avg	6.698736					2174.94	2174.9387				2500	87	87	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	969761	13C8-PFOA	991193	2500	Avg	0.927161	2638.1	5	500	1	26.381	26.381	26	26	Yes	24	110	110	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	521145	18O2-PFHxS	478395	2500	Avg	1.157763					2352.3	2352.2977				2500	94	94	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	595713	13C3-PFHxS	521145	2500	Avg	1.151629	2481.45	5	500	1	24.815	24.8145	25	25	Yes	23	110	108	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	540723	13C3-PFHxS	521145	2500	Avg	1.144236	2266.94	5	500	1	22.669	22.6694	23	23	Yes	22	103	103	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	478097	13C5-PFNA	524785	1250	Avg	0.988588					1151.94	1151.9385				1250	92	92	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	902354	13C9-PFNA	478097	1250	Avg	0.849909	2775.87	5	500	1	27.759	27.7587	28	28	Yes	24	116	116	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	162761	18O2-PFHxS	478395	2500	Avg	0.213625					3981.55	3981.5452				5000	80	80	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	629951	13C2-8:2FTS	162761	5000	Avg	1.68797	11465	5	500	1	114.65	114.6467	110	110	Yes	92	124	125	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	481373	13C4-PFOS	553320	2500	Avg	0.548279					3966.83	3966.8315				5000	79	79	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	228423	D3-NMeFOSAA	481373	5000	Avg	0.798372	2971.82	5	500	1	29.718	29.7182	30	30	Yes	24	124	124	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	455916	13C2-PFDA	431009	1250	Avg	1.165674					1134.31	1134.3091				1250	91	91	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	868048	13C6-PFDA	455916	1250	Avg	0.867931	2742.1	5	500	1	27.421	27.421	27	27	Yes	24	114	114	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	370915	13C4-PFOS	553320	2500	Avg	0.420694					3983.56	3983.5633				5000	80	80	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	225663	D5-NEtFOSAA	370915	5000	Avg	1.036789	2934.04	5	500	1	29.34	29.3404	29	29	Yes	24	122	122	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	514954	13C4-PFOS	553320	2500	Avg	1.004997					2315.09	2315.087				2500	93	93	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	519713	13C8-PFOS	514954	2500	Avg	0.954873	2642.35	5	500	1	26.423	26.4235	26	26	Yes	23	116	115	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	497905	13C8-PFOS	514954	2500	Avg	0.990455	2440.53	5	500	1	24.405	24.4053	24	24	Yes	22	110	111	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	591779	13C8-PFOS	514954	2500	Avg	1.152095	2493.69	5	500	1	24.937	24.9369	25	25	Yes	23	108	108	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	374631	13C2-PFDA	431009	1250	Avg	1.107859					980.72	980.7152				1250	78	78	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	812662	13C7-PFUnA	374631	1250	Avg	0.9124	2971.88	5	500	1	29.719	29.7188	30	30	Yes	24	124	124	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	336340	13C2-PFDA	431009	1250	Avg	1.018582					957.65	957.6486				1250	77	77	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	812875	13C4-PFOS	553320	2500	Avg	1.722863					2131.75	2131.7519				2500	85	85	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	844409	13C8-PFOSA	812875	2500	Avg	0.978797	2653.24	5	500	1	26.532	26.5324	27	27	Yes	24	111	111	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	279729	13C2-PFDA	431009	1250	Avg	0.914538					887.07	887.0731				1250	71	71	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	3280591	13C4-PFOS	553320	2500	Avg	0.727301					20380	20379.8764				25000	82	82	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3591212	D7-NMeFOSE	3280591	25000	Avg	1.00959	27107	5	500	1	271.07	271.0715	270	270	Yes	240	113	113	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	158388	13C4-PFOS	553320	2500	Avg	0.453376					1578.44	1578.4375				2500	63	63	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	153073	D3-NMeFOSA	158388	2500	Avg	0.916555	2636.08	5	500	1	26.361	26.3608	26	26	Yes	24	110	110	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	3524490	13C4-PFOS	553320	2500	Avg	0.801502					19868	19868.0531				25000	79	79	Yes			
080724023.d	ZQ15603-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	170665	13C4-PFOS	553320	2500	Avg	0.486842					1583.87	1583.8719				2500	63	63	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2953700	13C3-PFBA	1468373	5000	Avg	1.130641					8895.6	8895.6004				10000	89	89.0	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	247800	13C4-PFBA	2953700	10000	Avg	0.834189	1005.7	5	500	1	10.057	10.057	10	10	Yes	8	126	125.7	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1192989	13C2-PFHxA	807972	2500	Avg	0.8402					4393.37	4393.3668				5000	88	87.9	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	110984	13C5-PFPeA	1192989	5000	Avg	0.891585	521.71	5	500	1	5.2171	5.2171	5.2	5.2	Yes	4	130	130.4	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	109398	13C5-PFPeA	1192989	5000	Avg	0.917127	499.94	5	500	1	4.9994	4.9994	5.0	5.0	Yes	4	125	125.0	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	163243	18O2-PFHxS	453237	2500	Avg	0.200536					4490.11	4490.1089				5000	90	89.8	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	62158	13C2-4:2FTS	163243	5000	Avg	1.822044	1044.9	5	500	1	10.449	10.449	10	10	Yes	7.5	139	139.3	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	781882	13C2-PFHxA	807972	2500	Avg	1.104288					2190.8	2190.7991				2500	88	87.6	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	75768	13C5-PFHxA	781882	2500	Avg	0.89827	269.7	5	500	1	2.697	2.697	2.7	2.7	Yes	2	135	134.9	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	338909	13C5-PFHxA	781882	2500	Avg	0.169304	6400.5	5	500	1	64.005	64.005	64	64	Yes	50	128	128.0	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	546301	18O2-PFHxS	453237	2500	Avg	1.299121					2319.52	2319.5142				2500	93	92.8	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	56276	13C3-PFBS	546301	2500	Avg	1.180999	218.06	5	500	1	2.1806	2.1806	2.2	2.2	Yes	1.8	123	121.1	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	593796	13C2-PFHxA	807972	2500	Avg	0.205187					8954.29	8954.2893				10000	90	89.5	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	853018	13C2-PFHxA	807972	2500	Avg	1.198314					2202.58	2202.5778				2500	88	88.1	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	93163	13C4-PFHpA	853018	2500	Avg	1.029691	265.17	5	500	1	2.6517	2.6517	2.7	2.7	Yes	2	133	132.6	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	182356	18O2-PFHxS	453237	2500	Avg	0.236825					4247.25	4247.2435				5000	85	84.9	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	60115	13C2-6:2FTS	182356	5000	Avg	1.74466	944.76	5	500	1	9.4476	9.4476	9.4	9.4	Yes	7.6	124	124.3	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	939962	13C4-PFOA	159732	2500	Avg	6.698736					2196.17	2196.1678				2500	88	87.8	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	89059	13C8-PFOA	939962	2500	Avg	0.927161	255.48	5	500	1	2.5548	2.5548	2.6	2.6	Yes	2	128	127.7	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	486079	18O2-PFHxS	453237	2500	Avg	1.157763					2315.8	2315.8042				2500	93	92.6	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	51092	13C3-PFHxS	486079	2500	Avg	1.151629	228.18	5	500	1	2.2818	2.2818	2.3	2.3	Yes	1.9	121	120.1	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	51133	13C3-PFHxS	486079	2500	Avg	1.144236	229.84	5	500	1	2.2984	2.2984	2.3	2.3	Yes	1.8	126	127.7	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	411221	13C5-PFNA	548845	1250	Avg	0.988588					947.37	947.3714				1250	76	75.8	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	83575	13C9-PFNA	411221	1250	Avg	0.849909	298.91	5	500	1	2.9891	2.9891	3.0	3.0	Yes	2	149	149.5	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	161170	18O2-PFHxS	453237	2500	Avg	0.213625					4161.48	4161.4701				5000	83	83.2	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	58156	13C2-8:2FTS	161170	5000	Avg	1.68797	1068.85	5	500	1	10.688	10.6885	11	11	Yes	7.7	139	138.8	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	522808	13C4-PFOS	599470	2500	Avg	0.548279					3976.61	3976.6115				5000	80	79.5	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	20018	D3-NMeFOSAA	522808	5000	Avg	0.798372	239.8	5	500	1	2.398	2.398	2.4	2.4	Yes	2	120	119.9	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	455222	13C2-PFDA	418976	1250	Avg	1.165674					1165.11	1165.1102				1250	93	93.2	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	69032	13C6-PFDA	455222	1250	Avg	0.867931	218.4	5	500	1	2.184	2.184	2.2	2.2	Yes	2	109	109.2	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	397421	13C4-PFOS	599470	2500	Avg	0.420694					3939.64	3939.6446				5000	79	78.8	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	21489	D5-NEtFOSAA	397421	5000	Avg	1.036789	260.76	5	500	1	2.6076	2.6076	2.6	2.6	Yes	2	130	130.4	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	524978	13C4-PFOS	599470	2500	Avg	1.004997					2178.46	2178.4565				2500	87	87.1	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	45558	13C8-PFOS	524978	2500	Avg	0.954873	227.21	5	500	1	2.2721	2.2721	2.3	2.3	Yes	1.9	120	119.6	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	46074	13C8-PFOS	524978	2500	Avg	0.990455	221.52	5	500	1	2.2152	2.2152	2.2	2.2	Yes	1.9	120	116.6	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	55875	13C8-PFOS	524978	2500	Avg	1.152095	230.96	5	500	1	2.3096	2.3096	2.3	2.3	Yes	1.9	120	121.6	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	380375	13C2-PFDA	418976	1250	Avg	1.107859					1024.35	1024.3499				1250	82	81.9	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	77304	13C7-PFUnA	380375	1250	Avg	0.9124	278.43	5	500	1	2.7843	2.7843	2.8	2.8	Yes	2	139	139.2	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	349090	13C2-PFDA	418976	1250	Avg	1.018582					1022.5	1022.4976				1250	82	81.8	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	794980	13C4-PFOS	599470	2500	Avg	1.722863					1924.32	1924.3232				2500	77	77.0	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	76482	13C8-PFOSA	794980	2500	Avg	0.978797	245.73	5	500	1	2.4573	2.4573	2.5	2.5	Yes	2	123	122.9	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	297144	13C2-PFDA	418976	1250	Avg	0.914538					969.36	969.3622				1250	78	77.5	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	3301755	13C4-PFOS	599470	2500	Avg	0.727301					18932	18932.2929				25000	76	75.7	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	321627	D7-NMeFOSE	3301755	25000	Avg	1.00959	2412.14	5	500	1	24.121	24.1214	24	24	Yes	20	121	120.6	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	153270	13C4-PFOS	599470	2500	Avg	0.453376					1409.84	1409.8444				2500	56	56.4	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	13211	D3-NMeFOSA	153270	2500	Avg	0.916555	235.1	5	500	1	2.351	2.351	2.4	2.4	Yes	2	118	117.6	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	3556717	13C4-PFOS	599470	2500	Avg	0.801502					18506	18506.2002				25000	74	74.0	Yes			
080724024.d	ZQ15603-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	168575	13C4-PFOS	599470	2500	Avg	0.486842					1444.03	1444.0349				2500	58	57.8	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C4-PFBA	SESI-0111	3702275	13C3-PFBA	1622055	5000	Avg	1.130641					10094	10093.6531				10000	101	101	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	525230	13C4-PFBA	3702275	10000	Avg	0.834189	1700.66	5	462.71	1	18.377	18.3771	18	18	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1432025	13C2-PFHxA	826131	2500	Avg	0.8402					5157.73	5157.7349				5000	103	103	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1427581	13C5-PFPeA	1432025	5000	Avg	0.917127	5434.89	5	462.71	1	58.729	58.7289	59	59	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	197719	18O2-PFHxS	504202	2500	Avg	0.200536					4888.68	4888.6788				5000	98	98	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	6418	13C2-4:2FTS	197719	5000	Avg	1.822044	89.076	5	462.71	1	0.96255	0.9626	0.96	0.96	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C5-PFHxA	SESI-0113	919069	13C2-PFHxA	826131	2500	Avg	1.104288					2518.59	2518.5864				2500	101	101	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	2960880	13C5-PFHxA	919069	2500	Avg	0.89827	8966.14	5	462.71	1	96.887	96.8873	97	97	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	39172	13C5-PFHxA	919069	2500	Avg	0.169304	629.36	5	462.71	1	6.8008	6.8008	6.8	6.8	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C3-PFBS	SESI-0116	671924	18O2-PFHxS	504202	2500	Avg	1.299121					2564.52	2564.5194				2500	103	103	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	486704	13C3-PFBS	671924	2500	Avg	1.180999	1533.33	5	462.71	1	16.569	16.569	17	17	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	689010	13C2-PFHxA	826131	2500	Avg	0.205187					10162	10161.7094				10000	102	102	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1031623	13C2-PFHxA	826131	2500	Avg	1.198314					2605.2	2605.2024				2500	104	104	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1276634	13C4-PFHpA	1031623	2500	Avg	1.029691	3004.54	5	462.71	1	32.467	32.4668	32	32	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	246580	18O2-PFHxS	504202	2500	Avg	0.236825					5162.57	5162.5675				5000	103	103	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	841083	13C2-6:2FTS	246580	5000	Avg	1.74466	9775.53	5	462.71	1	105.63	105.6334	110	110	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C8-PFOA	SESI-0097	1183637	13C4-PFOA	177642	2500	Avg	6.698736					2486.68	2486.6807				2500	99	99	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	3480602	13C8-PFOA	1183637	2500	Avg	0.927161	7929.05	5	462.71	1	85.681	85.6805	86	86	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C3-PFHxS	SESI-0096	570875	18O2-PFHxS	504202	2500	Avg	1.157763					2444.88	2444.8758				2500	98	98	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	496829	13C3-PFHxS	570875	2500	Avg	1.151629	1889.27	5	462.71	1	20.415	20.4152	20	20	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	6675197	13C3-PFHxS	570875	2500	Avg	1.144236	25547	5	462.71	1	276.06	276.0632	280	280	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C9-PFNA	SESI-0099	539733	13C5-PFNA	530022	1250	Avg	0.988588					1287.6	1287.5964				1250	103	103	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	383028	13C9-PFNA	539733	1250	Avg	0.849909	1043.73	5	462.71	1	11.278	11.2785	11	11	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	244085	18O2-PFHxS	504202	2500	Avg	0.213625					5665.33	5665.3202				5000	113	113	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	221152	13C2-8:2FTS	244085	5000	Avg	1.68797	2683.83	5	462.71	1	29.001	29.0012	29	29	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	542984	13C4-PFOS	557114	2500	Avg	0.548279					4444.08	4444.0748				5000	89	89	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	136290	D3-NMeFOSAA	542984	5000	Avg	0.798372	1571.96	5	462.71	1	16.986	16.9865	17	17	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C6-PFDA	SESI-0115	520962	13C2-PFDA	489148	1250	Avg	1.165674					1142.09	1142.0856				1250	91	91	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	91759	13C6-PFDA	520962	1250	Avg	0.867931	253.67	5	462.71	1	2.7411	2.7411	2.7	2.7	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	345324	13C4-PFOS	557114	2500	Avg	0.420694					3683.46	3683.4636				5000	74	74	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	93527	D5-NEtFOSAA	345324	5000	Avg	1.036789	1306.14	5	462.71	1	14.114	14.114	14	14	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C8-PFOS	SESI-0098	551375	13C4-PFOS	557114	2500	Avg	1.004997					2461.94	2461.9444				2500	98	98	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	376245	13C8-PFOS	551375	2500	Avg	0.954873	1786.56	5	462.71	1	19.305	19.3054	19	19	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	39325	13C8-PFOS	551375	2500	Avg	1.152095	154.77	5	462.71	1	1.6724	1.6724	1.7	1.7	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C7-PFUnA	SESI-0117	435085	13C2-PFDA	489148	1250	Avg	1.107859					1003.6	1003.597				1250	80	80	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	9546	13C7-PFUnA	435085	1250	Avg	0.9124	30.059	5	462.71	1	0.32481	0.3248	0.32	0.32	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C2-PFDoA	SESI-0118	316138	13C2-PFDA	489148	1250	Avg	1.018582					793.14	793.1411				1250	63	63	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C8-PFOSA	SESI-0107	860922	13C4-PFOS	557114	2500	Avg	1.722863					2242.38	2242.3789				2500	90	90	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	358401	13C8-PFOSA	860922	2500	Avg	0.978797	1063.29	5	462.71	1	11.49	11.4898	11	11	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	261531	13C2-PFDA	489148	1250	Avg	0.914538					730.79	730.7876				1250	58	58	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2337776	13C4-PFOS	557114	2500	Avg	0.727301					14424	14423.9646				25000	58	58	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	13960	D7-NMeFOSE	2337776	25000	Avg	1.00959	147.87	5	462.71	1	1.5979	1.5979	1.6	1.6	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	163110	13C4-PFOS	557114	2500	Avg	0.453376					1614.42	1614.4255				2500	65	65	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1296	D3-NMeFOSA	163110	2500	Avg	0.916555	21.672	5	462.71	1	0.23419	0.2342	0.23	0.23	Yes							
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	1529814	13C4-PFOS	557114	2500	Avg	0.801502					8565.05	8565.0511				25000	34	34	Yes			
080724035.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	157135	13C4-PFOS	557114	2500	Avg	0.486842					1448.37	1448.3744				2500	58	58	Yes			
080824013.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	EIS	13C8-PFOS	SESI-0098	120732	13C4-PFOS	128630	500	Avg	1.004997					466.97	466.9661				500	93	93	Yes			
080824013.d	ZG13006-002	CACMW-001-110-070924	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	6502918	13C8-PFOS	120732	500	Avg	0.990455	27191	5	462.71	5	1469.1	1469.1031	1500	1500	Yes							
080824121.d	ZQ15738-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	2783528	13C3-PFBA	1508786	5000	Avg	1.130641					8158.55	8158.5546				10000	82	82	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1148942	13C2-PFHxA	846433	2500	Avg	0.8402					4038.9	4038.8977				5000	81	81	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	167605	18O2-PFHxS	505182	2500	Avg	0.200536					4136.06	4136.0594				5000	83	83	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	723251	13C2-PFHxA	846433	2500	Avg	1.104288					1934.44	1934.4349				2500	77	77	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	533054	18O2-PFHxS	505182	2500	Avg	1.299121					2030.55	2030.5503				2500	81	81	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	565269	13C2-PFHxA	846433	2500	Avg	0.205187					8136.78	8136.7833				10000	81	81	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	800286	13C2-PFHxA	846433	2500	Avg	1.198314					1972.52	1972.5227				2500	79	79	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	192819	18O2-PFHxS	505182	2500	Avg	0.236825					4029.16	4029.1591				5000	81	81	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	965471	13C4-PFOA	168015	2500	Avg	6.698736					2144.56	2144.5606				2500	86	86	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	512986	18O2-PFHxS	505182	2500	Avg	1.157763					2192.69	2192.6938				2500	88	88	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	417901	13C5-PFNA	583220	1250	Avg	0.988588					906.02	906.0156				1250	72	72	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	159504	18O2-PFHxS	505182	2500	Avg	0.213625					3694.98	3694.9762				5000	74	74	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	519799	13C4-PFOS	636494	2500	Avg	0.548279					3723.74	3723.7415				5000	74	74	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	427532	13C2-PFDA	452811	1250	Avg	1.165674					1012.48	1012.4756				1250	81	81	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	386732	13C4-PFOS	636494	2500	Avg	0.420694					3610.68	3610.684				5000	72	72	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	497563	13C4-PFOS	636494	2500	Avg	1.004997					1944.59	1944.5943				2500	78	78	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	391009	13C2-PFDA	452811	1250	Avg	1.107859					974.31	974.3058				1250	78	78	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	393237	13C2-PFDA	452811	1250	Avg	1.018582					1065.74	1065.7404				1250	85	85	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	833717	13C4-PFOS	636494	2500	Avg	1.722863					1900.7	1900.7001				2500	76	76	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	295645	13C2-PFDA	452811	1250	Avg	0.914538					892.41	892.4047				1250	71	71	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	3151893	13C4-PFOS	636494	2500	Avg	0.727301					17022	17021.7017				25000	68	68	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	173158	13C4-PFOS	636494	2500	Avg	0.453376					1500.13	1500.1329				2500	60	60	Yes			
080824121.d	ZQ15738-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	3471537	13C4-PFOS	636494	2500	Avg	0.801502					17012	17012.2941				25000	68	68	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
080824121.d	ZQ15738-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	179926	13C4-PFOS	636494	2500	Avg	0.486842					1451.61	1451.6154				2500	58	58	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2838955	13C3-PFBA	1558567	5000	Avg	1.130641					8055.24	8055.2367				10000	81	81	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2328270	13C4-PFBA	2838955	10000	Avg	0.834189	9831.29	5	500	1	98.313	98.3129	98	98	Yes	96	102	102	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1212653	13C2-PFHxA	841670	2500	Avg	0.8402					4286.98	4286.9856				5000	86	86	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1107010	13C5-PFPeA	1212653	5000	Avg	0.891585	5119.44	5	500	1	51.194	51.1944	51	51	Yes	48	107	107	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1026204	13C5-PFPeA	1212653	5000	Avg	0.917127	4613.58	5	500	1	46.136	46.1358	46	46	Yes	48	96	96	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	167225	18O2-PFHxS	525983	2500	Avg	0.200536					3963.48	3963.4844				5000	79	79	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	591828	13C2-4:2FTS	167225	5000	Avg	1.822044	9711.93	5	500	1	97.119	97.1193	97	97	Yes	90	108	108	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	758430	13C2-PFHxA	841670	2500	Avg	1.104288					2040.01	2040.0054				2500	82	82	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	647676	13C5-PFHxA	758430	2500	Avg	0.89827	2376.7	5	500	1	23.767	23.7671	24	24	Yes	24	99	99	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3363887	13C5-PFHxA	758430	2500	Avg	0.169304	65493	5	500	1	654.93	654.9357	650	650	Yes	600	109	109	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	529470	18O2-PFHxS	525983	2500	Avg	1.299121					1937.14	1937.1357				2500	77	77	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	550115	13C3-PFBS	529470	2500	Avg	1.180999	2199.39	5	500	1	21.994	21.9939	22	22	Yes	21	103	105	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	595254	13C2-PFHxA	841670	2500	Avg	0.205187					8616.89	8616.8918				10000	86	86	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	832871	13C2-PFHxA	841670	2500	Avg	1.198314					2064.45	2064.4543				2500	83	83	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	861769	13C4-PFHpA	832871	2500	Avg	1.029691	2512.15	5	500	1	25.122	25.1215	25	25	Yes	24	105	105	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	180480	18O2-PFHxS	525983	2500	Avg	0.236825					3622.18	3622.1784				5000	72	72	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	716099	13C2-6:2FTS	180480	5000	Avg	1.74466	11371	5	500	1	113.71	113.7112	110	110	Yes	91	125	125	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1013694	13C4-PFOA	180921	2500	Avg	6.698736					2091.05	2091.053				2500	84	84	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	837924	13C8-PFOA	1013694	2500	Avg	0.927161	2228.86	5	500	1	22.289	22.2886	22	22	Yes	24	93	93	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	464464	18O2-PFHxS	525983	2500	Avg	1.157763					1906.78	1906.7805				2500	76	76	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	527325	13C3-PFHxS	464464	2500	Avg	1.151629	2464.64	5	500	1	24.646	24.6464	25	25	Yes	23	109	107	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	452730	13C3-PFHxS	464464	2500	Avg	1.144236	2129.67	5	500	1	21.297	21.2967	21	21	Yes	22	97	97	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	454789	13C5-PFNA	642728	1250	Avg	0.988588					894.7	894.6999				1250	72	72	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	694568	13C9-PFNA	454789	1250	Avg	0.849909	2246.17	5	500	1	22.462	22.4617	22	22	Yes	24	94	94	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	200350	18O2-PFHxS	525983	2500	Avg	0.213625					4457.65	4457.646				5000	89	89	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	589509	13C2-8:2FTS	200350	5000	Avg	1.68797	8715.78	5	500	1	87.158	87.1578	87	87	Yes	92	95	95	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	532968	13C4-PFOS	655484	2500	Avg	0.548279					3707.47	3707.4682				5000	74	74	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	206033	D3-NMeFOSAA	532968	5000	Avg	0.798372	2421.03	5	500	1	24.21	24.2103	24	24	Yes	24	101	101	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	429460	13C2-PFDA	487789	1250	Avg	1.165674					944.11	944.1122				1250	76	76	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	724471	13C6-PFDA	429460	1250	Avg	0.867931	2429.53	5	500	1	24.295	24.2953	24	24	Yes	24	101	101	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	432403	13C4-PFOS	655484	2500	Avg	0.420694					3920.12	3920.1284				5000	78	78	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	207902	D5-NEtFOSAA	432403	5000	Avg	1.036789	2318.73	5	500	1	23.187	23.1873	23	23	Yes	24	97	97	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	532054	13C4-PFOS	655484	2500	Avg	1.004997					2019.15	2019.1513				2500	81	81	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	476819	13C8-PFOS	532054	2500	Avg	0.954873	2346.35	5	500	1	23.463	23.4635	23	23	Yes	23	103	102	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	450782	13C8-PFOS	532054	2500	Avg	0.990455	2138.53	5	500	1	21.385	21.3853	21	21	Yes	22	96	97	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	545673	13C8-PFOS	532054	2500	Avg	1.152095	2225.5	5	500	1	22.255	22.255	22	22	Yes	23	96	97	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	398730	13C2-PFDA	487789	1250	Avg	1.107859					922.3	922.3005				1250	74	74	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	727715	13C7-PFUnA	398730	1250	Avg	0.9124	2500.39	5	500	1	25.004	25.0039	25	25	Yes	24	104	104	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	372042	13C2-PFDA	487789	1250	Avg	1.018582					936	935.996				1250	75	75	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	870179	13C4-PFOS	655484	2500	Avg	1.722863					1926.35	1926.3525				2500	77	77	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	781699	13C8-PFOSA	870179	2500	Avg	0.978797	2294.45	5	500	1	22.944	22.9445	23	23	Yes	24	96	96	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	262460	13C2-PFDA	487789	1250	Avg	0.914538					735.43	735.4267				1250	59	59	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	3456463	13C4-PFOS	655484	2500	Avg	0.727301					18126	18125.7356				25000	73	73	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3439799	D7-NMeFOSE	3456463	25000	Avg	1.00959	24643	5	500	1	246.43	246.4314	250	250	Yes	240	103	103	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	182426	13C4-PFOS	655484	2500	Avg	0.453376					1534.64	1534.6386				2500	61	61	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	163686	D3-NMeFOSA	182426	2500	Avg	0.916555	2447.41	5	500	1	24.474	24.4741	24	24	Yes	24	102	102	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	3733119	13C4-PFOS	655484	2500	Avg	0.801502					17764	17764.1789				25000	71	71	Yes			
080824122.d	ZQ15738-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	189658	13C4-PFOS	655484	2500	Avg	0.486842					1485.8	1485.8024				2500	59	59	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C4-PFBA	SESI-0111	3621288	13C3-PFBA	1912067	5000	Avg	1.130641					8375.39	8375.3938				10000	84	84	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	131902	13C4-PFBA	3621288	10000	Avg	0.834189	436.64	5	477.21	1	4.5749	4.5749	4.6	4.6	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1462958	13C2-PFHxA	987121	2500	Avg	0.8402					4409.8	4409.799				5000	88	88	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	9984	13C5-PFPeA	1462958	5000	Avg	0.891585	38.272	5	477.21	1	0.401	0.401	0.4	0.4	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	360151	13C5-PFPeA	1462958	5000	Avg	0.917127	1342.13	5	477.21	1	14.062	14.0622	14	14	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	185718	18O2-PFHxS	651282	2500	Avg	0.200536					3554.94	3554.9425				5000	71	71	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	4602	13C2-4:2FTS	185718	5000	Avg	1.822044	67.999	5	477.21	1	0.71247	0.7125	0.71	0.71	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C5-PFHxA	SESI-0113	919049	13C2-PFHxA	987121	2500	Avg	1.104288					2107.78	2107.7832				2500	84	84	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	567712	13C5-PFHxA	919049	2500	Avg	0.89827	1719.18	5	477.21	1	18.013	18.0129	18	18	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C3-PFBS	SESI-0116	673188	18O2-PFHxS	651282	2500	Avg	1.299121					1989.11	1989.1049				2500	80	80	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	186473	13C3-PFBS	673188	2500	Avg	1.180999	586.37	5	477.21	1	6.1437	6.1437	6.1	6.1	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	676099	13C2-PFHxA	987121	2500	Avg	0.205187					8345.07	8345.0716				10000	83	83	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1034598	13C2-PFHxA	987121	2500	Avg	1.198314					2186.61	2186.6064				2500	87	87	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	241507	13C4-PFHpA	1034598	2500	Avg	1.029691	566.75	5	477.21	1	5.9382	5.9382	5.9	5.9	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	204396	18O2-PFHxS	651282	2500	Avg	0.236825					3312.96	3312.9569				5000	66	66	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	271571	13C2-6:2FTS	204396	5000	Avg	1.74466	3807.77	5	477.21	1	39.896	39.8961	40	40	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C8-PFOA	SESI-0097	1114985	13C4-PFOA	215502	2500	Avg	6.698736					1930.92	1930.9226				2500	77	77	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	666795	13C8-PFOA	1114985	2500	Avg	0.927161	1612.53	5	477.21	1	16.895	16.8954	17	17	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C3-PFHxS	SESI-0096	566391	18O2-PFHxS	651282	2500	Avg	1.157763					1877.88	1877.879				2500	75	75	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	176603	13C3-PFHxS	566391	2500	Avg	1.151629	676.88	5	477.21	1	7.092	7.092	7.1	7.1	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1640104	13C3-PFHxS	566391	2500	Avg	1.144236	6326.73	5	477.21	1	66.289	66.2888	66	66	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C9-PFNA	SESI-0099	540787	13C5-PFNA	723873	1250	Avg	0.988588					944.62	944.6231				1250	76	76	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	39365	13C9-PFNA	540787	1250	Avg	0.849909	107.06	5	477.21	1	1.1217	1.1217	1.1	1.1	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	159927	18O2-PFHxS	651282	2500	Avg	0.213625					2873.7	2873.6948				5000	57	57	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	41764	13C2-8:2FTS	159927	5000	Avg	1.68797	773.54	5	477.21	1	8.1049	8.1049	8.1	8.1	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	451193	13C4-PFOS	744258	2500	Avg	0.548279					2764.25	2764.2495				5000	55	55	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	11346	D3-NMeFOSAA	451193	5000	Avg	0.798372	157.49	5	477.21	1	1.6501	1.6501	1.7	1.7	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C6-PFDA	SESI-0115	479282	13C2-PFDA	565600	1250	Avg	1.165674					908.69	908.6876				1250	73	73	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	305650	13C4-PFOS	744258	2500	Avg	0.420694					2440.47	2440.4762				5000	49	49	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	12306	D5-NEtFOSAA	305650	5000	Avg	1.036789	194.17	5	477.21	1	2.0344	2.0344	2	2	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C8-PFOS	SESI-0098	591050	13C4-PFOS	744258	2500	Avg	1.004997					1975.49	1975.4951				2500	79	79	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	76832	13C8-PFOS	591050	2500	Avg	0.954873	340.34	5	477.21	1	3.5659	3.5659	3.6	3.6	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4181890	13C8-PFOS	591050	2500	Avg	0.990455	17859	5	477.21	1	187.12	187.1174	190	190	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C7-PFUnA	SESI-0117	396617	13C2-PFDA	565600	1250	Avg	1.107859					791.2	791.2021				1250	63	63	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C2-PFDoA	SESI-0118	304997	13C2-PFDA	565600	1250	Avg	1.018582					661.76	661.7595				1250	53	53	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C8-PFOSA	SESI-0107	858131	13C4-PFOS	744258	2500	Avg	1.722863					1673.09	1673.0902				2500	67	67	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	71970	13C8-PFOSA	858131	2500	Avg	0.978797	214.21	5	477.21	1	2.2444	2.2444	2.2	2.2	Yes							
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	58442	13C2-PFDA	565600	1250	Avg	0.914538					141.23	141.229				1250	11	11	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	74369	13C4-PFOS	744258	2500	Avg	0.727301					343.47	343.4743				25000	1	1	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	158049	13C4-PFOS	744258	2500	Avg	0.453376					1170.98	1170.9807				2500	47	47	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	43717	13C4-PFOS	744258	2500	Avg	0.801502					183.22	183.2155				25000	1	1	Yes			
080824125.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	150796	13C4-PFOS	744258	2500	Avg	0.486842					1040.44	1040.443				2500	42	42	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	3290989	13C3-PFBA	1750090	5000	Avg	1.130641					8315.94	8315.9395				10000	83	83	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2573977	13C4-PFBA	3290989	10000	Avg	0.834189	9375.92	5	490.49	1	95.577	95.577	96	96	Yes	98	93	92.9	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	1324523	13C2-PFHxA	931580	2500	Avg	0.8402					4230.55	4230.5485				5000	85	85	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1102649	13C5-PFPeA	1324523	5000	Avg	0.891585	4668.58	5	490.49	1	47.591	47.591	48	48	Yes	49	96	96.3	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1366118	13C5-PFPeA	1324523	5000	Avg	0.917127	5623.02	5	490.49	1	57.32	57.3204	57	57	Yes	49	88	88.3	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	180717	18O2-PFHxS	522272	2500	Avg	0.200536					4313.7	4313.6999				5000	86	86	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	542638	13C2-4:2FTS	180717	5000	Avg	1.822044	8239.91	5	490.49	1	83.997	83.9967	84	84	Yes	92	91	90.5	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	834688	13C2-PFHxA	931580	2500	Avg	1.104288					2028.44	2028.4377				2500	81	81	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1197262	13C5-PFHxA	834688	2500	Avg	0.89827	3992.07	5	490.49	1	40.695	40.6947	41	41	Yes	24	93	94.5	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3735065	13C5-PFHxA	834688	2500	Avg	0.169304	66076	5	490.49	1	673.57	673.576	670	670	Yes	610	110	110.4	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	596503	18O2-PFHxS	522272	2500	Avg	1.299121					2197.89	2197.8917				2500	88	88	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	713393	13C3-PFBS	596503	2500	Avg	1.180999	2531.67	5	490.49	1	25.808	25.8075	26	26	Yes	22	91	89.4	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	666284	13C2-PFHxA	931580	2500	Avg	0.205187					8714.24	8714.2376				10000	87	87	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	919861	13C2-PFHxA	931580	2500	Avg	1.198314					2060.02	2060.0199				2500	82	82	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1062929	13C4-PFHpA	919861	2500	Avg	1.029691	2805.53	5	490.49	1	28.599	28.5993	29	29	Yes	24	93	94.4	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	191143	18O2-PFHxS	522272	2500	Avg	0.236825					3863.44	3863.4395				5000	77	77	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	888802	13C2-6:2FTS	191143	5000	Avg	1.74466	13326	5	490.49	1	135.85	135.8456	140	140	Yes	93	103	103.2	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	1077651	13C4-PFOA	198331	2500	Avg	6.698736					2027.84	2027.8446				2500	81	81	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1386065	13C8-PFOA	1077651	2500	Avg	0.927161	3468.09	5	490.49	1	35.353	35.3533	35	35	Yes	24	75	76.9	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	479669	18O2-PFHxS	522272	2500	Avg	1.157763					1983.19	1983.1942				2500	79	79	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	699446	13C3-PFHxS	479669	2500	Avg	1.151629	3165.48	5	490.49	1	32.269	32.2686	32	32	Yes	23	109	109.5	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1884017	13C3-PFHxS	479669	2500	Avg	1.144236	8581.58	5	490.49	1	87.48	87.4797	87	87	Yes	22	95	96.3	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	492048	13C5-PFNA	636661	1250	Avg	0.988588					977.22	977.2235				1250	78	78	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	692751	13C9-PFNA	492048	1250	Avg	0.849909	2070.65	5	490.49	1	21.108	21.108	21	21	Yes	24	82	83.3	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	157612	18O2-PFHxS	522272	2500	Avg	0.213625					3531.68	3531.6729				5000	71	71	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	520786	13C2-8:2FTS	157612	5000	Avg	1.68797	9787.58	5	490.49	1	99.773	99.7735	100	100	Yes	94	98	97.5	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	336826	13C4-PFOS	624876	2500	Avg	0.548279					2457.82	2457.8205				5000	49	49	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	119137	D3-NMeFOSAA	336826	5000	Avg	0.798372	2215.16	5	490.49	1	22.581	22.5811	23	23	Yes	24	86	87.2	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	413687	13C2-PFDA	528122	1250	Avg	1.165674					839.98	839.983				1250	67	67	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorodecanoic acid (PFDA)	335-76-2	659569	13C6-PFDA	413687	1250	Avg	0.867931	2296.22	5	490.49	1	23.407	23.4074	23	23	Yes	24	96	97.5	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	173708	13C4-PFOS	624876	2500	Avg	0.420694					1651.96	1651.9605				5000	33	33	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	81284	D5-NEtFOSAA	173708	5000	Avg	1.036789	2256.65	5	490.49	1	23.004	23.0041	23	23	Yes	24	86	87.4	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	522151	13C4-PFOS	624876	2500	Avg	1.004997					2078.63	2078.6315				2500	83	83	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	509227	13C8-PFOS	522151	2500	Avg	0.954873	2553.35	5	490.49	1	26.029	26.0285	26	26	Yes	23	96	97.7	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4206251	13C8-PFOS	522151	2500	Avg	0.990455	20333	5	490.49	1	207.27	207.2737	210	210	Yes	23	89	87.6	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	401910	13C8-PFOS	522151	2500	Avg	1.152095	1670.26	5	490.49	1	17.026	17.0265	17	17	Yes	24	72	70.9	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	304740	13C2-PFDA	528122	1250	Avg	1.107859					651.06	651.0596				1250	52	52	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	520642	13C7-PFUnA	304740	1250	Avg	0.9124	2340.64	5	490.49	1	23.86	23.8602	24	24	Yes	24	98	99.4	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	99909	13C2-PFDA	528122	1250	Avg	1.018582					232.16	232.1584				1250	19	19	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	807951	13C4-PFOS	624876	2500	Avg	1.722863					1876.21	1876.2057				2500	75	75	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	771219	13C8-PFOSA	807951	2500	Avg	0.978797	2438.04	5	490.49	1	24.853	24.8531	25	25	Yes	24	92	94.2	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	3452	13C2-PFDA	528122	1250	Avg	0.914538					8.934	8.934				1250	1	1	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	7847	13C4-PFOS	624876	2500	Avg	0.727301					43.165	43.1654				25000	0	0	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	8880	D7-NMeFOSE	7847	25000	Avg	1.00959	28022	5	490.49	1	285.66	285.6565	290	290	Yes	240	117	119.0	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	134557	13C4-PFOS	624876	2500	Avg	0.453376					1187.39	1187.3915				2500	47	47	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	111555	D3-NMeFOSA	134557	2500	Avg	0.916555	2261.33	5	490.49	1	23.052	23.0518	23	23	Yes	24	94	96.0	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	6632	13C4-PFOS	624876	2500	Avg	0.801502					33.104	33.1044				25000	0	0	Yes			
080824126.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	65932	13C4-PFOS	624876	2500	Avg	0.486842					541.82	541.8192				2500	22	22	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	3412158	13C3-PFBA	1699478	5000	Avg	1.130641					8878.89	8878.8938				10000	89	89	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2658344	13C4-PFBA	3412158	10000	Avg	0.834189	9339.37	5	464.65	1	100.5	100.499	100	100	Yes	100	93	95.9	Yes	5	5.0	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	1402515	13C2-PFHxA	905468	2500	Avg	0.8402					4608.84	4608.8411				5000	92	92	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1118577	13C5-PFPeA	1402515	5000	Avg	0.891585	4472.66	5	464.65	1	48.129	48.1293	48	48	Yes	52	92	91.8	Yes	1.1	1.1	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1424400	13C5-PFPeA	1402515	5000	Avg	0.917127	5536.88	5	464.65	1	59.581	59.5812	60	60	Yes	52	88	87.5	Yes	3.9	3.9	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	187898	18O2-PFHxS	544480	2500	Avg	0.200536					4302.17	4302.1732				5000	86	86	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	568255	13C2-4:2FTS	187898	5000	Avg	1.822044	8299.13	5	464.65	1	89.305	89.3051	89	89	Yes	97	91	91.3	Yes	6.1	6.1	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	885575	13C2-PFHxA	905468	2500	Avg	1.104288					2214.17	2214.1646				2500	89	89	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1216101	13C5-PFHxA	885575	2500	Avg	0.89827	3821.88	5	464.65	1	41.126	41.1265	41	41	Yes	26	90	88.9	Yes	1.1	1.1	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3762668	13C5-PFHxA	885575	2500	Avg	0.169304	62740	5	464.65	1	675.13	675.13	680	680	Yes	650	105	103.9	Yes	0.23	0.2	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	602330	18O2-PFHxS	544480	2500	Avg	1.299121					2128.84	2128.8397				2500	85	85	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	728919	13C3-PFBS	602330	2500	Avg	1.180999	2561.74	5	464.65	1	27.566	27.5664	28	28	Yes	23	94	93.1	Yes	6.6	6.6	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	656216	13C2-PFHxA	905468	2500	Avg	0.205187					8830.06	8830.0645				10000	88	88	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	964383	13C2-PFHxA	905468	2500	Avg	1.198314					2222.01	2222.009				2500	89	89	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1155722	13C4-PFHpA	964383	2500	Avg	1.029691	2909.62	5	464.65	1	31.31	31.3099	31	31	Yes	26	98	97.6	Yes	9	9.0	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	217163	18O2-PFHxS	544480	2500	Avg	0.236825					4210.34	4210.3322				5000	84	84	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	911444	13C2-6:2FTS	217163	5000	Avg	1.74466	12028	5	464.65	1	129.43	129.4337	130	130	Yes	98	91	91.4	Yes	4.8	4.8	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	1091990	13C4-PFOA	199004	2500	Avg	6.698736					2047.88	2047.8776				2500	82	82	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1407047	13C8-PFOA	1091990	2500	Avg	0.927161	3474.36	5	464.65	1	37.387	37.3868	37	37	Yes	26	79	78.8	Yes	5.6	5.6	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	549262	18O2-PFHxS	544480	2500	Avg	1.157763					2178.3	2178.3014				2500	87	87	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	695832	13C3-PFHxS	549262	2500	Avg	1.151629	2750.12	5	464.65	1	29.594	29.5935	30	30	Yes	24	93	93.8	Yes	8.6	8.6	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1911234	13C3-PFHxS	549262	2500	Avg	1.144236	7602.54	5	464.65	1	81.809	81.8093	82	82	Yes	24	66	64.7	Yes	6.7	6.7	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	534428	13C5-PFNA	615500	1250	Avg	0.988588					1097.88	1097.8824				1250	88	88	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	782027	13C9-PFNA	534428	1250	Avg	0.849909	2152.14	5	464.65	1	23.159	23.1587	23	23	Yes	26	85	84.8	Yes	9.3	9.3	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	175088	18O2-PFHxS	544480	2500	Avg	0.213625					3763.24	3763.244				5000	75	75	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	553167	13C2-8:2FTS	175088	5000	Avg	1.68797	9358.48	5	464.65	1	100.7	100.7046	100	100	Yes	99	93	93.5	Yes	0.93	0.9	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	444957	13C4-PFOS	640236	2500	Avg	0.548279					3168.96	3168.957				5000	63	63	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	173258	D3-NMeFOSAA	444957	5000	Avg	0.798372	2438.6	5	464.65	1	26.241	26.2412	26	26	Yes	26	95	94.6	Yes	15	15.0	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	471495	13C2-PFDA	485135	1250	Avg	1.165674					1042.19	1042.1912				1250	83	83	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorodecanoic acid (PFDA)	335-76-2	671264	13C6-PFDA	471495	1250	Avg	0.867931	2050.41	5	464.65	1	22.064	22.064	22	22	Yes	26	85	84.9	Yes	5.9	5.9	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	301523	13C4-PFOS	640236	2500	Avg	0.420694					2798.68	2798.6852				5000	56	56	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	170316	D5-NEtFOSAA	301523	5000	Avg	1.036789	2724.05	5	464.65	1	29.313	29.3129	29	29	Yes	26	106	104.9	Yes	24	24.1	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	551884	13C4-PFOS	640236	2500	Avg	1.004997					2144.29	2144.2872				2500	86	86	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	528715	13C8-PFOS	551884	2500	Avg	0.954873	2508.24	5	464.65	1	26.991	26.9906	27	27	Yes	25	95	93.7	Yes	3.6	3.6	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4276131	13C8-PFOS	551884	2500	Avg	0.990455	19557	5	464.65	1	210.45	210.4517	210	210	Yes	24	97	97.2	Yes	1.5	1.5	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	481857	13C8-PFOS	551884	2500	Avg	1.152095	1894.62	5	464.65	1	20.388	20.3876	20	20	Yes	25	82	81.6	Yes	18	18.0	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	362366	13C2-PFDA	485135	1250	Avg	1.107859					842.77	842.7725				1250	67	67	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	591973	13C7-PFUnA	362366	1250	Avg	0.9124	2238.1	5	464.65	1	24.084	24.0837	24	24	Yes	26	93	92.6	Yes	0.93	0.9	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	304217	13C2-PFDA	485135	1250	Avg	1.018582					769.55	769.5465				1250	62	62	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	844039	13C4-PFOS	640236	2500	Avg	1.722863					1912.99	1912.9855				2500	77	77	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	815163	13C8-PFOSA	844039	2500	Avg	0.978797	2466.77	5	464.65	1	26.544	26.5444	27	27	Yes	26	94	93.5	Yes	6.6	6.6	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	152016	13C2-PFDA	485135	1250	Avg	0.914538					428.29	428.2871				1250	34	34	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	129768	13C4-PFOS	640236	2500	Avg	0.727301					696.71	696.7121				25000	3	3	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	106487	D7-NMeFOSE	129768	25000	Avg	1.00959	20320	5	464.65	1	218.66	218.6593	220	220	Yes	260	85	84.1	Yes	27	26.6	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	158570	13C4-PFOS	640236	2500	Avg	0.453376					1365.72	1365.7224				2500	55	55	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	133925	D3-NMeFOSA	158570	2500	Avg	0.916555	2303.68	5	464.65	1	24.789	24.7894	25	25	Yes	26	96	95.3	Yes	7.3	7.3	Yes
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	68819	13C4-PFOS	640236	2500	Avg	0.801502					335.28	335.2769				25000	1	1	Yes			
080824127.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	155226	13C4-PFOS	640236	2500	Avg	0.486842					1245.02	1245.0201				2500	50	50	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C4-PFBA	SESI-0111	3508830	13C3-PFBA	1888688	5000	Avg	1.133865					8192.39	8192.3927				10000	82	82	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	30355	13C4-PFBA	3508830	10000	Avg	0.85141	101.61	5	100	1	5.0804	5.0805	5.1	5.1	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C5-PFHxA	SESI-0113	996625	13C2-PFHxA	1161536	2500	Avg	1.08809					1971.4	1971.3979				2500	79	79	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	134776	13C5-PFHxA	996625	2500	Avg	0.896378	377.16	5	100	1	18.858	18.858	19	19	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C3-PFBS	SESI-0116	695819	18O2-PFHxS	708676	2500	Avg	1.30288					1884.01	1884.0141				2500	75	75	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	41823	13C3-PFBS	695819	2500	Avg	1.208343	124.36	5	100	1	6.2178	6.218	6.2	6.2	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	764883	13C2-PFHxA	1161536	2500	Avg	0.196665					8370.94	8370.96				10000	84	84	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1051771	13C2-PFHxA	1161536	2500	Avg	1.160285					1951.03	1951.0296				2500	78	78	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	62772	13C4-PFHpA	1051771	2500	Avg	1.019994	146.28	5	100	1	7.314	7.314	7.3	1.5	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	217004	18O2-PFHxS	708676	2500	Avg	0.208405					3673.26	3673.2619				5000	73	73	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	63711	13C2-6:2FTS	217004	5000	Avg	1.837836	798.75	5	100	1	39.937	39.9375	40	40	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C8-PFOA	SESI-0097	1296626	13C4-PFOA	228251	2500	Avg	6.826009					2080.54	2080.5358				2500	83	83	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	187927	13C8-PFOA	1296626	2500	Avg	0.882262	410.69	5	100	1	20.535	20.5345	21	21	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C3-PFHxS	SESI-0096	623507	18O2-PFHxS	708676	2500	Avg	1.165116					1887.84	1887.8368				2500	76	76	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	48714	13C3-PFHxS	623507	2500	Avg	1.154897	169.13	5	100	1	8.4563	8.4565	8.5	8.5	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	362693	13C3-PFHxS	623507	2500	Avg	1.142081	1273.33	5	100	1	63.666	63.6665	64	64	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C9-PFNA	SESI-0099	558683	13C5-PFNA	770354	1250	Avg	0.9905					915.23	915.2308				1250	73	73	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	12875	13C9-PFNA	558683	1250	Avg	0.792037	36.37	5	100	1	1.8185	1.8185	1.8	1.8	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	186238	18O2-PFHxS	708676	2500	Avg	0.190493					3448.9	3448.9076				5000	69	69	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	13681	13C2-8:2FTS	186238	5000	Avg	1.879444	195.43	5	100	1	9.7715	9.7715	9.8	9.8	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	564777	13C4-PFOS	846604	2500	Avg	0.485385					3435.98	3435.9778				5000	69	69	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C6-PFDA	SESI-0115	548926	13C2-PFDA	667086	1250	Avg	1.111006					925.82	925.8179				1250	74	74	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	480353	13C4-PFOS	846604	2500	Avg	0.417912					3394.18	3394.1838				5000	68	68	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C8-PFOS	SESI-0098	656489	13C4-PFOS	846604	2500	Avg	1.019176					1902.12	1902.1202				2500	76	76	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	22321	13C8-PFOS	656489	2500	Avg	0.936113	90.802	5	100	1	4.5401	4.5401	4.5	4.5	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	987369	13C8-PFOS	656489	2500	Avg	1.011018	3719.06	5	100	1	185.95	185.953	190	190	Yes							
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C7-PFUnA	SESI-0117	442089	13C2-PFDA	667086	1250	Avg	0.978463					846.63	846.6297				1250	68	68	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C2-PFDoA	SESI-0118	404365	13C2-PFDA	667086	1250	Avg	0.947371					799.8	799.8005				1250	64	64	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C8-PFOSA	SESI-0107	1015400	13C4-PFOS	846604	2500	Avg	1.639711					1828.65	1828.6456				2500	73	73	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	388059	13C2-PFDA	667086	1250	Avg	0.890868					816.23	816.2301				1250	65	65	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	3677988	13C4-PFOS	846604	2500	Avg	0.665955					16309	16308.9168				25000	65	65	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	188965	13C4-PFOS	846604	2500	Avg	0.421972					1322.38	1322.3835				2500	53	53	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	4032956	13C4-PFOS	846604	2500	Avg	0.756241					15748	15747.9112				25000	63	63	Yes			
081524007.d	ZG13006-007	CACMW-003-160-071124	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	207136	13C4-PFOS	846604	2500	Avg	0.448486					1363.85	1363.8493				2500	55	55	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	3730150	13C3-PFBA	2058168	5000	Avg	1.133865					7991.97	7991.9752				10000	80	80	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3284191	13C4-PFBA	3730150	10000	Avg	0.85141	10341	5	100	1	517.05	517.05	520	520	Yes	480	107	106.7	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	1580193	13C2-PFHxA	1250203	2500	Avg	0.801471					3942.59	3942.5916				5000	79	79	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1712480	13C5-PFPeA	1580193	5000	Avg	0.858289	6313.23	5	100	1	315.66	315.6615	320	320	Yes	240	131	131.5	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1550174	13C5-PFPeA	1580193	5000	Avg	0.913924	5366.98	5	100	1	268.35	268.349	270	270	Yes	240	106	105.5	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	226475	18O2-PFHxS	735424	2500	Avg	0.189605					4060.43	4060.4362				5000	81	81	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	737956	13C2-4:2FTS	226475	5000	Avg	1.821802	8942.91	5	100	1	447.15	447.1455	450	450	Yes	450	99	99.4	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	1069207	13C2-PFHxA	1250203	2500	Avg	1.08809					1964.97	1964.9724				2500	79	79	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1135497	13C5-PFHxA	1069207	2500	Avg	0.896378	2961.92	5	100	1	148.1	148.096	150	150	Yes	120	108	107.7	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3965597	13C5-PFHxA	1069207	2500	Avg	0.165672	55968	5	100	1	2798.38	2798.4	2800	2800	Yes	3000	93	93.3	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	718598	18O2-PFHxS	735424	2500	Avg	1.30288					1874.92	1874.9246				2500	75	75	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	849914	13C3-PFBS	718598	2500	Avg	1.208343	2447.03	5	100	1	122.35	122.3515	120	120	Yes	110	109	105.6	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	767953	13C2-PFHxA	1250203	2500	Avg	0.196665					7808.47	7808.4896				10000	78	78	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	1147991	13C2-PFHxA	1250203	2500	Avg	1.160285					1978.49	1978.4873				2500	79	79	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1263037	13C4-PFHpA	1147991	2500	Avg	1.019994	2696.62	5	100	1	134.83	134.831	130	130	Yes	120	106	106.3	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	234568	18O2-PFHxS	735424	2500	Avg	0.208405					3826.16	3826.1575				5000	77	77	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	925197	13C2-6:2FTS	234568	5000	Avg	1.837836	10731	5	100	1	536.54	536.55	540	540	Yes	460	109	108.0	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	1389069	13C4-PFOA	249308	2500	Avg	6.826009					2040.61	2040.6135				2500	82	82	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1461890	13C8-PFOA	1389069	2500	Avg	0.882262	2982.18	5	100	1	149.11	149.109	150	150	Yes	120	107	107.1	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	633188	18O2-PFHxS	735424	2500	Avg	1.165116					1847.42	1847.4203				2500	74	74	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	790038	13C3-PFHxS	633188	2500	Avg	1.154897	2700.92	5	100	1	135.05	135.046	140	140	Yes	110	112	115.1	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1041039	13C3-PFHxS	633188	2500	Avg	1.142081	3598.96	5	100	1	179.95	179.948	180	180	Yes	110	106	105.7	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	659771	13C5-PFNA	873969	1250	Avg	0.9905					952.69	952.6925				1250	76	76	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	1117450	13C9-PFNA	659771	1250	Avg	0.792037	2673	5	100	1	133.65	133.65	130	130	Yes	120	110	109.9	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	207418	18O2-PFHxS	735424	2500	Avg	0.190493					3701.43	3701.4308				5000	74	74	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	748330	13C2-8:2FTS	207418	5000	Avg	1.879444	9598.15	5	100	1	479.91	479.9075	480	480	Yes	460	102	102.2	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	612055	13C4-PFOS	816053	2500	Avg	0.485385					3863.01	3863.0092				5000	77	77	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	262336	D3-NMeFOSAA	612055	5000	Avg	0.841107	2547.92	5	100	1	127.4	127.396	130	130	Yes	120	105	106.2	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	578652	13C2-PFDA	717277	1250	Avg	1.111006					907.66	907.662				1250	73	73	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorodecanoic acid (PFDA)	335-76-2	965610	13C6-PFDA	578652	1250	Avg	0.879258	2372.35	5	100	1	118.62	118.6175	120	120	Yes	120	99	98.8	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	485125	13C4-PFOS	816053	2500	Avg	0.417912					3556.23	3556.235				5000	71	71	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	277859	D5-NEtFOSAA	485125	5000	Avg	1.061343	2698.27	5	100	1	134.91	134.9135	130	130	Yes	120	112	112.4	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	721116	13C4-PFOS	816053	2500	Avg	1.019176					2167.59	2167.5922				2500	87	87	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	690340	13C8-PFOS	721116	2500	Avg	0.936113	2556.64	5	100	1	127.83	127.832	130	130	Yes	110	108	112.1	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1795717	13C8-PFOS	721116	2500	Avg	1.011018	6157.63	5	100	1	307.88	307.8815	310	310	Yes	110	109	110.8	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	723008	13C8-PFOS	721116	2500	Avg	1.078285	2324.58	5	100	1	116.23	116.229	120	120	Yes	120	101	96.9	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	484886	13C2-PFDA	717277	1250	Avg	0.978463					863.61	863.6114				1250	69	69	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	923192	13C7-PFUnA	484886	1250	Avg	0.906176	2626.33	5	100	1	131.32	131.3165	130	131	Yes	120	109	109.4	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	430648	13C2-PFDA	717277	1250	Avg	0.947371					792.18	792.1829				1250	63	63	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	1067609	13C4-PFOS	816053	2500	Avg	1.639711					1994.65	1994.6493				2500	80	80	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1041227	13C8-PFOSA	1067609	2500	Avg	0.96599	2524.06	5	100	1	126.2	126.203	130	130	Yes	120	105	105.2	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	413153	13C2-PFDA	717277	1250	Avg	0.890868					808.2	808.2034				1250	65	65	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	3950559	13C4-PFOS	816053	2500	Avg	0.665955					18173	18173.3634				25000	73	73	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4052104	D7-NMeFOSE	3950559	25000	Avg	1.019907	25142	5	100	1	1257.1	1257.1	1300	1300	Yes	1200	105	104.8	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	207446	13C4-PFOS	816053	2500	Avg	0.421972					1506.06	1506.0628				2500	60	60	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	180562	D3-NMeFOSA	207446	2500	Avg	0.911057	2388.45	5	100	1	119.42	119.4225	120	120	Yes	120	100	99.5	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	4227209	13C4-PFOS	816053	2500	Avg	0.756241					17124	17124.3914				25000	68	68	Yes			
081524008.d	ZG13006-007MS	CACMW-003-160-071124	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	211266	13C4-PFOS	816053	2500	Avg	0.448486					1443.12	1443.1197				2500	58	58	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	4056448	13C3-PFBA	2122688	5000	Avg	1.133865					8426.91	8426.9109				10000	84	84	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3395578	13C4-PFBA	4056448	10000	Avg	0.85141	9831.71	5	100	1	491.59	491.5855	490	490	Yes	480	101	101.4	Yes	5	5.0	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	1706573	13C2-PFHxA	1264579	2500	Avg	0.801471					4209.51	4209.5057				5000	84	84	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1795560	13C5-PFPeA	1706573	5000	Avg	0.858289	6129.31	5	100	1	306.47	306.4655	310	310	Yes	240	128	127.7	Yes	3	3.0	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1560129	13C5-PFPeA	1706573	5000	Avg	0.913924	5001.44	5	100	1	250.07	250.072	250	250	Yes	240	98	97.9	Yes	7.1	7.1	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	228858	18O2-PFHxS	741916	2500	Avg	0.189605					4067.25	4067.2567				5000	81	81	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	803143	13C2-4:2FTS	228858	5000	Avg	1.821802	9633.53	5	100	1	481.58	481.5765	480	480	Yes	450	107	107.0	Yes	7.4	7.4	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	1167896	13C2-PFHxA	1264579	2500	Avg	1.08809					2121.94	2121.9414				2500	85	85	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1093602	13C5-PFHxA	1167896	2500	Avg	0.896378	2611.58	5	100	1	130.58	130.579	130	130	Yes	120	93	93.1	Yes	13	12.6	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	4203081	13C5-PFHxA	1167896	2500	Avg	0.165672	54307	5	100	1	2715.34	2715.35	2700	2700	Yes	3000	91	90.5	Yes	3	3.0	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	789056	18O2-PFHxS	741916	2500	Avg	1.30288					2040.74	2040.7447				2500	82	82	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	870013	13C3-PFBS	789056	2500	Avg	1.208343	2281.22	5	100	1	114.06	114.061	110	110	Yes	110	101	98.0	Yes	7	7.0	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	822291	13C2-PFHxA	1264579	2500	Avg	0.196665					8265.93	8265.9449				10000	83	83	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	1239684	13C2-PFHxA	1264579	2500	Avg	1.160285					2112.23	2112.2259				2500	84	84	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1296716	13C4-PFHpA	1239684	2500	Avg	1.019994	2563.75	5	100	1	128.19	128.1875	130	130	Yes	120	101	100.7	Yes	5.1	5.1	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	250328	18O2-PFHxS	741916	2500	Avg	0.208405					4047.5	4047.4973				5000	81	81	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	985905	13C2-6:2FTS	250328	5000	Avg	1.837836	10715	5	100	1	535.75	535.75	540	540	Yes	460	109	107.8	Yes	0.15	0.1	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	1444429	13C4-PFOA	264953	2500	Avg	6.826009					1996.64	1996.6434				2500	80	80	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1426445	13C8-PFOA	1444429	2500	Avg	0.882262	2798.35	5	100	1	139.92	139.9175	140	140	Yes	120	99	99.5	Yes	6.4	6.4	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	713518	18O2-PFHxS	741916	2500	Avg	1.165116					2063.58	2063.5787				2500	83	83	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	826186	13C3-PFHxS	713518	2500	Avg	1.154897	2506.51	5	100	1	125.33	125.3255	130	130	Yes	110	103	106.2	Yes	7.5	7.5	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1143940	13C3-PFHxS	713518	2500	Avg	1.142081	3509.47	5	100	1	175.47	175.4735	180	180	Yes	110	102	101.6	Yes	2.5	2.5	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	720186	13C5-PFNA	873878	1250	Avg	0.9905					1040.04	1040.0385				1250	83	83	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	1142837	13C9-PFNA	720186	1250	Avg	0.792037	2504.4	5	100	1	125.22	125.22	130	130	Yes	120	103	102.8	Yes	6.5	6.5	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	230547	18O2-PFHxS	741916	2500	Avg	0.190493					4078.17	4078.1738				5000	82	82	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	852416	13C2-8:2FTS	230547	5000	Avg	1.879444	9836.32	5	100	1	491.82	491.816	490	490	Yes	460	105	104.8	Yes	2.5	2.5	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	698248	13C4-PFOS	967826	2500	Avg	0.485385					3715.92	3715.9176				5000	74	74	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	271609	D3-NMeFOSAA	698248	5000	Avg	0.841107	2312.35	5	100	1	115.62	115.6175	120	120	Yes	120	95	96.3	Yes	9.7	9.7	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	643086	13C2-PFDA	689979	1250	Avg	1.111006					1048.64	1048.6409				1250	84	84	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorodecanoic acid (PFDA)	335-76-2	1112036	13C6-PFDA	643086	1250	Avg	0.879258	2458.35	5	100	1	122.92	122.9175	120	120	Yes	120	102	102.4	Yes	3.6	3.6	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	557817	13C4-PFOS	967826	2500	Avg	0.417912					3447.86	3447.86				5000	69	69	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	290333	D5-NEtFOSAA	557817	5000	Avg	1.061343	2451.99	5	100	1	122.6	122.5995	120	120	Yes	120	102	102.2	Yes	9.6	9.6	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	841689	13C4-PFOS	967826	2500	Avg	1.019176					2133.27	2133.2669				2500	85	85	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	697132	13C8-PFOS	841689	2500	Avg	0.936113	2211.95	5	100	1	110.6	110.5975	110	110	Yes	110	93	96.4	Yes	14	14.5	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1926294	13C8-PFOS	841689	2500	Avg	1.011018	5659.16	5	100	1	282.96	282.958	280	280	Yes	110	87	88.2	Yes	8.4	8.4	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	771911	13C8-PFOS	841689	2500	Avg	1.078285	2126.29	5	100	1	106.31	106.3145	110	110	Yes	120	92	88.6	Yes	8.9	8.9	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	574751	13C2-PFDA	689979	1250	Avg	0.978463					1064.17	1064.1662				1250	85	85	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	971666	13C7-PFUnA	574751	1250	Avg	0.906176	2332.03	5	100	1	116.6	116.6015	120	120	Yes	120	97	97.2	Yes	12	11.9	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	504709	13C2-PFDA	689979	1250	Avg	0.947371					965.15	965.1506				1250	77	77	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	1156841	13C4-PFOS	967826	2500	Avg	1.639711					1822.42	1822.4226				2500	73	73	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1115850	13C8-PFOSA	1156841	2500	Avg	0.96599	2496.31	5	100	1	124.82	124.8155	120	120	Yes	120	104	104.0	Yes	1.1	1.1	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	470526	13C2-PFDA	689979	1250	Avg	0.890868					956.85	956.8512				1250	77	77	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	4438506	13C4-PFOS	967826	2500	Avg	0.665955					17216	17216.095				25000	69	69	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4346829	D7-NMeFOSE	4438506	25000	Avg	1.019907	24006	5	100	1	1200.29	1200.3	1200	1200	Yes	1200	100	100.0	Yes	4.6	4.6	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	221056	13C4-PFOS	967826	2500	Avg	0.421972					1353.2	1353.1982				2500	54	54	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	215139	D3-NMeFOSA	221056	2500	Avg	0.911057	2670.62	5	100	1	133.53	133.531	130	130	Yes	120	111	111.3	Yes	11	11.2	Yes
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	4718692	13C4-PFOS	967826	2500	Avg	0.756241					16118	16117.7396				25000	64	64	Yes			
081524009.d	ZG13006-007MD	CACMW-003-160-071124	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	244188	13C4-PFOS	967826	2500	Avg	0.448486					1406.43	1406.4301				2500	56	56	Yes			

Key

from quantitation report
from reported calibration
from lab report/SEDD
calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
mL	milliliters
ND	not detected
ng/L	nanograms per liter
On Col.	on column
RF	response factor
RPD	relative percent difference

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match ?	Expected Result	%R	Calc. %R	Matc h?	RPD	Calc. RPD	Match?
080924043.d	ZQ15815-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	4173364	13C3-PFBA	2318886	5000	Avg	1.130641					7958.88	7958.8834				10000	80	80	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1670515	13C2-PFHxA	1268966	2500	Avg	0.8402					3917.04	3917.0375				5000	78	78	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	233385	18O2-PFHxS	793541	2500	Avg	0.200536					3666.49	3666.4961				5000	73	73	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	1099915	13C2-PFHxA	1268966	2500	Avg	1.104288					1962.31	1962.3063				2500	78	78	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	817761	18O2-PFHxS	793541	2500	Avg	1.299121					1983.11	1983.1129				2500	79	79	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	787537	13C2-PFHxA	1268966	2500	Avg	0.205187					7561.55	7561.5556				10000	76	76	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	1214298	13C2-PFHxA	1268966	2500	Avg	1.198314					1996.39	1996.3867				2500	80	80	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	271064	18O2-PFHxS	793541	2500	Avg	0.236825					3605.92	3605.9104				5000	72	72	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1370139	13C4-PFOA	264553	2500	Avg	6.698736					1932.85	1932.8541				2500	77	77	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	692650	18O2-PFHxS	793541	2500	Avg	1.157763					1884.8	1884.798				2500	75	75	Yes			
080924043.d	ZQ15815-001		Method_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3492	13C3-PFHxS	692650	2500	Avg	1.144236	11.015	5	500	1	0.11015	0.1102	ND	0.11	Yes							
080924043.d	ZQ15815-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	594684	13C5-PFNA	821786	1250	Avg	0.988588					915	915.0023				1250	73	73	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	235794	18O2-PFHxS	793541	2500	Avg	0.213625					3477.38	3477.3733				5000	70	70	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	730999	13C4-PFOS	932745	2500	Avg	0.548279					3573.49	3573.4874				5000	71	71	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	578947	13C2-PFDA	705201	1250	Avg	1.165674					880.36	880.3569				1250	70	70	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	553113	13C4-PFOS	932745	2500	Avg	0.420694					3523.91	3523.9085				5000	70	70	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	674723	13C4-PFOS	932745	2500	Avg	1.004997					1799.44	1799.4419				2500	72	72	Yes			
080924043.d	ZQ15815-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2948	13C8-PFOS	674723	2500	Avg	0.990455	11.028	5	500	1	0.11028	0.1103	ND	0.11	Yes							
080924043.d	ZQ15815-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	489312	13C2-PFDA	705201	1250	Avg	1.107859					782.89	782.8859				1250	63	63	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	475876	13C2-PFDA	705201	1250	Avg	1.018582					828.12	828.1231				1250	66	66	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	1082117	13C4-PFOS	932745	2500	Avg	1.722863					1683.45	1683.4513				2500	67	67	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	402504	13C2-PFDA	705201	1250	Avg	0.914538					780.13	780.1274				1250	62	62	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	4251578	13C4-PFOS	932745	2500	Avg	0.727301					15668	15667.9813				25000	63	63	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	183202	13C4-PFOS	932745	2500	Avg	0.453376					1083.05	1083.0506				2500	43	43	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	4418591	13C4-PFOS	932745	2500	Avg	0.801502					14776	14775.9792				25000	59	59	Yes			
080924043.d	ZQ15815-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	192768	13C4-PFOS	932745	2500	Avg	0.486842					1061.26	1061.2653				2500	42	42	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3784574	13C3-PFBA	1936055	5000	Avg	1.130641					8644.59	8644.5937				10000	86	86	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2878888	13C4-PFBA	3784574	10000	Avg	0.834189	9118.92	5	500	1	91.189	91.1892	91	91	Yes	96	95	95	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1550017	13C2-PFHxA	1061238	2500	Avg	0.8402					4345.91	4345.9127				5000	87	87	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1294962	13C5-PFPeA	1550017	5000	Avg	0.917127	4554.72	5	500	1	45.547	45.5471	46	46	Yes	48	95	95	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	218882	18O2-PFHxS	611285	2500	Avg	0.200536					4463.89	4463.895				5000	89	89	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	708251	13C2-4:2FTS	218882	5000	Avg	1.822044	8879.5	5	500	1	88.795	88.795	89	89	Yes	90	99	99	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	980337	13C2-PFHxA	1061238	2500	Avg	1.104288					2091.32	2091.3189				2500	84	84	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	827315	13C5-PFHxA	980337	2500	Avg	0.89827	2348.7	5	500	1	23.487	23.4871	23	23	Yes	24	98	98	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	4705262	13C5-PFHxA	980337	2500	Avg	0.169304	70873	5	500	1	708.73	708.7306	710	710	Yes	600	118	118	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	729915	18O2-PFHxS	611285	2500	Avg	1.299121					2297.84	2297.8356				2500	92	92	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	690371	13C3-PFBS	729915	2500	Avg	1.180999	2002.17	5	500	1	20.022	20.0217	20	20	Yes	21	94	95	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	757802	13C2-PFHxA	1061238	2500	Avg	0.205187					8700.28	8700.2778				10000	87	87	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1150273	13C2-PFHxA	1061238	2500	Avg	1.198314					2261.3	2261.2965				2500	90	90	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1046315	13C4-PFHpA	1150273	2500	Avg	1.029691	2208.49	5	500	1	22.085	22.0849	22	22	Yes	24	92	92	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	255702	18O2-PFHxS	611285	2500	Avg	0.236825					4415.74	4415.7334				5000	88	88	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	789113	13C2-6:2FTS	255702	5000	Avg	1.74466	8844.32	5	500	1	88.443	88.4432	88	88	Yes	91	97	97	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1243172	13C4-PFOA	230574	2500	Avg	6.698736					2012.19	2012.1856				2500	80	80	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1014223	13C8-PFOA	1243172	2500	Avg	0.927161	2199.82	5	500	1	21.998	21.9982	22	22	Yes	24	92	92	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	619919	18O2-PFHxS	611285	2500	Avg	1.157763					2189.84	2189.8358				2500	88	88	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	630199	13C3-PFHxS	619919	2500	Avg	1.151629	2206.84	5	500	1	22.068	22.0684	22	22	Yes	23	98	96	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	603161	13C3-PFHxS	619919	2500	Avg	1.144236	2125.8	5	500	1	21.258	21.258	21	21	Yes	22	97	97	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	570314	13C5-PFNA	724766	1250	Avg	0.988588					994.97	994.9721				1250	80	80	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	911370	13C9-PFNA	570314	1250	Avg	0.849909	2350.27	5	500	1	23.503	23.5027	24	24	Yes	24	98	98	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	190189	18O2-PFHxS	611285	2500	Avg	0.213625					3641.08	3641.0747				5000	73	73	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	663883	13C2-8:2FTS	190189	5000	Avg	1.68797	10340	5	500	1	103.4	103.3978	100	100	Yes	92	112	112	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	662080	13C4-PFOS	802586	2500	Avg	0.548279					3761.47	3761.4673				5000	75	75	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	258937	D3-NMeFOSAA	662080	5000	Avg	0.798372	2449.34	5	500	1	24.493	24.4934	24	24	Yes	24	102	102	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	553811	13C2-PFDA	582897	1250	Avg	1.165674					1018.83	1018.8322				1250	82	82	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	873635	13C6-PFDA	553811	1250	Avg	0.867931	2271.92	5	500	1	22.719	22.7192	23	23	Yes	24	95	95	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	480032	13C4-PFOS	802586	2500	Avg	0.420694					3554.28	3554.2854				5000	71	71	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	237114	D5-NEtFOSAA	480032	5000	Avg	1.036789	2382.14	5	500	1	23.821	23.8214	24	24	Yes	24	99	99	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	663203	13C4-PFOS	802586	2500	Avg	1.004997					2055.56	2055.5599				2500	82	82	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	625652	13C8-PFOS	663203	2500	Avg	0.954873	2469.91	5	500	1	24.699	24.6991	25	25	Yes	23	108	107	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	561899	13C8-PFOS	663203	2500	Avg	0.990455	2138.54	5	500	1	21.385	21.3854	21	21	Yes	22	96	97	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	729009	13C8-PFOS	663203	2500	Avg	1.152095	2385.27	5	500	1	23.853	23.8527	24	24	Yes	23	103	104	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	488483	13C2-PFDA	582897	1250	Avg	1.107859					945.55	945.5471				1250	76	76	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	820476	13C7-PFUnA	488483	1250	Avg	0.9124	2301.13	5	500	1	23.011	23.0113	23	23	Yes	24	96	96	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	446517	13C2-PFDA	582897	1250	Avg	1.018582					940.07	940.07				1250	75	75	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	1020568	13C4-PFOS	802586	2500	Avg	1.722863					1845.18	1845.1838				2500	74	74	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	893735	13C8-PFOSA	1020568	2500	Avg	0.978797	2236.73	5	500	1	22.367	22.3673	22	22	Yes	24	93	93	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	343850	13C2-PFDA	582897	1250	Avg	0.914538					806.28	806.2792				1250	65	65	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	3906029	13C4-PFOS	802586	2500	Avg	0.727301					16729	16728.9895				25000	67	67	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3665364	D7-NMeFOSE	3906029	25000	Avg	1.00959	23237	5	500	1	232.37	232.3682	230	230	Yes	240	97	97	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	175358	13C4-PFOS	802586	2500	Avg	0.453376					1204.8	1204.8015				2500	48	48	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	4223893	13C4-PFOS	802586	2500	Avg	0.801502					16416	16415.5987				25000	66	66	Yes			
080924044.d	ZQ15815-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	193009	13C4-PFOS	802586	2500	Avg	0.486842					1234.92	1234.9175				2500	49	49	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3847450	13C3-PFBA	2060226	5000	Avg	1.130641					8258.54	8258.54				10000	83	82.6	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	264239	13C4-PFBA	3847450	10000	Avg	0.834189	823.3	5	500	1	8.233	8.2330	8.2	8.2	Yes	8	103	102.9128219	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1564454	13C2-PFHxA	1120647	2500	Avg	0.8402					4153.85	4153.85				5000	83	83.1	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	118318	13C5-PFPeA	1564454	5000	Avg	0.917127	412.31	5	500	1	4.1231	4.1231	4.1	4.1	Yes	4	103	103.0786105	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	221749	18O2-PFHxS	670995	2500	Avg	0.200536					4119.93	4119.93				5000	82	82.4	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	63863	13C2-4:2FTS	221749	5000	Avg	1.822044	790.31	5	500	1	7.9031	7.9031	7.9	7.9	Yes	7.5	105	105.3749851	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	1017120	13C2-PFHxA	1120647	2500	Avg	1.104288					2054.76	2054.76				2500	82	82.2	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	73078	13C5-PFHxA	1017120	2500	Avg	0.89827	199.96	5	500	1	1.9996	1.9996	2.0	2.0	Yes	2	100	99.98102307	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	348940	13C5-PFHxA	1017120	2500	Avg	0.169304	5065.83	5	500	1	50.658	50.6584	51	51	Yes	50	101	101.3167728	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	742798	18O2-PFHxS	670995	2500	Avg	1.299121					2130.31	2130.31				2500	85	85.2	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	66138	13C3-PFBS	742798	2500	Avg	1.180999	188.48	5	500	1	1.8848	1.8848	1.9	1.9	Yes	1.8	106	104.7124463	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	770417	13C2-PFHxA	1120647	2500	Avg	0.205187					8376.2	8376.20				10000	84	83.8	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1118486	13C2-PFHxA	1120647	2500	Avg	1.198314					2082.24	2082.24				2500	83	83.3	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	87770	13C4-PFHpA	1118486	2500	Avg	1.029691	190.52	5	500	1	1.9052	1.9052	1.9	1.9	Yes	2	95	95.26176901	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	243080	18O2-PFHxS	670995	2500	Avg	0.236825					3824.22	3824.22				5000	76	76.5	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	74701	13C2-6:2FTS	243080	5000	Avg	1.74466	880.72	5	500	1	8.8072	8.8072	8.8	8.8	Yes	7.6	116	115.8838181	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1265573	13C4-PFOA	226126	2500	Avg	6.698736					2088.74	2088.74				2500	84	83.5	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	92952	13C8-PFOA	1265573	2500	Avg	0.927161	198.04	5	500	1	1.9804	1.9804	2.0	2.0	Yes	2	99	99.02079198	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	665519	18O2-PFHxS	670995	2500	Avg	1.157763					2141.71	2141.71				2500	86	85.7	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	58199	13C3-PFHxS	665519	2500	Avg	1.151629	189.84	5	500	1	1.8984	1.8984	1.9	1.9	Yes	1.9	101	99.9145827	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	56512	13C3-PFHxS	665519	2500	Avg	1.144236	185.53	5	500	1	1.8553	1.8553	1.9	1.9	Yes	1.8	102	103.0699618	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	582412	13C5-PFNA	756164	1250	Avg	0.988588					973.89	973.89				1250	78	77.9	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	79881	13C9-PFNA	582412	1250	Avg	0.849909	201.72	5	500	1	2.0172	2.0172	2.0	2.0	Yes	2	101	100.8604189	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	213371	18O2-PFHxS	670995	2500	Avg	0.213625					3721.39	3721.38				5000	74	74.4	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match ?	Expected Result	%R	Calc. %R	Matc h?	RPD	Calc. RPD	Match?
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	68698	13C2-8:2FTS	213371	5000	Avg	1.68797	953.7	5	500	1	9.537	9.5370	9.5	9.5	Yes	7.7	124	123.85777	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	664236	13C4-PFOS	746325	2500	Avg	0.548279					4058.19	4058.19				5000	81	81.2	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	22033	D3-NMeFOSAA	664236	5000	Avg	0.798372	207.74	5	500	1	2.0774	2.0774	2.1	2.1	Yes	2	104	103.8689966	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	584951	13C2-PFDA	617041	1250	Avg	1.165674					1016.57	1016.57				1250	81	81.3	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	80435	13C6-PFDA	584951	1250	Avg	0.867931	198.04	5	500	1	1.9804	1.9804	2.0	2.0	Yes	2	99	99.01942392	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	477070	13C4-PFOS	746325	2500	Avg	0.420694					3798.63	3798.64				5000	76	76.0	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	21814	D5-NEtFOSAA	477070	5000	Avg	1.036789	220.51	5	500	1	2.2051	2.2051	2.2	2.2	Yes	2	110	110.2561515	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	649184	13C4-PFOS	746325	2500	Avg	1.004997					2163.79	2163.79				2500	87	86.6	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	50367	13C8-PFOS	649184	2500	Avg	0.954873	203.13	5	500	1	2.0313	2.0313	2.0	2.0	Yes	1.9	107	106.9101824	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	54512	13C8-PFOS	649184	2500	Avg	0.990455	211.95	5	500	1	2.1195	2.1195	2.1	2.1	Yes	1.9	115	111.5516421	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	52425	13C8-PFOS	649184	2500	Avg	1.152095	175.24	5	500	1	1.7524	1.7524	1.8	1.8	Yes	1.9	91	92.22926497	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	469843	13C2-PFDA	617041	1250	Avg	1.107859					859.14	859.14				1250	69	68.7	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	79758	13C7-PFUnA	469843	1250	Avg	0.9124	232.57	5	500	1	2.3257	2.3257	2.3	2.3	Yes	2	116	116.283002	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	426689	13C2-PFDA	617041	1250	Avg	1.018582					848.62	848.62				1250	68	67.9	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	1007405	13C4-PFOS	746325	2500	Avg	1.722863					1958.69	1958.69				2500	78	78.3	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	82630	13C8-PFOSA	1007405	2500	Avg	0.978797	209.5	5	500	1	2.095	2.0950	2.1	2.1	Yes	2	105	104.749277	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	377992	13C2-PFDA	617041	1250	Avg	0.914538					837.29	837.29				1250	67	67.0	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	3772120	13C4-PFOS	746325	2500	Avg	0.727301					17373	17373.34				25000	69	69.5	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	318526	D7-NMeFOSE	3772120	25000	Avg	1.00959	2091	5	500	1	20.91	20.9100	21	21	Yes	20	1.5	104.5500778	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	168227	13C4-PFOS	746325	2500	Avg	0.453376					1242.94	1242.94				2500	50	49.7	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	4070946	13C4-PFOS	746325	2500	Avg	0.801502					17014	17013.86				25000	68	68.1	Yes			
080924045.d	ZQ15815-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	176354	13C4-PFOS	746325	2500	Avg	0.486842					1213.41	1213.41				2500	49	48.5	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C4-PFBA	SESI-0111	3655569	13C3-PFBA	1868724	5000	Avg	1.130641					8650.78	8650.7766				10000	87	87	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	521196	13C4-PFBA	3655569	10000	Avg	0.834189	1709.16	5	503.92	1	16.959	16.9586	17	17	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1434081	13C2-PFHxA	963232	2500	Avg	0.8402					4429.96	4429.9631				5000	89	89	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1434856	13C5-PFPeA	1434081	5000	Avg	0.917127	5454.76	5	503.92	1	54.123	54.1232	54	54	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	191702	18O2-PFHxS	621446	2500	Avg	0.200536					3845.66	3845.6602				5000	77	77	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	7601	13C2-4:2FTS	191702	5000	Avg	1.822044	108.81	5	503.92	1	1.0796	1.0796	1.1	1.1	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C5-PFHxA	SESI-0113	911586	13C2-PFHxA	963232	2500	Avg	1.104288					2142.52	2142.5176				2500	86	86	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	3141645	13C5-PFHxA	911586	2500	Avg	0.89827	9591.63	5	503.92	1	95.17	95.1702	95	95	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	52376	13C5-PFHxA	911586	2500	Avg	0.169304	848.41	5	503.92	1	8.4181	8.4181	8.4	8.4	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C3-PFBS	SESI-0116	666497	18O2-PFHxS	621446	2500	Avg	1.299121					2063.88	2063.8836				2500	83	83	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	470448	13C3-PFBS	666497	2500	Avg	1.180999	1494.18	5	503.92	1	14.826	14.8256	15	15	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	686660	13C2-PFHxA	963232	2500	Avg	0.205187					8685.62	8685.6238				10000	87	87	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1013928	13C2-PFHxA	963232	2500	Avg	1.198314					2196.07	2196.067				2500	88	88	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1290711	13C4-PFHpA	1013928	2500	Avg	1.029691	3090.69	5	503.92	1	30.666	30.6664	31	31	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	223199	18O2-PFHxS	621446	2500	Avg	0.236825					3791.42	3791.4149				5000	76	76	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	918433	13C2-6:2FTS	223199	5000	Avg	1.74466	11793	5	503.92	1	117.01	117.01	120	120	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C8-PFOA	SESI-0097	1160098	13C4-PFOA	202295	2500	Avg	6.698736					2140.21	2140.2114				2500	86	86	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	3902378	13C8-PFOA	1160098	2500	Avg	0.927161	9070.26	5	503.92	1	89.997	89.997	90	90	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C3-PFHxS	SESI-0096	610954	18O2-PFHxS	621446	2500	Avg	1.157763					2122.88	2122.8801				2500	85	85	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	526046	13C3-PFHxS	610954	2500	Avg	1.151629	1869.14	5	503.92	1	18.546	18.546	19	19	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	6928572	13C3-PFHxS	610954	2500	Avg	1.144236	24778	5	503.92	1	245.85	245.8488	250	250	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C9-PFNA	SESI-0099	576990	13C5-PFNA	675441	1250	Avg	0.988588					1080.13	1080.1288				1250	86	86	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	401892	13C9-PFNA	576990	1250	Avg	0.849909	1024.42	5	503.92	1	10.165	10.1645	10	10	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	255199	18O2-PFHxS	621446	2500	Avg	0.213625					4805.78	4805.7758				5000	96	96	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	283283	13C2-8:2FTS	255199	5000	Avg	1.68797	3288.11	5	503.92	1	32.625	32.6254	33	33	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	626793	13C4-PFOS	644410	2500	Avg	0.548279					4435.07	4435.0678				5000	89	89	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	158870	D3-NMeFOSAA	626793	5000	Avg	0.798372	1587.39	5	503.92	1	15.75	15.7504	16	16	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C6-PFDA	SESI-0115	572869	13C2-PFDA	545458	1250	Avg	1.165674					1126.23	1126.2295				1250	90	90	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	95014	13C6-PFDA	572869	1250	Avg	0.867931	238.87	5	503.92	1	2.3701	2.3701	2.4	2.4	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	380204	13C4-PFOS	644410	2500	Avg	0.420694					3506.13	3506.1307				5000	70	70	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	132522	D5-NEtFOSAA	380204	5000	Avg	1.036789	1680.93	5	503.92	1	16.679	16.6786	17	17	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C8-PFOS	SESI-0098	565777	13C4-PFOS	644410	2500	Avg	1.004997					2184.03	2184.0283				2500	88	87	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	393255	13C8-PFOS	565777	2500	Avg	0.954873	1819.8	5	503.92	1	18.056	18.0564	18	18	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	41745	13C8-PFOS	565777	2500	Avg	1.152095	160.11	5	503.92	1	1.5886	1.5886	1.6	1.6	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C7-PFUnA	SESI-0117	468750	13C2-PFDA	545458	1250	Avg	1.107859					969.63	969.6288				1250	78	78	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	15187	13C7-PFUnA	468750	1250	Avg	0.9124	44.387	5	503.92	1	0.44042	0.4404	0.44	0.44	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C2-PFDoA	SESI-0118	349499	13C2-PFDA	545458	1250	Avg	1.018582					786.32	786.3188				1250	63	63	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C8-PFOSA	SESI-0107	832752	13C4-PFOS	644410	2500	Avg	1.722863					1875.18	1875.1788				2500	75	75	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	368600	13C8-PFOSA	832752	2500	Avg	0.978797	1130.54	5	503.92	1	11.217	11.2175	11	11	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	293756	13C2-PFDA	545458	1250	Avg	0.914538					736.09	736.0947				1250	59	59	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2904264	13C4-PFOS	644410	2500	Avg	0.727301					15492	15491.7202				25000	62	62	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	13300	D7-NMeFOSE	2904264	25000	Avg	1.00959	113.4	5	503.92	1	1.1252	1.1252	1.1	1.1	Yes							
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	165407	13C4-PFOS	644410	2500	Avg	0.453376					1415.38	1415.3801				2500	57	57	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2657611	13C4-PFOS	644410	2500	Avg	0.801502					12864	12863.6596				25000	51	51	Yes			
080924064.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	167472	13C4-PFOS	644410	2500	Avg	0.486842					1334.54	1334.541				2500	53	53	Yes			
081224044.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	EIS	13C8-PFOS	SESI-0098	127439	13C4-PFOS	143802	500	Avg	1.004997					440.9	440.9026				500	88	88	Yes			
081224044.d	ZG18020-003	CACMW-005-110-071224	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	7279352	13C8-PFOS	127439	500	Avg	0.990455	28835	5	503.92	5	1430.55	1430.5533	1400	1400	Yes							
081924109.d	ZQ16172-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3421067	13C3-PFBA	1800888	5000	Avg	1.133865					8376.9	8376.9038				10000	84	84	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1378741	13C2-PFHxA	1037694	2500	Avg	0.801471					4144.44	4144.4374				5000	83	83	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	183734	18O2-PFHxS	526323	2500	Avg	0.189605					4602.85	4602.8562				5000	92	92	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	938708	13C2-PFHxA	1037694	2500	Avg	1.08809					2078.43	2078.4348				2500	83	83	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	643545	18O2-PFHxS	526323	2500	Avg	1.30288					2346.18	2346.1845				2500	94	94	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	685786	13C2-PFHxA	1037694	2500	Avg	0.196665					8401.01	8401.0243				10000	84	84	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	1021171	13C2-PFHxA	1037694	2500	Avg	1.160285					2120.34	2120.3351				2500	85	85	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	219514	18O2-PFHxS	526323	2500	Avg	0.208405					5003.13	5003.1296				5000	100	100	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1084735	13C4-PFOA	214768	2500	Avg	6.826009					1849.81	1849.8105				2500	74	74	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	599932	18O2-PFHxS	526323	2500	Avg	1.165116					2445.8	2445.7976				2500	98	98	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	508196	13C5-PFNA	709984	1250	Avg	0.9905					903.31	903.3129				1250	72	72	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	180147	18O2-PFHxS	526323	2500	Avg	0.190493					4491.95	4491.9579				5000	90	90	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	606754	13C4-PFOS	774790	2500	Avg	0.485385					4033.51	4033.5022				5000	81	81	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	541301	13C2-PFDA	573879	1250	Avg	1.111006					1061.24	1061.2363				1250	85	85	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	498556	13C4-PFOS	774790	2500	Avg	0.417912					3849.33	3849.3297				5000	77	77	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	637240	13C4-PFOS	774790	2500	Avg	1.019176					2017.48	2017.4828				2500	81	81	Yes			
081924109.d	ZQ16172-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	9389	13C8-PFOS	637240	2500	Avg	1.011018	36.433	5	500	1	0.36433	0.3643	0.36	0.36	Yes							
081924109.d	ZQ16172-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	452279	13C2-PFDA	573879	1250	Avg	0.978463					1006.82	1006.8197				1250	81	81	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	405866	13C2-PFDA	573879	1250	Avg	0.947371					933.15	933.1517				1250	75	75	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	1036116	13C4-PFOS	774790	2500	Avg	1.639711					2038.91	2038.9054				2500	82	82	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	361381	13C2-PFDA	573879	1250	Avg	0.890868					883.57	883.5714				1250	71	71	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	4250832	13C4-PFOS	774790	2500	Avg	0.665955					20596	20596.1032				25000	82	82	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	216137	13C4-PFOS	774790	2500	Avg	0.421972					1652.73	1652.7284				2500	66	66	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	4707333	13C4-PFOS	774790	2500	Avg	0.756241					20085	20084.9477				25000	80	80	Yes			
081924109.d	ZQ16172-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	243078	13C4-PFOS	774790	2500	Avg	0.448486					1748.85	1748.8508				2500	70	70	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3209797	13C3-PFBA	1596411	5000	Avg	1.133865					8866.28	8866.2814				10000	89	89	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2645662	13C4-PFBA	3209797	10000	Avg	0.85141	9680.95	5	500	1	96.809	96.8095	97	97	Yes	96	101	101	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match ?	Expected Result	%R	Calc. %R	Matc h?	RPD	Calc. RPD	Match?
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1324955	13C2-PFHxA	921087	2500	Avg	0.801471					4486.97	4486.9649				5000	90	90	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1151638	13C5-PFPeA	1324955	5000	Avg	0.913924	4755.26	5	500	1	47.553	47.5527	48	48	Yes	48	99	99	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	174096	18O2-PFHxS	475941	2500	Avg	0.189605					4823.09	4823.0959				5000	96	96	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	593898	13C2-4:2FTS	174096	5000	Avg	1.821802	9362.5	5	500	1	93.625	93.625	94	94	Yes	90	104	104	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	876830	13C2-PFHxA	921087	2500	Avg	1.08809					2187.21	2187.2073				2500	87	87	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	762249	13C5-PFHxA	876830	2500	Avg	0.896378	2424.55	5	500	1	24.245	24.2455	24	24	Yes	24	101	101	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	2878563	13C5-PFHxA	876830	2500	Avg	0.165672	49539	5	500	1	495.39	495.3946	500	500	Yes	600	83	83	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	612193	18O2-PFHxS	475941	2500	Avg	1.30288					2468.15	2468.1459				2500	99	99	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	621573	13C3-PFBS	612193	2500	Avg	1.208343	2100.65	5	500	1	21.006	21.0065	21	21	Yes	21	99	100	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	630596	13C2-PFHxA	921087	2500	Avg	0.196665					8702.87	8702.8899				10000	87	87	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	886642	13C2-PFHxA	921087	2500	Avg	1.160285					2074.07	2074.0679				2500	83	83	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	918307	13C4-PFHpA	886642	2500	Avg	1.019994	2538.53	5	500	1	25.385	25.3853	25	25	Yes	24	106	106	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	198105	18O2-PFHxS	475941	2500	Avg	0.208405					4993.15	4993.1452				5000	100	100	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	687762	13C2-6:2FTS	198105	5000	Avg	1.837836	9445.09	5	500	1	94.451	94.4509	94	94	Yes	91	104	104	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1061839	13C4-PFOA	200321	2500	Avg	6.826009					1941.36	1941.3567				2500	78	78	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	874626	13C8-PFOA	1061839	2500	Avg	0.882262	2334.03	5	500	1	23.34	23.3403	23	23	Yes	24	97	97	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	563092	18O2-PFHxS	475941	2500	Avg	1.165116					2538.62	2538.6164				2500	102	102	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	597562	13C3-PFHxS	563092	2500	Avg	1.154897	2297.21	5	500	1	22.972	22.9721	23	23	Yes	23	102	100	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	522201	13C3-PFHxS	563092	2500	Avg	1.142081	2030.02	5	500	1	20.3	20.3003	20	20	Yes	22	93	92	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	527742	13C5-PFNA	664388	1250	Avg	0.9905					1002.43	1002.4331				1250	80	80	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	887043	13C9-PFNA	527742	1250	Avg	0.792037	2652.7	5	500	1	26.527	26.527	27	27	Yes	24	111	111	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	179237	18O2-PFHxS	475941	2500	Avg	0.190493					4942.37	4942.3732				5000	99	99	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	565280	13C2-8:2FTS	179237	5000	Avg	1.879444	8390.28	5	500	1	83.903	83.9028	84	84	Yes	92	91	91	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	633438	13C4-PFOS	728613	2500	Avg	0.485385					4477.76	4477.7604				5000	90	90	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	268585	D3-NMeFOSAA	633438	5000	Avg	0.841107	2520.56	5	500	1	25.206	25.2056	25	25	Yes	24	105	105	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	514275	13C2-PFDA	519489	1250	Avg	1.111006					1113.81	1113.814				1250	89	89	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	810593	13C6-PFDA	514275	1250	Avg	0.879258	2240.79	5	500	1	22.408	22.4079	22	22	Yes	24	93	93	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	446855	13C4-PFOS	728613	2500	Avg	0.417912					3668.81	3668.8071				5000	73	73	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	215509	D5-NEtFOSAA	446855	5000	Avg	1.061343	2272.03	5	500	1	22.72	22.7202	23	23	Yes	24	95	95	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	588873	13C4-PFOS	728613	2500	Avg	1.019176					1982.51	1982.5107				2500	79	79	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	498786	13C8-PFOS	588873	2500	Avg	0.936113	2262.06	5	500	1	22.621	22.6206	23	23	Yes	23	99	98	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	516410	13C8-PFOS	588873	2500	Avg	1.011018	2168.47	5	500	1	21.685	21.6847	22	22	Yes	22	97	99	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	622424	13C8-PFOS	588873	2500	Avg	1.078285	2450.59	5	500	1	24.506	24.5059	25	25	Yes	23	106	107	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	459661	13C2-PFDA	519489	1250	Avg	0.978463					1130.39	1130.3864				1250	90	90	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	788149	13C7-PFUnA	459661	1250	Avg	0.906176	2365.2	5	500	1	23.652	23.652	24	24	Yes	24	99	99	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	404736	13C2-PFDA	519489	1250	Avg	0.947371					1027.98	1027.9818				1250	82	82	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	966789	13C4-PFOS	728613	2500	Avg	1.639711					2023.05	2023.054				2500	81	81	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	891904	13C8-PFOSA	966789	2500	Avg	0.96599	2387.56	5	500	1	23.876	23.8756	24	24	Yes	24	99	99	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	337027	13C2-PFDA	519489	1250	Avg	0.890868					910.3	910.3009				1250	73	73	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	3885586	13C4-PFOS	728613	2500	Avg	0.665955					20020	20019.5695				25000	80	80	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3950360	D7-NMeFOSE	3885586	25000	Avg	1.019907	24921	5	500	1	249.21	249.2066	250	250	Yes	240	104	104	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	204709	13C4-PFOS	728613	2500	Avg	0.421972					1664.55	1664.5483				2500	67	67	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	4365150	13C4-PFOS	728613	2500	Avg	0.756241					19805	19805.3283				25000	79	79	Yes			
081924110.d	ZQ16172-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	230351	13C4-PFOS	728613	2500	Avg	0.448486					1762.32	1762.3181				2500	70	70	Yes			

Key

from quantitation report
from reported calibration
from lab report/SEDD
calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
mL	milliliters
ND	not detected
ng/L	nanograms per liter
On Col.	on column
RF	response factor
RPD	relative percent difference

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
081324114.d	ZQ15901-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	4615089	13C3-PFBA	2483499	5000	Avg	1.130641					8217.91	8217.9097				10000	82	82	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	2011170	13C2-PFHxA	1392891	2500	Avg	0.8402					4296.24	4296.2444				5000	86	86	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	250025	18O2-PFHxS	796780	2500	Avg	0.200536					3911.94	3911.9444				5000	78	78	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	1216894	13C2-PFHxA	1392891	2500	Avg	1.104288					1977.85	1977.8496				2500	79	79	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	916425	18O2-PFHxS	796780	2500	Avg	1.299121					2213.34	2213.344				2500	89	89	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	931216	13C2-PFHxA	1392891	2500	Avg	0.205187					8145.61	8145.6072				10000	81	81	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	1376409	13C2-PFHxA	1392891	2500	Avg	1.198314					2061.58	2061.5779				2500	82	82	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	283252	18O2-PFHxS	796780	2500	Avg	0.236825					3752.73	3752.7274				5000	75	75	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1519950	13C4-PFOA	286879	2500	Avg	6.698736					1977.32	1977.3233				2500	79	79	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	820122	18O2-PFHxS	796780	2500	Avg	1.157763					2222.6	2222.5952				2500	89	89	Yes			
081324114.d	ZQ15901-001		Method_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2674	13C3-PFHxS	820122	2500	Avg	1.144236	7.1237	5	500	1	0.07124	0.0712	ND	0.071	Yes							
081324114.d	ZQ15901-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	779075	13C5-PFNA	967227	1250	Avg	0.988588					1018.46	1018.4637				1250	81	81	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	269525	18O2-PFHxS	796780	2500	Avg	0.213625					3958.67	3958.6633				5000	79	79	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	744798	13C4-PFOS	1059623	2500	Avg	0.548279					3204.98	3204.9815				5000	64	64	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	697329	13C2-PFDA	784425	1250	Avg	1.165674					953.28	953.2772				1250	76	76	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	582041	13C4-PFOS	1059623	2500	Avg	0.420694					3264.19	3264.1935				5000	65	65	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	832811	13C4-PFOS	1059623	2500	Avg	1.004997					1955.11	1955.1061				2500	78	78	Yes			
081324114.d	ZQ15901-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3589	13C8-PFOS	832811	2500	Avg	0.990455	10.878	5	500	1	0.10878	0.1088	ND	0.11	Yes							
081324114.d	ZQ15901-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	604649	13C2-PFDA	784425	1250	Avg	1.107859					869.72	869.716				1250	70	70	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	557357	13C2-PFDA	784425	1250	Avg	1.018582					871.96	871.959				1250	70	70	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	1278917	13C4-PFOS	1059623	2500	Avg	1.722863					1751.38	1751.3794				2500	70	70	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	454050	13C2-PFDA	784425	1250	Avg	0.914538					791.15	791.1531				1250	63	63	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	5093245	13C4-PFOS	1059623	2500	Avg	0.727301					16522	16522.2434				25000	66	66	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	239069	13C4-PFOS	1059623	2500	Avg	0.453376					1244.09	1244.0945				2500	50	50	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	5516702	13C4-PFOS	1059623	2500	Avg	0.801502					16239	16239.1595				25000	65	65	Yes			
081324114.d	ZQ15901-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	257905	13C4-PFOS	1059623	2500	Avg	0.486842					1249.86	1249.8571				2500	50	50	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	4991352	13C3-PFBA	2582910	5000	Avg	1.130641					8545.83	8545.829				10000	85	85	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3929387	13C4-PFBA	4991352	10000	Avg	0.834189	9437.18	5	500	1	94.372	94.3718	94	94	Yes	96	98	98	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	2086680	13C2-PFHxA	1447465	2500	Avg	0.8402					4289.48	4289.4846				5000	86	86	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1788215	13C5-PFPeA	2086680	5000	Avg	0.917127	4672.02	5	500	1	46.72	46.7202	47	47	Yes	48	97	97	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	273391	18O2-PFHxS	869256	2500	Avg	0.200536					3920.88	3920.8857				5000	78	78	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2FTS)	757124-72-4	866715	13C2-4:2FTS	273391	5000	Avg	1.822044	8699.68	5	500	1	86.997	86.9968	87	87	Yes	90	97	97	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	1327172	13C2-PFHxA	1447465	2500	Avg	1.104288					2075.76	2075.7584				2500	83	83	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1087141	13C5-PFHxA	1327172	2500	Avg	0.89827	2279.77	5	500	1	22.798	22.7977	23	23	Yes	24	95	95	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	4908727	13C5-PFHxA	1327172	2500	Avg	0.169304	54615	5	500	1	546.15	546.1532	550	550	Yes	600	91	91	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	985900	18O2-PFHxS	869256	2500	Avg	1.299121					2182.61	2182.6072				2500	87	87	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	924988	13C3-PFBS	985900	2500	Avg	1.180999	1986.07	5	500	1	19.861	19.8607	20	20	Yes	21	93	95	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	968279	13C2-PFHxA	1447465	2500	Avg	0.205187					8150.47	8150.4692				10000	82	82	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1355184	13C2-PFHxA	1447465	2500	Avg	1.198314					1953.26	1953.2578				2500	78	78	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1393549	13C4-PFHpA	1355184	2500	Avg	1.029691	2496.65	5	500	1	24.966	24.9665	25	25	Yes	24	104	104	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	317955	18O2-PFHxS	869256	2500	Avg	0.236825					3861.28	3861.2723				5000	77	77	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1002877	13C2-6:2FTS	317955	5000	Avg	1.74466	9039.43	5	500	1	90.394	90.3943	90	90	Yes	91	99	99	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1618101	13C4-PFOA	312536	2500	Avg	6.698736					1932.2	1932.2029				2500	77	77	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1367824	13C8-PFOA	1618101	2500	Avg	0.927161	2279.34	5	500	1	22.793	22.7934	23	23	Yes	24	95	95	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	864736	18O2-PFHxS	869256	2500	Avg	1.157763					2148.11	2148.1084				2500	86	86	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	880380	13C3-PFHxS	864736	2500	Avg	1.151629	2210.11	5	500	1	22.101	22.1011	22	22	Yes	23	98	96	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	783078	13C3-PFHxS	864736	2500	Avg	1.144236	1978.54	5	500	1	19.785	19.7854	20	20	Yes	22	90	90	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	826169	13C5-PFNA	1016883	1250	Avg	0.988588					1027.29	1027.2889				1250	82	82	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	1216915	13C9-PFNA	826169	1250	Avg	0.849909	2165.28	5	500	1	21.653	21.6528	22	22	Yes	24	90	90	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	274158	18O2-PFHxS	869256	2500	Avg	0.213625					3690.98	3690.9755				5000	74	74	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2FTS)	39108-34-4	859256	13C2-8:2FTS	274158	5000	Avg	1.68797	9283.82	5	500	1	92.838	92.8382	93	93	Yes	92	101	101	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	806909	13C4-PFOS	1075650	2500	Avg	0.548279					3420.52	3420.5187				5000	68	68	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	317233	D3-NMeFOSAA	806909	5000	Avg	0.798372	2462.17	5	500	1	24.622	24.6217	25	25	Yes	24	103	103	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	750655	13C2-PFDA	813338	1250	Avg	1.165674					989.7	989.6969				1250	79	79	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	1165308	13C6-PFDA	750655	1250	Avg	0.867931	2235.76	5	500	1	22.358	22.3576	22	22	Yes	24	93	93	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	608444	13C4-PFOS	1075650	2500	Avg	0.420694					3361.42	3361.4242				5000	67	67	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	303865	D5-NEtFOSAA	608444	5000	Avg	1.036789	2408.46	5	500	1	24.085	24.0846	24	24	Yes	24	100	100	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	867376	13C4-PFOS	1075650	2500	Avg	1.004997					2005.91	2005.911				2500	80	80	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	791340	13C8-PFOS	867376	2500	Avg	0.954873	2388.64	5	500	1	23.886	23.8864	24	24	Yes	23	104	104	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	752370	13C8-PFOS	867376	2500	Avg	0.990455	2189.42	5	500	1	21.894	21.8942	22	22	Yes	22	98	100	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	877011	13C8-PFOS	867376	2500	Avg	1.152095	2194.06	5	500	1	21.941	21.9406	22	22	Yes	23	95	95	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	617103	13C2-PFDA	813338	1250	Avg	1.107859					856.08	856.0756				1250	68	68	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	1151998	13C7-PFUnA	617103	1250	Avg	0.9124	2557.52	5	500	1	25.575	25.5752	26	26	Yes	24	107	107	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	548885	13C2-PFDA	813338	1250	Avg	1.018582					828.18	828.1792				1250	66	66	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	1352565	13C4-PFOS	1075650	2500	Avg	1.722863					1824.64	1824.6368				2500	73	73	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1200803	13C8-PFOSA	1352565	2500	Avg	0.978797	2267.57	5	500	1	22.676	22.6757	23	23	Yes	24	94	94	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	476101	13C2-PFDA	813338	1250	Avg	0.914538					800.09	800.0853				1250	64	64	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	5204825	13C4-PFOS	1075650	2500	Avg	0.727301					16633	16632.6318				25000	67	67	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	5120524	D7-NMeFOSE	5204825	25000	Avg	1.00959	24361	5	500	1	243.61	243.6146	240	240	Yes	240	102	102	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	246121	13C4-PFOS	1075650	2500	Avg	0.453376					1261.71	1261.7089				2500	50	50	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	5842896	13C4-PFOS	1075650	2500	Avg	0.801502					16943	16943.0883				25000	68	68	Yes			
081324115.d	ZQ15901-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	268458	13C4-PFOS	1075650	2500	Avg	0.486842					1281.61	1281.6143				2500	51	51	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	4966932	13C3-PFBA	2669453	5000	Avg	1.130641					8228.32	8228.3207				10000	82	82.3	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	336984	13C4-PFBA	4966932	10000	Avg	0.834189	813.31	5	500	1	8.1331	8.133109286	8.1	8.1	Yes	8	102	101.7	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	2092732	13C2-PFHxA	1527034	2500	Avg	0.8402					4077.76	4077.7654				5000	82	81.6	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	160946	13C5-PFPeA	2092732	5000	Avg	0.917127	419.28	5	500	1	4.1928	4.192828489	4.2	4.2	Yes	4	105	104.8	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	285948	18O2-PFHxS	939717	2500	Avg	0.200536					3793.48	3793.4786				5000	76	75.9	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2FTS)	757124-72-4	78527	13C2-4:2FTS	285948	5000	Avg	1.822044	753.6	5	500	1	7.536	7.536038124	7.5	7.5	Yes	7.5	100	100.5	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	1338046	13C2-PFHxA	1527034	2500	Avg	1.104288					1983.72	1983.7183				2500	79	79.3	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	98836	13C5-PFHxA	1338046	2500	Avg	0.89827	205.58	5	500	1	2.0558	2.055782808	2.1	2.1	Yes	2	103	102.8	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	453413	13C5-PFHxA	1338046	2500	Avg	0.169304	5003.74	5	500	1	50.037	50.03751272	50	50	Yes	50	100	100.1	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	976696	18O2-PFHxS	939717	2500	Avg	1.299121					2000.11	2000.1047				2500	80	80.0	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	80799	13C3-PFBS	976696	2500	Avg	1.180999	175.12	5	500	1	1.7512	1.75120527	1.8	1.8	Yes	1.8	99	97.3	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	1012059	13C2-PFHxA	1527034	2500	Avg	0.205187					8075.09	8075.0885				10000	81	80.8	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1510850	13C2-PFHxA	1527034	2500	Avg	1.198314					2064.15	2064.1536				2500	83	82.6	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	124637	13C4-PFHpA	1510850	2500	Avg	1.029691	200.29	5	500	1	2.0029	2.002897525	2	2	Yes	2	100	100.1	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	361894	18O2-PFHxS	939717	2500	Avg	0.236825					4065.34	4065.339				5000	81	81.3	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	86930	13C2-6:2FTS	361894	5000	Avg	1.74466	688.41	5	500	1	6.8841	6.884105179	6.9	6.9	Yes	7.6	91	90.6	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1676024	13C4-PFOA	308870	2500	Avg	6.698736					2025.12	2025.1241				2500	81	81.0	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	120800	13C8-PFOA	1676024	2500	Avg	0.927161	194.34	5	500	1	1.9434	1.943441867	1.9	1.9	Yes	2	97	97.2	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	907955	18O2-PFHxS	939717	2500	Avg	1.157763					2086.35	2086.352				2500	83	83.5	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	76066	13C3-PFHxS	907955	2500	Avg	1.151629	181.87	5	500	1	1.8187	1.818669027	1.8	1.8	Yes	1.9	97	95.7	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	71106	13C3-PFHxS	907955	2500	Avg	1.144236	171.11	5	500	1	1.7111	1.71106428	1.7	1.7	Yes	1.8	94	95.1	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	828151	13C5-PFNA	1084501	1250	Avg	0.988588					965.55	965.5489				1250	77	77.2	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	120276	13C9-PFNA	828151	1250	Avg	0.849909	213.6	5	500	1	2.136	2.136028439	2.1	2.1	Yes	2	107	106.8	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	273788	18O2-PFHxS	939717	2500	Avg	0.213625					3409.62	3409.6143				5000	68	68.2	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	80037	13C2-8:2FTS	273788	5000	Avg	1.68797	865.93	5	500	1	8.6593	8.659277811	8.7	8.7	Yes	7.7	113	112.5	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	818213	13C4-PFOS	1147910	2500	Avg	0.548279					3250.1	3250.1016				5000	65	65.0	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	30063	D3-NMeFOSAA	818213	5000	Avg	0.798372	230.11	5	500	1	2.3011	2.301074335	2.3	2.3	Yes	2	115	115.1	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	657520	13C2-PFDA	818597	1250	Avg	1.165674					861.33	861.3343				1250	69	68.9	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	100940	13C6-PFDA	657520	1250	Avg	0.867931	221.1	5	500	1	2.211	2.210951142	2.2	2.2	Yes	2	111	110.5	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	617378	13C4-PFOS	1147910	2500	Avg	0.420694					3196.07	3196.0753				5000	64	63.9	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	25244	D5-NEtFOSAA	617378	5000	Avg	1.036789	197.19	5	500	1	1.9719	1.971907984	2	2	Yes	2	99	98.6	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	916244	13C4-PFOS	1147910	2500	Avg	1.004997					1985.54	1985.5396				2500	79	79.4	Yes			
081324116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	69545	13C8-PFOS	916244	2500	Avg	0.954873	198.72	5	500	1	1.9872	1.987234705	2	2	Yes	1.9	105	104.6	Yes			

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D24007

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
08124116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	59718	13C8-PFOS	916244	2500	Avg	0.990455	164.51	5	500	1	1.6451	1.645126775	1.6	1.6	Yes	1.9	89	86.6	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	70052	13C8-PFOS	916244	2500	Avg	1.152095	165.91	5	500	1	1.6591	1.659056255	1.7	1.7	Yes	1.9	86	87.3	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	682368	13C2-PFDA	818597	1250	Avg	1.107859					940.53	940.533				1250	75	75.2	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	100798	13C7-PFUnA	682368	1250	Avg	0.9124	202.38	5	500	1	2.0238	2.023755301	2	2	Yes	2	101	101.2	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	588483	13C2-PFDA	818597	1250	Avg	1.018582					882.22	882.2218				1250	71	70.6	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	1361673	13C4-PFOS	1147910	2500	Avg	1.722863					1721.29	1721.2908				2500	69	68.9	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	111496	13C8-PFOSA	1361673	2500	Avg	0.978797	209.14	5	500	1	2.0914	2.091384283	2.1	2.1	Yes	2	105	104.6	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	480036	13C2-PFDA	818597	1250	Avg	0.914538					801.52	801.5155				1250	64	64.1	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	5435532	13C4-PFOS	1147910	2500	Avg	0.727301					16276	16276.4632				25000	65	65.1	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	427647	D7-NMeFOSE	5435532	25000	Avg	1.00959	1948.22	5	500	1	19.482	19.48221543	20	19	Yes	20	98	97.4	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	261537	13C4-PFOS	1147910	2500	Avg	0.453376					1256.34	1256.3388				2500	50	50.3	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	5882240	13C4-PFOS	1147910	2500	Avg	0.801502					15983	15983.4416				25000	64	63.9	Yes			
08124116.d	ZQ15901-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	283355	13C4-PFOS	1147910	2500	Avg	0.486842					1267.58	1267.5789				2500	51	50.7	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C4-PFBA	SESI-0111	3759446	13C3-PFBA	1828643	5000	Avg	1.130641					9091.6	9091.5974				10000	91	91	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	522132	13C4-PFBA	3759446	10000	Avg	0.834189	1664.91	5	480.76	1	17.315	17.3154	17	17	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1554423	13C2-PFHxA	975731	2500	Avg	0.8402					4740.2	4740.1976				5000	95	95	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1477590	13C5-PFPeA	1554423	5000	Avg	0.917127	5182.34	5	480.76	1	53.897	53.8973	54	54	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	212556	18O2-PFHxS	621171	2500	Avg	0.200536					4265.89	4265.892				5000	85	85	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2FTS)	757124-72-4	7323	13C2-4:2FTS	212556	5000	Avg	1.822044	94.542	5	480.76	1	0.98326	0.9833	0.98	0.98	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C5-PFHxA	SESI-0113	987352	13C2-PFHxA	975731	2500	Avg	1.104288					2290.87	2290.8653				2500	92	92	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	3177650	13C5-PFHxA	987352	2500	Avg	0.89827	8957.09	5	480.76	1	93.156	93.1556	93	93	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	2H, 2H, 3H, 3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	49063	13C5-PFHxA	987352	2500	Avg	0.169304	733.76	5	480.76	1	7.6312	7.6313	7.6	7.6	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C3-PFBS	SESI-0116	740515	18O2-PFHxS	621171	2500	Avg	1.299121					2294.1	2294.104				2500	92	92	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	525848	13C3-PFBS	740515	2500	Avg	1.180999	1503.2	5	480.76	1	15.634	15.6336	16	16	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	730457	13C2-PFHxA	975731	2500	Avg	0.205187					9121.26	9121.2576				10000	91	91	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1110138	13C2-PFHxA	975731	2500	Avg	1.198314					2373.65	2373.6476				2500	95	95	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1304089	13C4-PFHpA	1110138	2500	Avg	1.029691	2852.09	5	480.76	1	29.662	29.6623	30	30	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	260611	18O2-PFHxS	621171	2500	Avg	0.236825					4428.89	4428.8812				5000	89	89	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	1H, 1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	932625	13C2-6:2FTS	260611	5000	Avg	1.74466	10256	5	480.76	1	106.66	106.6633	110	110	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C8-PFOA	SESI-0097	1337810	13C4-PFOA	199431	2500	Avg	6.698736					2503.51	2503.5076				2500	100	100	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	3698549	13C8-PFOA	1337810	2500	Avg	0.927161	7454.56	5	480.76	1	77.529	77.5289	78	78	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C3-PFHxS	SESI-0096	632370	18O2-PFHxS	621171	2500	Avg	1.157763					2198.27	2198.2669				2500	88	88	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	573641	13C3-PFHxS	632370	2500	Avg	1.151629	1969.23	5	480.76	1	20.48	20.4804	20	20	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	7511716	13C3-PFHxS	632370	2500	Avg	1.144236	25953	5	480.76	1	269.92	269.9193	270	270	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C9-PFNA	SESI-0099	588485	13C5-PFNA	661976	1250	Avg	0.988588					1124.06	1124.0557				1250	90	90	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	396996	13C9-PFNA	588485	1250	Avg	0.849909	992.17	5	480.76	1	10.319	10.3188	10	10	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	266587	18O2-PFHxS	621171	2500	Avg	0.213625					5022.46	5022.4512				5000	100	100	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2FTS)	39108-34-4	253197	13C2-8:2FTS	266587	5000	Avg	1.68797	2813.36	5	480.76	1	29.259	29.2595	29	29	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	628786	13C4-PFOS	653295	2500	Avg	0.548279					4388.66	4388.6599				5000	88	88	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	144585	D3-NMeFOSAA	628786	5000	Avg	0.798372	1440.08	5	480.76	1	14.977	14.9771	15	15	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C6-PFDA	SESI-0115	620388	13C2-PFDA	564032	1250	Avg	1.165674					1179.48	1179.4853				1250	94	94	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	93058	13C6-PFDA	620388	1250	Avg	0.867931	216.03	5	480.76	1	2.2468	2.2468	2.2	2.2	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	334255	13C4-PFOS	653295	2500	Avg	0.420694					3040.48	3040.4808				5000	61	61	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	109755	D5-NEtFOSAA	334255	5000	Avg	1.036789	1583.53	5	480.76	1	16.469	16.469	16	16	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C8-PFOS	SESI-0098	600305	13C4-PFOS	653295	2500	Avg	1.004997					2285.98	2285.7981				2500	91	91	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	436275	13C8-PFOS	600305	2500	Avg	0.954873	1902.75	5	480.76	1	19.789	19.789	20	20	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	47610	13C8-PFOS	600305	2500	Avg	1.152095	172.1	5	480.76	1	1.7899	1.7899	1.8	1.8	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C7-PFUnA	SESI-0117	488177	13C2-PFDA	564032	1250	Avg	1.107859					976.56	976.5604				1250	78	78	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	12902	13C7-PFUnA	488177	1250	Avg	0.9124	36.208	5	480.76	1	0.37657	0.3766	0.38	0.38	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C2-PFDoA	SESI-0118	359258	13C2-PFDA	564032	1250	Avg	1.018582					781.66	781.6579				1250	63	63	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C8-PFOSA	SESI-0107	873296	13C4-PFOS	653295	2500	Avg	1.722863					1939.73	1939.7305				2500	78	78	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	336115	13C8-PFOSA	873296	2500	Avg	0.978797	983.05	5	480.76	1	10.224	10.2239	10	10	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	270206	13C2-PFDA	564032	1250	Avg	0.914538					654.79	654.7862				1250	52	52	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1676004	13C4-PFOS	653295	2500	Avg	0.727301					8818.43	8818.4355				25000	35	35	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	9286	D7-NMeFOSE	1676004	25000	Avg	1.00959	137.2	5	480.76	1	1.4269	1.4269	1.4	1.4	Yes							
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	174513	13C4-PFOS	653295	2500	Avg	0.453376					1472.99	1472.9905				2500	59	59	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	801914	13C4-PFOS	653295	2500	Avg	0.801502					3828.72	3828.7222				25000	15	15	Yes			
08124137.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	175783	13C4-PFOS	653295	2500	Avg	0.486842					1381.72	1381.7183				2500	55	55	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C4-PFBA	SESI-0111	3591259	13C3-PFBA	1342727	5000	Avg	1.130641					11828	11827.8084				10000	118	118	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	594620	13C4-PFBA	3591259	10000	Avg	0.834189	1984.85	5	498.52	1	19.907	19.9075	20	20	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1519018	13C2-PFHxA	752258	2500	Avg	0.8402					6008.32	6008.3253				5000	120	120	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1641094	13C5-PFPeA	1519018	5000	Avg	0.917127	5889.95	5	498.52	1	59.074	59.0743	59	59	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	202539	18O2-PFHxS	469853	2500	Avg	0.200536					5373.95	5373.9586				5000	107	107	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2FTS)	757124-72-4	6325	13C2-4:2FTS	202539	5000	Avg	1.822044	85.697	5	498.52	1	0.85951	0.8595	0.86	0.86	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C5-PFHxA	SESI-0113	979487	13C2-PFHxA	752258	2500	Avg	1.104288					2947.74	2947.7423				2500	118	118	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	3261191	13C5-PFHxA	979487	2500	Avg	0.89827	9266.39	5	498.52	1	92.939	92.939	93	93	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	2H, 2H, 3H, 3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	33120	13C5-PFHxA	979487	2500	Avg	0.169304	499.3	5	498.52	1	5.0078	5.0079	5	5	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C3-PFBS	SESI-0116	760926	18O2-PFHxS	469853	2500	Avg	1.299121					3116.53	3116.5265				2500	125	125	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	483883	13C3-PFBS	760926	2500	Avg	1.180999	1346.13	5	498.52	1	13.501	13.5013	14	14	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	737888	13C2-PFHxA	752258	2500	Avg	0.205187					11951	11951.2629				10000	120	120	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1105738	13C2-PFHxA	752258	2500	Avg	1.198314					3066.58	3066.5835				2500	123	123	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1502680	13C4-PFHpA	1105738	2500	Avg	1.029691	3299.49	5	498.52	1	33.093	33.0929	33	33	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	238296	18O2-PFHxS	469853	2500	Avg	0.236825					5353.87	5353.8625				5000	107	107	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	1H, 1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	953299	13C2-6:2FTS	238296	5000	Avg	1.74466	11465	5	498.52	1	114.99	114.9897	110	110	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C8-PFOA	SESI-0097	1194518	13C4-PFOA	161263	2500	Avg	6.698736					2764.43	2764.4269				2500	111	111	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	4240039	13C8-PFOA	1194518	2500	Avg	0.927161	9571.11	5	498.52	1	95.995	95.9952	96	96	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C3-PFHxS	SESI-0096	637545	18O2-PFHxS	469853	2500	Avg	1.157763					2930.01	2930.0105				2500	117	117	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	527816	13C3-PFHxS	637545	2500	Avg	1.151629	1797.21	5	498.52	1	18.025	18.0255	18	18	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	7296655	13C3-PFHxS	637545	2500	Avg	1.144236	25006	5	498.52	1	250.8	250.7984	250	250	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C9-PFNA	SESI-0099	593128	13C5-PFNA	535262	1250	Avg	0.988588					1401.12	1401.1244				1250	112	112	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	461622	13C9-PFNA	593128	1250	Avg	0.849909	1144.66	5	498.52	1	11.481	11.4806	11	11	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	254495	18O2-PFHxS	469853	2500	Avg	0.213625					6338.78	6338.7728				5000	127	127	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2FTS)	39108-34-4	272260	13C2-8:2FTS	254495	5000	Avg	1.68797	3168.91	5	498.52	1	31.783	31.7832	32	32	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	602207	13C4-PFOS	512209	2500	Avg	0.548279					5360.89	5360.8912				5000	107	107	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	131720	D3-NMeFOSAA	602207	5000	Avg	0.798372	1369.84	5	498.52	1	13.739	13.7391	14	14	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C6-PFDA	SESI-0115	510774	13C2-PFDA	494326	1250	Avg	1.165674					1108.02	1108.0216				1250	89	89	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	72812	13C6-PFDA	510774	1250	Avg	0.867931	205.3	5	498.52	1	2.0591	2.0591	2.1	2.1	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	376329	13C4-PFOS	512209	2500	Avg	0.420694					4366.1	4366.105				5000	87	87	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	104406	D5-NEtFOSAA	376329	5000	Avg	1.036789	1337.94	5	498.52	1	13.419	13.4191	13	13	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C8-PFOS	SESI-0098	562280	13C4-PFOS	512209	2500	Avg	1.004997					2730.74	2730.742				2500	109	109	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	361277	13C8-PFOS	562280	2500	Avg	0.954873	1682.22	5	498.52	1	16.872	16.8721	17	17	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	33762	13C8-PFOS	562280	2500	Avg	1.152095	130.29	5	498.52	1	1.3068	1.3068	1.3	1.3	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C7-PFUnA	SESI-0117	442894	13C2-PFDA	494326	1250	Avg	1.107859					1010.91	1010.9085				1250	81	81	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	12620	13C7-PFUnA	442894	1250	Avg	0.9124	39.038	5	498.52	1	0.39154	0.3915	0.39	0.39	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C2-PFDoA	SESI-0118	386528	13C2-PFDA	494326	1250	Avg	1.018582					959.58	959.5807				1250	77	77	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C8-PFOSA	SESI-0107	901456	13C4-PFOS	512209	2500	Avg	1.722863					2553.8	2553.7983				2500	102	102	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	379624	13C8-PFOSA	901456	2500	Avg	0.978797	1075.61	5	498.52	1	10.788	10.7881	11	11	Yes							
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	311138	13C2-PFDA	494326	1250	Avg	0.914538					860.3	860.2959				1250	69	69	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	3020993	13C4-PFOS	512209	2500	Avg	0.727301					20273	20273.4816				25000	81	81	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	191440	13C4-PFOS	512209	2500	Avg	0.453376					2060.95	2060.9477				2500	82	82	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2759979	13C4-PFOS	512209	2500	Avg	0.801502					16807	16807.1459				25000	67	67	Yes			
08124141.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	189851	13C4-PFOS	512209	2500	Avg	0.486842					1903.34	1903.3456				2500	76	76	Yes			
08124105.d	ZG19005-002	CACMW-006-110-071524	Field_Sample	EIS	13C8-PFOS	SESI-0098	124368	13C4-PFOS	137002	500	Avg	1.019176					445.35	445.3511				500	89	89	Yes			
08124105.d	ZG19005-002	CACMW-006

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
081524106.d	ZG19005-004	CACMW-007-060-071524	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	6133338	13C8-PFOS	121807	500	Avg	1.011018	24902	5	498.52	5	1248.8	1248.8009	1200	1200	Yes							
081924053.d	ZQ15907-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	4112804	13C3-PFBA	1961033	5000	Avg	1.133865					9248.29	9248.2969				10000	92	92	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1716337	13C2-PFHxA	1125186	2500	Avg	0.801471					4758.07	4758.0658				5000	95	95	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	213772	18O2-PFHxS	615210	2500	Avg	0.189605					4581.6	4581.6051				5000	92	92	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	1122789	13C2-PFHxA	1125186	2500	Avg	1.08809					2292.71	2292.7094				2500	92	92	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	784303	18O2-PFHxS	615210	2500	Avg	1.30288					2446.22	2446.2232				2500	98	98	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	804973	13C2-PFHxA	1125186	2500	Avg	0.196665					9094.29	9094.3136				10000	91	91	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	1203553	13C2-PFHxA	1125186	2500	Avg	1.160285					2304.71	2304.7097				2500	92	92	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	251757	18O2-PFHxS	615210	2500	Avg	0.208405					4908.97	4908.9662				5000	98	98	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1335304	13C4-PFOA	229449	2500	Avg	6.826009					2131.41	2131.4107				2500	85	85	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	719079	18O2-PFHxS	615210	2500	Avg	1.165116					2507.98	2507.98				2500	100	100	Yes				
081924053.d	ZQ15907-001		Method_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2955	13C3-PFHxS	719079	2500	Avg	1.142081	8.9955	5	500	1	0.08995	0.09	ND	0.09	Yes							
081924053.d	ZQ15907-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	663249	13C5-PFNA	731060	1250	Avg	0.9905					1144.93	1144.9305				1250	92	92	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	204238	18O2-PFHxS	615210	2500	Avg	0.190493					4356.86	4356.8655				5000	87	87	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	707420	13C4-PFOS	847493	2500	Avg	0.485385					4299.27	4299.2715				5000	86	86	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	654130	13C2-PFDA	603904	1250	Avg	1.111006					1218.68	1218.6802				1250	97	97	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	533184	13C4-PFOS	847493	2500	Avg	0.417912					3763.54	3763.5367				5000	75	75	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	743345	13C4-PFOS	847493	2500	Avg	1.019176					2151.52	2151.5187				2500	86	86	Yes				
081924053.d	ZQ15907-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4037	13C8-PFOS	743345	2500	Avg	1.011018	13.429	5	500	1	0.13429	0.1343	ND	0.13	Yes							
081924053.d	ZQ15907-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	530774	13C2-PFDA	603904	1250	Avg	0.978463					1122.81	1122.8128				1250	90	90	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	479538	13C2-PFDA	603904	1250	Avg	0.947371					1047.72	1047.7196				1250	84	84	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	1025308	13C4-PFOS	847493	2500	Avg	1.639711					1844.55	1844.5521				2500	74	74	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	411356	13C2-PFDA	603904	1250	Avg	0.890868					955.76	955.755				1250	76	76	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2920400	13C4-PFOS	847493	2500	Avg	0.665955					12936	12936.0198				25000	52	52	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	116341	13C4-PFOS	847493	2500	Avg	0.421972					813.3	813.3043				2500	33	33	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	3438393	13C4-PFOS	847493	2500	Avg	0.756241					13412	13412.1741				25000	54	54	Yes				
081924053.d	ZQ15907-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	118910	13C4-PFOS	847493	2500	Avg	0.448486					782.12	782.12				2500	31	31	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3836900	13C3-PFBA	2132244	5000	Avg	1.133865					7935.09	7935.0969				10000	79	79	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2783194	13C4-PFBA	3836900	10000	Avg	0.85141	8519.7	5	500	1	85.197	85.197	85	85	Yes	96	89	89	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1619830	13C2-PFHxA	1270234	2500	Avg	0.801471					3977.75	3977.7538				5000	80	80	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1263723	13C5-PFPeA	1619830	5000	Avg	0.913924	4268.18	5	500	1	42.682	42.6818	43	43	Yes	48	89	89	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	215129	18O2-PFHxS	682383	2500	Avg	0.189605					4156.81	4156.8177				5000	83	83	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2FTS)	757124-72-4	637276	13C2-4:2FTS	215129	5000	Avg	1.821802	8130.13	5	500	1	81.301	81.3013	81	81	Yes	90	90	90	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	1053754	13C2-PFHxA	1270234	2500	Avg	1.08809					1906.03	1906.0342				2500	76	76	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	828574	13C5-PFHxA	1053754	2500	Avg	0.896378	2193.01	5	500	1	21.93	21.9301	22	22	Yes	24	91	91	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3823649	13C5-PFHxA	1053754	2500	Avg	0.165672	54756	5	500	1	547.56	547.5574	550	550	Yes	600	91	91	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	712258	18O2-PFHxS	682383	2500	Avg	1.30288					2002.83	2002.833				2500	80	80	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	632322	13C3-PFBS	712258	2500	Avg	1.208343	1836.75	5	500	1	18.368	18.3675	18	18	Yes	21	86	87	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	751415	13C2-PFHxA	1270234	2500	Avg	0.196665					7519.83	7519.848				10000	75	75	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1085756	13C2-PFHxA	1270234	2500	Avg	1.160285					1841.72	1841.721				2500	74	74	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	983573	13C4-PFHpA	1085756	2500	Avg	1.019994	2220.33	5	500	1	22.203	22.2033	22	22	Yes	24	93	93	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	226203	18O2-PFHxS	682383	2500	Avg	0.208405					3976.51	3976.5096				5000	80	80	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	712941	13C2-6:2FTS	226203	5000	Avg	1.837836	8574.69	5	500	1	85.747	85.7469	86	86	Yes	91	94	94	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1297928	13C4-PFOA	262303	2500	Avg	6.826009					1812.26	1812.26				2500	72	72	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	938704	13C8-PFOA	1297928	2500	Avg	0.882262	2049.37	5	500	1	20.494	20.4937	20	20	Yes	24	85	85	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	666733	18O2-PFHxS	682383	2500	Avg	1.165116					2096.5	2096.4987				2500	84	84	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	591390	13C3-PFHxS	666733	2500	Avg	1.154897	1920.08	5	500	1	19.201	19.2008	19	19	Yes	23	85	83	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	521556	13C3-PFHxS	666733	2500	Avg	1.142081	1712.35	5	500	1	17.123	17.1235	17	17	Yes	22	78	78	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	627674	13C5-PFNA	814030	1250	Avg	0.9905					973.08	973.0816				1250	78	78	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	920374	13C9-PFNA	627674	1250	Avg	0.792037	2314.17	5	500	1	23.142	23.1417	23	23	Yes	24	96	96	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	206779	18O2-PFHxS	682383	2500	Avg	0.190493					3976.84	3976.8501				5000	80	80	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	620408	13C2-8:2FTS	206779	5000	Avg	1.879444	7982	5	500	1	79.82	79.82	80	80	Yes	92	87	87	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	654864	13C4-PFOS	903337	2500	Avg	0.485385					3733.84	3733.8337				5000	75	75	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	226841	D3-NMeFOSAA	654864	5000	Avg	0.841107	2059.16	5	500	1	20.592	20.5916	21	21	Yes	24	86	86	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	585435	13C2-PFDA	673802	1250	Avg	1.111006					977.55	977.5523				1250	78	78	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	848407	13C6-PFDA	585435	1250	Avg	0.879258	2060.25	5	500	1	20.602	20.6025	21	21	Yes	24	86	86	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	475153	13C4-PFOS	903337	2500	Avg	0.417912					3146.58	3146.5805				5000	63	63	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	227954	D5-NEtFOSAA	475153	5000	Avg	1.061343	2260.1	5	500	1	22.601	22.601	23	23	Yes	24	94	94	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	713385	13C4-PFOS	903337	2500	Avg	1.019176					1937.16	1937.1578				2500	77	77	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	554756	13C8-PFOS	713385	2500	Avg	0.936113	2076.78	5	500	1	20.768	20.7678	21	21	Yes	23	91	90	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	547762	13C8-PFOS	713385	2500	Avg	1.011018	1898.67	5	500	1	18.987	18.9867	19	19	Yes	22	85	86	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	616028	13C8-PFOS	713385	2500	Avg	1.078285	2002.09	5	500	1	20.021	20.0209	20	20	Yes	23	87	87	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	517673	13C2-PFDA	673802	1250	Avg	0.978463					981.5	981.4967				1250	79	79	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	827314	13C7-PFUnA	517673	1250	Avg	0.906176	2204.51	5	500	1	22.045	22.0451	22	22	Yes	24	92	92	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	426456	13C2-PFDA	673802	1250	Avg	0.947371					835.09	835.0373				1250	67	67	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	935200	13C4-PFOS	903337	2500	Avg	1.639711					1578.44	1578.4375				2500	63	63	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	838885	13C8-PFOSA	935200	2500	Avg	0.96599	2321.48	5	500	1	23.215	23.2148	23	23	Yes	24	97	97	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	357262	13C2-PFDA	673802	1250	Avg	0.890868					743.96	743.9627				1250	60	60	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	3232076	13C4-PFOS	903337	2500	Avg	0.665955					13432	13431.5734				25000	54	54	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	2930684	D7-NMeFOSE	3232076	25000	Avg	1.019907	22226	5	500	1	222.26	222.2628	220	220	Yes	240	93	93	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	144364	13C4-PFOS	903337	2500	Avg	0.421972					946.82	946.8158				2500	38	38	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	3786703	13C4-PFOS	903337	2500	Avg	0.756241					13858	13857.7025				25000	55	55	Yes				
081924054.d	ZQ15907-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	164049	13C4-PFOS	903337	2500	Avg	0.448486					1012.31	1012.3132				2500	40	40	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C4-PFBA	SESI-0111	3775788	13C3-PFBA	1777353	5000	Avg	1.133865					9367.9	9367.9069				10000	94	94	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	135541	13C4-PFBA	3775788	10000	Avg	0.85141	421.62	5	100	1	21.081	21.0812	21	21	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1599589	13C2-PFHxA	1038669	2500	Avg	0.801471					4803.78	4803.7836				5000	96	96	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	402644	13C5-PFPeA	1599589	5000	Avg	0.913924	1377.12	5	100	1	68.856	68.8562	69	69	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	204486	18O2-PFHxS	573198	2500	Avg	0.189605					4703.8	4703.8031				5000	94	94	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C5-PFHxA	SESI-0113	1063665	13C2-PFHxA	1038669	2500	Avg	1.08809					2352.9	2352.8969				2500	94	94	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	846470	13C5-PFHxA	1063665	2500	Avg	0.896378	2219.5	5	100	1	110.98	110.9751	110	110	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C3-PFBS	SESI-0116	740289	18O2-PFHxS	573198	2500	Avg	1.30288					2478.18	2478.1764				2500	99	99	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	111750	13C3-PFBS	740289	2500	Avg	1.208343	312.32	5	100	1	15.616	15.6159	16	16	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	784046	13C2-PFHxA	1038669	2500	Avg	0.196665					9595.69	9595.7142				10000	96	96	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1070348	13C2-PFHxA	1038669	2500	Avg	1.160285					2220.36	2220.3588				2500	89	89	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	355536	13C4-PFHpA	1070348	2500	Avg	1.019994	814.14	5	100	1	40.707	40.7072	41	41	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	221515	18O2-PFHxS	573198	2500	Avg	0.208405					4635.86	4635.8604				5000	93	93	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	226356	13C2-6:2FTS	221515	5000	Avg	1.837836	2780.05	5	100	1	139	139.0023	140	140	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C8-PFOA	SESI-0097	1211815	13C4-PFOA	214213	2500	Avg	6.826009					2071.88	2071.8755				2500	83	83	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1012567	13C8-PFOA	1211815	2500	Avg	0.882262	2367.72	5	100	1	118.39	118.3859	120	120	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C3-PFHxS	SESI-0096	687494	18O2-PFHxS	573198	2500	Avg	1.165116					2573.56	2573.5647				2500	103	103	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	119400	13C3-PFHxS	687494	2500	Avg	1.154897	375.95	5	100	1	18.798	18.7976	19	19	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1748067	13C3-PFHxS	687494	2500	Avg	1.142081	5565.86	5	100	1	278.29	278.293	280	280	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C9-PFNA	SESI-0099	609675	13C5-PFNA	688774	1250	Avg	0.9905					1117.06	1117.0617				1250	89	89	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	113835	13C9-PFNA	609675	1250	Avg	0.792037	294.67	5	100	1	14.734	14.7337	15	15	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	192929	18O2-PFHxS	573198	2500	Avg	0.190493					4417.26	4417.2689				5000	88	88	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	51613	13C2-8:2FTS	192929	5000	Avg	1.879444	711.71	5	100	1	35.585	35.5854	36	36	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	424970	13C4-PFOS	736135	2500	Avg	0.485385					2973.41	2973.4077				5000	59	59	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	29391	D3-NMeFOSAA	424970	5000	Avg	0.841107	411.13	5	100	1	20.556	20.5563	21	21	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C6-PFDA	SESI-0115	534618	13C2-PFDA	602595	1250	Avg	1.111006					998.19	998.1864				1250	80	80	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	20719	13C6-PFDA	534618	1250	Avg	0.879258	55.096	5	100	1	2.7548	2.7548	2.8	2.8	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	299850	13C4-PFOS	736135	2500	Avg	0.417912					2436.7	2436.6983				5000	49	49	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	18332	D5-NEtFOSAA	299850	5000	Avg	1.061343	288.02	5	100	1	14.401	14.4009	14	14	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C8-PFOS	SESI-0098	660434	13C4-PFOS	736135	2500	Avg	1.019176					2200.71	2200.7098				2500	88	88	Yes				
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	87198	13C8-PFOS	660434	2500	Avg	0.936113	352.61	5	100	1	17.63	17.6303	18	18	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	6984907	13C8-PFOS	660434	2500	Avg	1.011018	26152	5	100	1	1307.62	1307.6223	1300	1300	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	6797	13C8-PFOS	660434	2500	Avg	1.078285	23.861	5	100	1	1.1931	1.1931	1.2	1.2	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C7-PFUnA	SESI-0117	405725	13C2-PFDA	602595	1250	Avg	0.978463					860.15	860.1454										
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C2-PFDoA	SESI-0118	362062	13C2-PFDA	602595	1250	Avg	0.947371					792.77	792.7703				1250	63	63	Yes			
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C8-PFOSA	SESI-0107	625078	13C4-PFOS	736135	2500	Avg	1.639711					1294.64	1294.6413				2500	52	52	Yes			
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	59144	13C8-PFOSA	625078	2500	Avg	0.96599	244.87	5	100	1	12.244	12.2437	12	12	Yes							
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	305371	13C2-PFDA	602595	1250	Avg	0.890868					711.05	711.0048				1250	57	57	Yes			
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2515115	13C4-PFOS	736135	2500	Avg	0.665955					12826	12826.1261				25000	51	51	Yes			
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	116148	13C4-PFOS	736135	2500	Avg	0.421972					934.78	934.7827				2500	37	37	Yes			
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2795809	13C4-PFOS	736135	2500	Avg	0.756241					12555	12555.3788				25000	50	50	Yes			
081924056.d	ZG19005-001	CACMW-006-060-071524	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	124732	13C4-PFOS	736135	2500	Avg	0.448486					944.52	944.5208				2500	38	38	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C4-PFBA	SESI-0111	3578232	13C3-PFBA	1842100	5000	Avg	1.133865					8565.72	8565.7214				10000	86	86	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2832398	13C4-PFBA	3578232	10000	Avg	0.85141	9297.09	5	100	1	464.85	464.8545	460	460	Yes	480	92	92.5	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	1505401	13C2-PFHxA	1082431	2500	Avg	0.801471					4338.15	4338.1461				5000	87	87	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1643617	13C5-PFPeA	1505401	5000	Avg	0.913924	5973.22	5	100	1	298.66	298.6609	300	300	Yes	240	96	95.8	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	184519	18O2-PFHxS	593660	2500	Avg	0.189605					4098.2	4098.2036				5000	82	82	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2FTS)	757124-72-4	585729	13C2-4:2FTS	184519	5000	Avg	1.821802	8712.13	5	100	1	435.61	435.6066	440	440	Yes	450	97	96.8	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	996238	13C2-PFHxA	1082431	2500	Avg	1.08809					2114.65	2114.6479				2500	85	85	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1694306	13C5-PFHxA	996238	2500	Avg	0.896378	4743.27	5	100	1	237.16	237.1633	240	240	Yes	120	105	105.2	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3133745	13C5-PFHxA	996238	2500	Avg	0.165672	47467	5	100	1	2373.34	2373.3481	2400	2400	Yes	3000	79	79.1	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C3-PFBS	SESI-0116	687345	18O2-PFHxS	593660	2500	Avg	1.30288					2221.63	2221.6343				2500	89	89	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	734294	13C3-PFBS	687345	2500	Avg	1.208343	2210.27	5	100	1	110.51	110.5134	110	110	Yes	110	89	86.3	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	735328	13C2-PFHxA	1082431	2500	Avg	0.196665					8635.61	8635.6258				10000	86	86	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	1056470	13C2-PFHxA	1082431	2500	Avg	1.160285					2102.97	2102.9661				2500	84	84	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1337807	13C4-PFHpA	1056470	2500	Avg	1.019994	3103.69	5	100	1	155.18	155.1846	160	160	Yes	120	95	95.4	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	219469	18O2-PFHxS	593660	2500	Avg	0.208405					4434.73	4434.7309				5000	89	89	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	898223	13C2-6:2FTS	219469	5000	Avg	1.837836	11135	5	100	1	556.73	556.7295	560	560	Yes	460	92	90.8	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C8-PFOA	SESI-0097	1261016	13C4-PFOA	212675	2500	Avg	6.826009					2171.59	2171.5874				2500	87	87	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	2126647	13C8-PFOA	1261016	2500	Avg	0.882262	4778.78	5	100	1	238.94	238.9391	240	240	Yes	120	100	100.5	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	627658	18O2-PFHxS	593660	2500	Avg	1.165116					2268.59	2268.5906				2500	91	91	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	721633	13C3-PFHxS	627658	2500	Avg	1.154897	2488.8	5	100	1	124.44	124.44	120	120	Yes	110	94	96.0	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2358920	13C3-PFHxS	627658	2500	Avg	1.142081	8226.84	5	100	1	411.34	411.3422	410	410	Yes	110	121	121.0	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C9-PFNA	SESI-0099	582293	13C5-PFNA	723026	1250	Avg	0.9905					1016.35	1016.3498				1250	81	81	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	956457	13C9-PFNA	582293	1250	Avg	0.792037	2592.32	5	100	1	129.62	129.6159	130	130	Yes	120	96	95.7	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	168991	18O2-PFHxS	593660	2500	Avg	0.190493					3735.82	3735.8272				5000	75	75	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	609793	13C2-8:2FTS	168991	5000	Avg	1.879444	9599.74	5	100	1	479.99	479.987	480	480	Yes	460	96	96.6	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	346023	13C4-PFOS	801980	2500	Avg	0.485385					2222.26	2222.2611				5000	44	44	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	157568	D3-NMeFOSAA	346023	5000	Avg	0.841107	2706.96	5	100	1	135.35	135.348	140	140	Yes	120	96	95.7	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C6-PFDA	SESI-0115	506498	13C2-PFDA	604924	1250	Avg	1.111006					942.04	942.0426				1250	75	75	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluorodecanoic acid (PFDA)	335-76-2	745612	13C6-PFDA	506498	1250	Avg	0.879258	2092.81	5	100	1	104.64	104.6403	100	100	Yes	120	85	84.9	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	D5-NEtFOSA	SESI-0110	263206	13C4-PFOS	801980	2500	Avg	0.417912					1963.3	1963.3034				5000	39	39	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	141430	D5-NEtFOSAA	263206	5000	Avg	1.061343	2531.4	5	100	1	126.57	126.5698	130	130	Yes	120	93	93.5	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C8-PFOS	SESI-0098	642148	13C4-PFOS	801980	2500	Avg	1.019176					1964.1	1964.0947				2500	79	79	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	613372	13C8-PFOS	642148	2500	Avg	0.936113	2550.94	5	100	1	127.55	127.5471	130	130	Yes	110	96	99.9	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	8521779	13C8-PFOS	642148	2500	Avg	1.011018	32815	5	100	1	1640.76	1640.7645	1600	1600	Yes	110	299	302.9	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	477404	13C8-PFOS	642148	2500	Avg	1.078285	1723.68	5	100	1	86.184	86.1841	86	86	Yes	120	74	70.8	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	344211	13C2-PFDA	604924	1250	Avg	0.978463					726.92	726.9249				1250	58	58	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	550711	13C7-PFUnA	344211	1250	Avg	0.906176	2206.97	5	100	1	110.35	110.3485	110	110	Yes	120	92	92.0	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	285514	13C2-PFDA	604924	1250	Avg	0.947371					622.75	622.754				1250	50	50	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	549844	13C4-PFOS	801980	2500	Avg	1.639711					1045.32	1045.3185				2500	42	42	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	592712	13C8-PFOSA	549844	2500	Avg	0.96599	2789.79	5	100	1	139.49	139.4895	140	140	Yes	120	106	106.0	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	271569	13C2-PFDA	604924	1250	Avg	0.890868					629.91	629.9064				1250	50	50	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	2240524	13C4-PFOS	801980	2500	Avg	0.665955					10488	10487.7225				25000	42	42	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1932733	D7-NMeFOSE	2240524	25000	Avg	1.019907	21145	5	100	1	1057.24	1057.2354	1100	1100	Yes	1200	88	88.1	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	106914	13C4-PFOS	801980	2500	Avg	0.421972					789.82	789.8187				2500	32	32	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	2422879	13C4-PFOS	801980	2500	Avg	0.756241					9987.3	9987.2973				25000	40	40	Yes			
081924057.d	ZG19005-001MS		Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	116573	13C4-PFOS	801980	2500	Avg	0.448486					810.26	810.2622				2500	32	32	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	3822344	13C3-PFBA	2092759	5000	Avg	1.133865					8054.14	8054.1406				10000	81	81	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3150921	13C4-PFBA	3822344	10000	Avg	0.85141	9682.08	5	100	1	484.1	484.1044	480	480	Yes	480	96	96.5	Yes	4.1	4.1	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	1626083	13C2-PFHxA	1211040	2500	Avg	0.801471					4188.29	4188.2868				5000	84	84	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1809057	13C5-PFPeA	1626083	5000	Avg	0.913924	6086.52	5	100	1	304.33	304.3263	300	300	Yes	240	98	98.1	Yes	1.9	1.9	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	202459	18O2-PFHxS	685584	2500	Avg	0.189605					3893.73	3893.7372				5000	78	78	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2FTS)	757124-72-4	652465	13C2-4:2FTS	202459	5000	Avg	1.821802	8844.82	5	100	1	442.24	442.241	440	440	Yes	450	98	98.3	Yes	1.5	1.5	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	1094561	13C2-PFHxA	1211040	2500	Avg	1.08809					2076.62	2076.6183				2500	83	83	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1839353	13C5-PFHxA	1094561	2500	Avg	0.896378	4686.77	5	100	1	234.34	234.3387	230	230	Yes	120	103	102.8	Yes	1.2	1.2	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3920542	13C5-PFHxA	1094561	2500	Avg	0.165672	54050	5	100	1	2702.5	2702.5068	2700	2700	Yes	3000	90	90.1	Yes	13	13.0	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	741700	18O2-PFHxS	685584	2500	Avg	1.30288					2075.88	2075.8846				2500	83	83	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	825330	13C3-PFBS	741700	2500	Avg	1.208343	2302.23	5	100	1	115.11	115.1116	120	120	Yes	110	93	90.5	Yes	4.1	4.1	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	771616	13C2-PFHxA	1211040	2500	Avg	0.196665					8099.43	8099.4526				10000	81	81	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	1105324	13C2-PFHxA	1211040	2500	Avg	1.160285					1966.56	1966.5566				2500	79	79	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1413936	13C4-PFHpA	1105324	2500	Avg	1.019994	3135.32	5	100	1	156.77	156.7662	160	160	Yes	120	97	96.7	Yes	1	1.0	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	217402	18O2-PFHxS	685584	2500	Avg	0.208405					3803.95	3803.9494				5000	76	76	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1016427	13C2-6:2FTS	217402	5000	Avg	1.837836	12720	5	100	1	635.98	635.9836	640	640	Yes	460	109	108.0	Yes	13	13.3	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	1271137	13C4-PFOA	259249	2500	Avg	6.826009					1795.76	1795.7605				2500	72	72	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	2102225	13C8-PFOA	1271137	2500	Avg	0.882262	4686.29	5	100	1	234.31	234.3146	230	230	Yes	120	97	96.6	Yes	2	2.0	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	688071	18O2-PFHxS	685584	2500	Avg	1.165116					2153.49	2153.4928				2500	86	86	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	768352	13C3-PFHxS	688071	2500	Avg	1.154897	2417.26	5	100	1	120.86	120.8631	120	120	Yes	110	90	92.8	Yes	2.9	2.9	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2401355	13C3-PFHxS	688071	2500	Avg	1.142081	7639.52	5	100	1	381.98	381.9761	380	380	Yes	110	95	94.3	Yes	7.4	7.4	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	634903	13C5-PFNA	816544	1250	Avg	0.9905					981.26	981.2582				1250	79	79	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	1079413	13C9-PFNA	634903	1250	Avg	0.792037	2683.15	5	100	1	134.16	134.1575	130	130	Yes	120	100	99.5	Yes	3.4	3.4	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	184269	18O2-PFHxS	685584	2500	Avg	0.190493					3527.38	3527.3828				5000	71	71	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	653427	13C2-8:2FTS	184269	5000	Avg	1.879444	9433.78	5	100	1	471.69	471.6886	470	470	Yes	460	95	94.8	Yes	1.7	1.7	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	376759	13C4-PFOS	901528	2500	Avg	0.485385					2152.48	2152.4748				5000	43	43	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	177389	D3-NMeFOSAA	376759	5000	Avg	0.841107	2798.86	5	100	1	139.94	139.9432	140	140	Yes	120	99	99.5	Yes	3.3	3.3	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	505445	13C2-PFDA	683198	1250	Avg	1.111006					832.38	832.3786				1250	67	67	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluorodecanoic acid (PFDA)	335-76-2	824872	13C6-PFDA	505445	1250	Avg	0.879258	2320.1	5	100	1	116	116.0049	120	120	Yes	120	94	94.4	Yes	10	10.3	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	295246	13C4-PFOS	901528	2500	Avg	0.417912					1959.11	1959.1152				5000	39	39	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	159057	D5-NEtFOSAA	295246	5000	Avg	1.061343	2537.95	5	100	1	126.9	126.8975	130	130	Yes	120	94	93.7	Yes	0.26	0.3	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	666793	13C4-PFOS	901528	2500	Avg	1.019176					1814.27	1814.273				2500	73	73	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	688847	13C8-PFOS	666793	2500	Avg	0.936113	2758.95	5	100	1	137.95	137.9474	140	140	Yes	110	105	109.4	Yes	7.8	7.8	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	8098143	13C8-PFOS	666793	2500	Avg	1.011018	30031	5	100	1	1501.57	1501.5698	1500	1500	Yes	110	174	176.3	Yes	8.9	8.9	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	564328	13C8-PFOS	666793	2500	Avg	1.078285	1962.22	5	100	1	98.111	98.1108	98	98	Yes	120	84	80.8	Yes	13	12.9	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	374721	13C2-PFDA	683198	1250	Avg	0.978463					700.69	700.6918				1250	56	56	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	692496	13C7-PFUnA	374721	1250	Avg	0.906176	2549.22	5	100	1	127.46	127.4608	130	130	Yes	120	106	106.2	Yes	14	14.4	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	337808	13C2-PFDA	683198	1250	Avg	0.947371					652.4	652.399				1250	52	52	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	648611	13C4-PFOS	901528	2500	Avg	1.639711					1096.93	1096.9272				2500	44	44	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	677648	13C8-PFOSA	648611	2500	Avg	0.96599	2703.88	5	100	1	135.19	135.1939	140	140	Yes	120	102	102.5	Yes	3.1	3.1	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	317069	13C2-PFDA	683198	1250	Avg	0.890868					651.182	651.1842				1250	52	52	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	2590798	13C4-PFOS	901528	2500	Avg	0.665955					10788	10788.2116				25000	43	43	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	2485746	D7-NMeFOSE	2590798	25000	Avg	1.019907	23518	5	100	1	1175.91	1175.9061	1200	1200	Yes	1200	98	98.0	Yes	11	10.6	Yes
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	124879	13C4-PFOS	901528	2500	Avg	0.421972					820.67	820.6662				2500	33	33	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	2857822	13C4-PFOS	901528	2500	Avg	0.756241					10479	10479.3838				25000	42	42	Yes			
081924058.d	ZG19005-001MD		Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	134646	13C4-PFOS	901528	2500	Avg	0.448486					832.54	832.5405				2500	33	33

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C5-PFHxA	SESI-0113	997308	13C2-PFHxA	1067393	2500	Avg	1.08809					2146.74	2146.7434				2500	86	86	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C3-PFBS	SESI-0116	701782	18O2-PFHxS	601007	2500	Avg	1.30288					2240.57	2240.5688				2500	90	90	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	733871	13C2-PFHxA	1067393	2500	Avg	0.196665					8739.92	8739.9371				10000	87	87	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1018955	13C2-PFHxA	1067393	2500	Avg	1.160285					2056.87	2056.8659				2500	82	82	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	211778	18O2-PFHxS	601007	2500	Avg	0.208405					4227.01	4227.0091				5000	85	85	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C8-PFOA	SESI-0097	1253071	13C4-PFOA	216532	2500	Avg	6.826009					2119.47	2119.4674				2500	85	85	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	26931	13C8-PFOA	1253071	2500	Avg	0.882262	60.9	5	538.73	1	0.56522	0.5652	0.57	0.57	Yes							
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C3-PFHxS	SESI-0096	583669	18O2-PFHxS	601007	2500	Avg	1.165116					2083.81	2083.8091				2500	83	83	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	6433	13C3-PFHxS	583669	2500	Avg	1.142081	24.126	5	538.73	1	0.22392	0.2239	0.22	0.22	Yes							
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C9-PFNA	SESI-0099	528133	13C5-PFNA	699863	1250	Avg	0.9905					952.33	952.3264				1250	76	76	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	143926	18O2-PFHxS	601007	2500	Avg	0.190493					3142.82	3142.8287				5000	63	63	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	372223	13C4-PFOS	734179	2500	Avg	0.485385					2611.29	2611.2888				5000	52	52	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C6-PFDA	SESI-0115	410006	13C2-PFDA	573759	1250	Avg	1.111006					804	803.9968				1250	64	64	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	234062	13C4-PFOS	734179	2500	Avg	0.417912					1907.15	1907.1468				5000	38	38	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C8-PFOS	SESI-0098	582266	13C4-PFOS	734179	2500	Avg	1.019176					1945.41	1945.4062				2500	78	78	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	12328	13C8-PFOS	582266	2500	Avg	1.011018	52.354	5	538.73	1	0.4859	0.4859	0.49	0.49	Yes							
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C7-PFUnA	SESI-0117	306937	13C2-PFDA	573759	1250	Avg	0.978463					683.42	683.4163				1250	55	55	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C2-PFDoA	SESI-0118	254445	13C2-PFDA	573759	1250	Avg	0.947371					585.13	585.1327				1250	47	47	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C8-PFOSA	SESI-0107	456063	13C4-PFOS	734179	2500	Avg	1.639711					947.1	947.0994				2500	38	38	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	211268	13C2-PFDA	573759	1250	Avg	0.890868					516.66	516.6553				1250	41	41	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1792080	13C4-PFOS	734179	2500	Avg	0.665955					9163.28	9163.2716				25000	37	37	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	81465	13C4-PFOS	734179	2500	Avg	0.421972					657.39	657.3936				2500	26	26	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	1885104	13C4-PFOS	734179	2500	Avg	0.756241					8488.15	8488.152				25000	34	34	Yes			
081924067.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	88689	13C4-PFOS	734179	2500	Avg	0.448486					673.38	673.378				2500	27	27	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C4-PFBA	SESI-0111	3212629	13C3-PFBA	1706302	5000	Avg	1.133865					8302.58	8302.585				10000	83	83	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1324320	13C2-PFHxA	997705	2500	Avg	0.801471					4140.41	4140.4065				5000	83	83	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	168031	18O2-PFHxS	564789	2500	Avg	0.189605					3922.77	3922.7751				5000	78	78	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C5-PFHxA	SESI-0113	874768	13C2-PFHxA	997705	2500	Avg	1.08809					2014.49	2014.4938				2500	81	81	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C3-PFBS	SESI-0116	577059	18O2-PFHxS	564789	2500	Avg	1.30288					1960.51	1960.5123				2500	78	78	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	623586	13C2-PFHxA	997705	2500	Avg	0.196665					7945.22	7945.2422				10000	79	79	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C4-PFHpA	SESI-0114	877695	13C2-PFHxA	997705	2500	Avg	1.160285					1895.47	1895.4695				2500	76	76	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	182192	18O2-PFHxS	564789	2500	Avg	0.208405					3869.68	3869.6791				5000	77	77	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C8-PFOA	SESI-0097	1047412	13C4-PFOA	177530	2500	Avg	6.826009					2160.82	2160.8218				2500	86	86	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	18708	13C8-PFOA	1047412	2500	Avg	0.882262	50.612	5	522.79	1	0.48406	0.4841	0.48	0.48	Yes							
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C3-PFHxS	SESI-0096	601745	18O2-PFHxS	564789	2500	Avg	1.165116					2286.11	2286.1099				2500	91	91	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	6151	13C3-PFHxS	601745	2500	Avg	1.142081	22.376	5	522.79	1	0.214	0.214	0.21	0.21	Yes							
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C9-PFNA	SESI-0099	444614	13C5-PFNA	650981	1250	Avg	0.9905					861.93	861.9267				1250	69	69	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	115566	18O2-PFHxS	564789	2500	Avg	0.190493					2685.37	2685.3744				5000	54	54	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	264887	13C4-PFOS	742753	2500	Avg	0.485385					1836.84	1836.8339				5000	37	37	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C6-PFDA	SESI-0115	285575	13C2-PFDA	508983	1250	Avg	1.111006					631.26	631.2633				1250	51	51	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	178446	13C4-PFOS	742753	2500	Avg	0.417912					1437.2	1437.2012				5000	29	29	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C8-PFOS	SESI-0098	412009	13C4-PFOS	742753	2500	Avg	1.019176					1360.67	1360.6709				2500	54	54	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	8191	13C8-PFOS	412009	2500	Avg	1.011018	49.16	5	522.79	1	0.47017	0.4702	0.47	0.47	Yes							
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C7-PFUnA	SESI-0117	200971	13C2-PFDA	508983	1250	Avg	0.978463					504.42	504.424				1250	40	40	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C2-PFDoA	SESI-0118	174885	13C2-PFDA	508983	1250	Avg	0.947371					453.36	453.3558				1250	36	36	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C8-PFOSA	SESI-0107	385915	13C4-PFOS	742753	2500	Avg	1.639711					792.17	792.1728				2500	32	32	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	156342	13C2-PFDA	508983	1250	Avg	0.890868					430.99	430.9918				1250	34	34	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	839634	13C4-PFOS	742753	2500	Avg	0.665955					4243.66	4243.6614				25000	17	17	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	78734	13C4-PFOS	742753	2500	Avg	0.421972					628.02	628.0212				2500	25	25	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	563262	13C4-PFOS	742753	2500	Avg	0.756241					2506.95	2506.9509				25000	10	10	Yes			
082924069.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	82566	13C4-PFOS	742753	2500	Avg	0.448486					619.65	619.6521				2500	25	25	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C4-PFBA	SESI-0111	3383657	13C3-PFBA	1848741	5000	Avg	1.133865					8070.84	8070.8433				10000	81	81	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	153653	13C4-PFBA	3383657	10000	Avg	0.85141	533.35	5	100	1	26.668	26.6677	27	27	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1414318	13C2-PFHxA	1103576	2500	Avg	0.801471					3997.58	3997.5787				5000	80	80	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	426076	13C5-PFPeA	1414318	5000	Avg	0.913924	1648.16	5	100	1	82.408	82.4081	82	82	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	173445	18O2-PFHxS	596046	2500	Avg	0.189605					3836.82	3836.8271				5000	77	77	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C5-PFHxA	SESI-0113	988188	13C2-PFHxA	1103576	2500	Avg	1.08809					2057.37	2057.3705				2500	82	82	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	831103	13C5-PFHxA	988188	2500	Avg	0.896378	2345.66	5	100	1	117.28	117.2827	120	120	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C3-PFBS	SESI-0116	647320	18O2-PFHxS	596046	2500	Avg	1.30288					2083.89	2083.8902				2500	83	83	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	114169	13C3-PFBS	647320	2500	Avg	1.208343	364.9	5	100	1	18.245	18.2452	18	18	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	660013	13C2-PFHxA	1103576	2500	Avg	0.196665					7602.6	7602.6181				10000	76	76	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C4-PFHpA	SESI-0114	998912	13C2-PFHxA	1103576	2500	Avg	1.160285					1950.3	1950.295				2500	78	78	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	372899	13C4-PFHpA	998912	2500	Avg	1.019994	914.97	5	100	1	45.748	45.7484	46	46	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	202407	18O2-PFHxS	596046	2500	Avg	0.208405					4073.6	4073.5929				5000	81	81	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	1H, 1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	232567	13C2-6:2FTS	202407	5000	Avg	1.837836	3125.98	5	100	1	156.3	156.2989	160	160	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C8-PFOA	SESI-0097	1128898	13C4-PFOA	202857	2500	Avg	6.826009					2038.16	2038.158				2500	82	82	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	947940	13C8-PFOA	1128898	2500	Avg	0.882262	2379.41	5	100	1	118.97	118.9703	120	120	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C3-PFHxS	SESI-0096	582794	18O2-PFHxS	596046	2500	Avg	1.165116					2098	2098.0032				2500	84	84	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	129148	13C3-PFHxS	582794	2500	Avg	1.154897	479.7	5	100	1	23.985	23.985	24	24	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1699890	13C3-PFHxS	582794	2500	Avg	1.142081	6384.82	5	100	1	319.24	319.2411	320	320	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C9-PFNA	SESI-0099	607903	13C5-PFNA	722338	1250	Avg	0.9905					1062.06	1062.0607				1250	85	85	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	110931	13C9-PFNA	607903	1250	Avg	0.792037	287.99	5	100	1	14.4	14.3997	14	14	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	159644	18O2-PFHxS	596046	2500	Avg	0.190493					3515.06	3515.0686				5000	70	70	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	54450	13C2-8:2FTS	159644	5000	Avg	1.879444	907.37	5	100	1	45.369	45.3687	45	45	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	326535	13C4-PFOS	807950	2500	Avg	0.485385					2081.61	2081.6078				5000	42	42	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	23404	D3-NMeFOSAA	326535	5000	Avg	0.841107	426.07	5	100	1	21.303	21.3034	21	21	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C6-PFDA	SESI-0115	439005	13C2-PFDA	588447	1250	Avg	1.111006					839.37	839.3744				1250	67	67	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	19501	13C6-PFDA	439005	1250	Avg	0.879258	63.151	5	100	1	3.1576	3.1576	3.2	3.2	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	238044	13C4-PFOS	807950	2500	Avg	0.417912					1762.49	1762.4951				5000	35	35	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	21581	D5-NEtFOSAA	238044	5000	Avg	1.061343	427.1	5	100	1	21.355	21.355	21	21	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C8-PFOS	SESI-0098	606212	13C4-PFOS	807950	2500	Avg	1.019176					1840.48	1840.479				2500	74	74	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	87049	13C8-PFOS	606212	2500	Avg	0.936113	383.49	5	100	1	19.174	19.1744	19	19	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	7591641	13C8-PFOS	606212	2500	Avg	1.011018	30967	5	100	1	1548.33	1548.3255	1500	1500	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	9632	13C8-PFOS	606212	2500	Avg	1.078285	36.838	5	100	1	1.8419	1.8419	1.8	1.8	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C7-PFUnA	SESI-0117	335215	13C2-PFDA	588447	1250	Avg	0.978463					727.75	727.7491				1250	58	58	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C2-PFDoA	SESI-0118	256931	13C2-PFDA	588447	1250	Avg	0.947371					576.1	576.1016				1250	46	46	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C8-PFOSA	SESI-0107	560522	13C4-PFOS	807950	2500	Avg	1.639711					1057.74	1057.7447				2500	42	42	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	65961	13C8-PFOSA	560522	2500	Avg	0.96599	304.55	5	100	1	15.228	15.2276	15	15	Yes							
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	234588	13C2-PFDA	588447	1250	Avg	0.890868					559.36	559.3647				1250	45	45	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2207717	13C4-PFOS	807950	2500	Avg	0.665955					10258	10257.7956				25000	41	41	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	113395	13C4-PFOS	807950	2500	Avg	0.421972					831.51	831.5068				2500	33	33	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2392115	13C4-PFOS	807950	2500	Avg	0.756241					9787.63	9787.6258				25000	39	39	Yes			
081924070.d	ZG19005-014	CACMW-GW-FD02-071524	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	120977	13C4-PFOS	807950	2500	Avg	0.448486					834.66	834.6597				2500	33	33	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C4-PFBA	SESI-0111	2850769	13C3-PFBA	1494983	5000	Avg	1.132872					8416.18	8416.1784				10000	84	84	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1161111	13C2-PFHxA	868685	2500	Avg	0.828959					4031.05	4031.0518				5000	81	81	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	162640	18O2-PFHxS	570188	2500	Avg	0.187238					3808.52	3808.5118				5000	76	76	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C5-PFHxA	SESI-0113	767651	13C2-PFHxA	868685	2500	Avg	1.116275					1979.11	1979.1117				2500	79	79	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	8118	13C5-PFHxA	767651	2500	Avg	0.866933	30.496	5	538.73	1	0.28303	0.283	0.28	0.28	Yes							
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C3-PFBS	SESI-0116	579278	18O2-PFHxS	570188	2500	Avg	1.29016					1968.64	1968.6359				2500	79	79	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	579716	13C2-PFHxA	868685	2500	Avg	0.201407					8283.58	8283.5865				10000	83	83	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C4-PFHpA	SESI-0114	828134	13C2-PFHxA	868685	2500	Avg	1.179082					2021.32	2021.3164				2500	81	81	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	183424	18O2-PFHxS	570188	2500	Avg	0.216237					3719.19	3719.1876				5000	74	74	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C8-PFOA	SESI-0097	961766	13C4-PFOA	186509	2500	Avg	6.377131					2021.55	2021.5491				2500	81	81	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C3-PFHxS	SESI-0096	580483	18O2-PFHxS	570188	2500	Avg	1.188611					2141.27	2141.2713				2500	86	86	Yes			
082224.134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	6599	13C3-PFHxS	580483	2500	Avg	1.122573	25.317	5	538.73	1	0.23497	0.235	0.23	0.23	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (mL)	Dilution Factor	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Result (ng/L)	Calc. Result (ng/L)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C9-PFNA	SESI-0099	470685	13C5-PFNA	623846	1250	Avg	0.964448					977.88	977.8768				1250	78	78	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	148152	18O2-PFHxS	570188	2500	Avg	0.197187					3294.2	3294.2092				5000	66	66	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	472808	13C4-PFOS	721443	2500	Avg	0.485386					3375.48	3375.4801				5000	68	68	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C6-PFDA	SESI-0115	415102	13C2-PFDA	508706	1250	Avg	1.154558					883.45	883.4505				1250	71	71	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	309131	13C4-PFOS	721443	2500	Avg	0.384441					2786.45	2786.4474				5000	56	56	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C8-PFOS	SESI-0098	548274	13C4-PFOS	721443	2500	Avg	1.031291					1842.28	1842.2748				2500	74	74	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	12000	13C8-PFOS	548274	2500	Avg	1.00003	54.716	5	538.73	1	0.50782	0.5078	0.51	0.51	Yes							
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C7-PFUnA	SESI-0117	333244	13C2-PFDA	508706	1250	Avg	1.113868					735.14	735.1429				1250	59	59	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C2-PFDoA	SESI-0118	263437	13C2-PFDA	508706	1250	Avg	1.031521					627.54	627.5406				1250	50	50	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C8-PFOSA	SESI-0107	737392	13C4-PFOS	721443	2500	Avg	1.635831					1562.06	1562.0609				2500	62	62	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	9342	13C8-PFOSA	737392	2500	Avg	0.962947	32.891	5	538.73	1	0.30527	0.3053	0.31	0.31	Yes							
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	241896	13C2-PFDA	508706	1250	Avg	0.953858					623.14	623.1436				1250	50	50	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2126413	13C4-PFOS	721443	2500	Avg	0.682988					10789	10788.7848				25000	43	43	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	136468	13C4-PFOS	721443	2500	Avg	0.422567					1119.11	1119.1112				2500	45	45	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2308139	13C4-PFOS	721443	2500	Avg	0.769364					10396	10396.0434				25000	42	42	Yes			
082224134.d	ZG19005-011	CACMW-EB03-071624	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	142751	13C4-PFOS	721443	2500	Avg	0.455453					1086.11	1086.1094				2500	43	43	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C4-PFBA	SESI-0111	3088239	13C3-PFBA	1612787	5000	Avg	1.132872					8451.29	8451.2909				10000	85	85	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1302804	13C2-PFHxA	941738	2500	Avg	0.828959					4172.11	4172.1119				5000	83	83	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	174360	18O2-PFHxS	592824	2500	Avg	0.187238					3927.06	3927.056				5000	79	79	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C5-PFHxA	SESI-0113	850755	13C2-PFHxA	941738	2500	Avg	1.116275					2023.22	2023.2205				2500	81	81	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C3-PFBS	SESI-0116	651439	18O2-PFHxS	592824	2500	Avg	1.29016					2129.34	2129.3371				2500	85	85	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	626437	13C2-PFHxA	941738	2500	Avg	0.201407					8256.81	8256.8188				10000	83	83	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C4-PFHpA	SESI-0114	924387	13C2-PFHxA	941738	2500	Avg	1.179082					2081.23	2081.2284				2500	83	83	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	216990	18O2-PFHxS	592824	2500	Avg	0.216237					4231.79	4231.7884				5000	85	85	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C8-PFOA	SESI-0097	1145097	13C4-PFOA	204464	2500	Avg	6.377131					2195.53	2195.5336				2500	88	88	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	27088	13C8-PFOA	1145097	2500	Avg	0.896892	65.938	5	522.79	1	0.63063	0.6306	0.63	0.63	Yes							
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C3-PFHxS	SESI-0096	591149	18O2-PFHxS	592824	2500	Avg	1.188611					2097.35	2097.3526				2500	84	84	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	7908	13C3-PFHxS	591149	2500	Avg	1.122573	29.792	5	522.79	1	0.28493	0.2849	0.28	0.28	Yes							
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C9-PFNA	SESI-0099	536453	13C5-PFNA	673522	1250	Avg	0.964448					1032.31	1032.3123				1250	83	83	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	134428	18O2-PFHxS	592824	2500	Avg	0.197187					2874.91	2874.9195				5000	57	57	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	451090	13C4-PFOS	793700	2500	Avg	0.485386					2927.25	2927.2484				5000	59	59	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C6-PFDA	SESI-0115	395729	13C2-PFDA	562690	1250	Avg	1.154558					761.42	761.4176				1250	61	61	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	302022	13C4-PFOS	793700	2500	Avg	0.384441					2474.53	2474.5288				5000	49	49	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C8-PFOS	SESI-0098	556081	13C4-PFOS	793700	2500	Avg	1.031291					1698.4	1698.4019				2500	68	68	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	18994	13C8-PFOS	556081	2500	Avg	1.00003	85.39	5	522.79	1	0.81667	0.8167	0.82	0.82	Yes							
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C7-PFUnA	SESI-0117	328585	13C2-PFDA	562690	1250	Avg	1.113868					655.32	655.3221				1250	52	52	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C2-PFDoA	SESI-0118	255853	13C2-PFDA	562690	1250	Avg	1.031521					551	551.0021				1250	44	44	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C8-PFOSA	SESI-0107	653428	13C4-PFOS	793700	2500	Avg	1.635831					1258.18	1258.1805				2500	50	50	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	237908	13C2-PFDA	562690	1250	Avg	0.953858					554.07	554.0719				1250	44	44	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2158995	13C4-PFOS	793700	2500	Avg	0.682988					9956.85	9956.8552				25000	40	40	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	119310	13C4-PFOS	793700	2500	Avg	0.422567					889.33	889.334				2500	36	36	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2346623	13C4-PFOS	793700	2500	Avg	0.769364					9607.16	9607.1615				25000	38	38	Yes			
082224135.d	ZG19005-013	CACMW-FB04-071624	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	125325	13C4-PFOS	793700	2500	Avg	0.455453					866.72	866.7179				2500	35	35	Yes			

Key

	from quantitation report
	from reported calibration
	from lab report/SEDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
mL	milliliters
ND	not detected
ng/L	nanograms per liter
On Col.	on column
RF	response factor
RPD	relative percent difference

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Leslie Brooks	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical National
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	L1756419
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	August 9, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical National – Mount Juliet, Tennessee. The laboratory is ADEC CS approved for the analyses performed, where required.

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☐ No ☒ N/A ☐
   Analyses requested: Alkalinity (SM2320B), TOC (SM5310C), TDS (SM2540C), TSS (SM2540D), anions (300.0), nitrate/nitrite (353.2), RCRA metals (6020A/7470A), and total/dissolved Fe/Mn/Ca/Mg (6010C). Hardness (SM3500, per QAPP) was not requested, but per correspondence with the lab hardness was determined by EPA Method 130.1 using volume from alkalinity bottle.
   Comments: Clarifications were submitted in a revised electronic CoC.

3. Laboratory Sample Receipt Documentation

a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
Yes ☒ No ☐ N/A ☐
Cooler temperature(s): 3.0, 4.5, 5.7, 1.5
Comments: Samples were received within the acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☐ No ☒ N/A ☐
Comments: The case narrative referred to qualifications throughout the report for documentation of QC failures; none were summarized or discussed in the case narrative. The case narrative noted that sample quantity was not sufficient to complete TSS analysis per recommended method guidelines for sample CACMW-001-110-070924. Analysis was completed; presumably the laboratory had insufficient volume to re-run the analysis in response to an LCS failure.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: No corrective actions were performed.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☐ No ☒ N/A ☐
Comments: TOC was analyzed by EPA Method 9060A instead of SM5310C, and hardness was analyzed by EPA Method 130.1 instead of SM3500.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this workorder.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☐ No ☒ N/A ☐
Comments: LOQs and LODs for non-detect results were compared to the Project Screening Levels (PSLs) as defined in Worksheet #15 of the UFP-QAPP. LOQs and LODs for cadmium and mercury were above PSLs for all samples.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Methods used for hardness and TOC produce comparable data. Data quality was not affected. The UFP-QAPP states the project will use the LOD as the PSL for arsenic, cadmium, and mercury

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: TOC was detected below the LOQ and LOD but above the DL for method blanks in prep batches WG2323624 and WG2323629 at 246 ug/L and 114 ug/L respectively.

iii. If above LoQ or RL, what samples are affected?
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated method blank concentration. No samples were affected.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☐ No ☐ N/A ☒
Comments: No organic methods were performed in this work order.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☒ N/A ☐
Comments: 6020 prep batch WG2324884 was missing a duplicate.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☐ No ☒ N/A ☐
Comments: LCS recovery was below laboratory limits for Total Suspended Solids in prep batches WG2322808 and WG2322815.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☐ No ☒ N/A ☐
Comments: Laboratory duplicate RPD of Total Suspended Solids (TSS) in sample CACMW-002-160-07112 was reported above the laboratory control limit of 10%.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments: TSS results for samples CACMW-001-060-070924, CACMW-001-110-070924, CACMW-001-160-071024, CACMW-002-060-071024, and CACMW-003-060-071024 are considered affected by the recovery failures. No samples were affected by the RPD failure as both the parent sample and laboratory duplicate results were below the LOQ.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Affected TSS results are qualified 'J-' as estimated with low bias due to low LCS recovery.

vii. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No organic methods were performed in this work order.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☒ N/A ☐
Comments: Sample CACMW-003-160-071124 was submitted with additional volume for MS/MSD analysis. However, MS/MSD analysis was not run for methods SM2320B, SM2540C, and SM2540D.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments: MS/MSD recoveries were above laboratory control limits for Nitrate-Nitrite in sample CACMW-003-160-071124.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments: Project-sample results are not considered affected if the associated MS/MSD was recovered high and the associated analyte was not detected in the parent sample. No samples were affected.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☐ No ☐ N/A ☒
Comments: No organic methods were performed in this work order.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☐ No ☒ N/A ☐
Comments No field duplicates were submitted in this work order. Refer to DQA for evaluation of overall field duplicate collection frequency.

ii. Was the duplicate submitted blind to lab?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☒ No ☐ N/A ☐
Comments: The following field blanks and equipment blanks were reported in SDG L1758446: CACMW-EB02-071524, CACMW-EB03-071624 CACMW-FB02-071524, CACMW-FB03-071624

ii. Are all results less than LoQ or RL?

Yes ☒ No ☐ N/A ☐
Comments: All detections were below LOD. See checklist L1758446 for details.

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. Fluoride results for all samples in this work order are considered affected

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD, and results above the LOD were qualified with “J+” flags as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Leslie Brooks	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical National
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	L1758081
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	August 8, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical National – Mount Juliet, Tennessee. The laboratory is ADEC CS approved for the analysis performed, where required.

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☐ No ☒ N/A ☐
   Analyses requested: Hardness (130.2), alkalinity (SM2320B), TOC (SM5310C), TDS (SM2540C), TSS (2540D), anions (300), nitrate/nitrite (353.2), RCRA metals (6020A/7470A), and total/dissolved Fe/Mn/Ca/Mg (6010C).
   Comments: The method requested for hardness did not match the method listed in the QAPP (SM3500).

3. Laboratory Sample Receipt Documentation

a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
Yes ☒ No ☐ N/A ☐
Cooler temperature(s): 5.7, 3.3, 1.2
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☐ No ☒ N/A ☐
Comments: The case narrative referred to qualifications throughout the report for documentation of QC failures; none were summarized or discussed in the case narrative.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: No corrective actions were performed.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☐ No ☒ N/A ☐
Comments: TOC was analyzed by EPA Method 9060A instead of SM5310C, and hardness was analyzed by EPA Method 130.1 instead of SM3500.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this workorder.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☐ No ☒ N/A ☐
Comments: LOQs and LODs for non-detect results were compared to the Project Screening Levels (PSLs) as defined in Worksheet #15 of the UFP-QAPP. LOQs and LODs for cadmium and mercury were above PSLs for all samples.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Methods used for hardness and TOC produce comparable data. Data quality was not affected. The UFP-QAPP states the project will use the LOD as the PSL for arsenic, cadmium, and mercury

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: Click or tap here to enter text.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; there were no method blank detections.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☐ No ☐ N/A ☒
Comments: No organic methods were performed in this workorder.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R or RPD outside control limits.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No organic methods were performed in this workorder.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: There were no project-specific MS/MSD submitted in this work order. Refer to DQA for evaluation of overall MS/MSD collection frequency. Non-project related MS/MSDs are not reviewed. Additionally, the laboratory performed MS analysis for batch QC purposes for the following sample: CAMW-004-110-071224

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments: MS recoveries were below laboratory limits for the following: CAMW-004-110-071224 - Chloride

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: The following results were considered affected by low MS/MSD recovery:
CAMW-004-110-071224 - Chloride

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Detected results affected by low MS/MSD recovery failures are qualified 'J-' as estimated with a low bias.

vii. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☐ No ☐ N/A ☒
Comments: No organic methods were performed in this work order.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☒ No ☐ N/A ☐

Comments: The following field duplicate pair was submitted in this work order: CACMW-004-160-071224 / CACMW-GW-FD01-071224

ii. Was the duplicate submitted blind to lab?
Yes ☐ No ☒ N/A ☐
Comments: The field duplicate ID included "FD" identifying it as a field duplicate; however, the associated primary sample could not be readily determined from the field duplicate ID. Future sampling should not include identifiers such as "FD" so field duplicates are blind to the laboratory.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☒ No ☐ N/A ☐
Comments: The following field blanks and equipment blanks were reported in SDG L1758446: CACMW-EB02-071524, CACMW-EB03-071624, CACMW-FB02-071524, CACMW-FB03-071624

ii. Are all results less than LoQ or RL?
Yes ☒ No ☐ N/A ☐
Comments: All detections were below LOD. See checklist L1758446 for details.

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. Fluoride results for all samples in this work order are considered affected.

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a “UB” as false-positives and are considered non-detect up to the LOD, and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Leslie Brooks	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical National
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	L1758446
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	August 8, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical National – Mount Juliet, Tennessee. The laboratory is ADEC CS approved for the analyses performed, where required.

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☐ No ☒ N/A ☐
   Analyses requested: Hardness (130.2), alkalinity (SM2320B), TOC (9060), TDS (2540C), TSS (2540D), anions (9056), nitrate/nitrite (353), RCRA metals (6020A/7470A), and total/dissolved Fe/Mn/Ca/Mg (6010C)
   Comments: The methods requested for hardness and TOC did not match the methods listed in the QAPP (SM3500 and SM5310C, respectively).

3. Laboratory Sample Receipt Documentation

a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
Yes ☒ No ☐ N/A ☐
Cooler temperature(s): 1.4, 2.5, 3.1, 1.6, 4.6, 5.2, 4.5
Comments: Click or tap here to enter text.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☐ No ☒ N/A ☐
Comments: The case narrative referred to qualifications throughout the report for documentation of QC failures; none were summarized or discussed in the case narrative.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: No corrective actions were performed.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: However as noted in Section 2.b., methods requested for hardness and TOC did not match the QAPP.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this work order.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☐ No ☒ N/A ☐
Comments: LOQs and LODs for non-detect results were compared to the Project Screening Levels (PSLs) as defined in Worksheet #15 of the UFP-QAPP. LOQs and LODs for cadmium and mercury were above PSLs for all samples.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Methods used for hardness and TOC produce comparable data. Data quality was not affected. The UFP-QAPP states the project will use the LOD as the PSL for arsenic, cadmium, and mercury.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: TOC was detected below the LOQ and LOD but above the DL for method blank in prep batch WG2327213, at 434 ug/L.

iii. If above LoQ or RL, what samples are affected?
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated method blank concentration. No sample results were affected.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☐ No ☐ N/A ☒
Comments: No organic methods were performed in this work order.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R or RPD outside control limits.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

vii. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No organic methods were performed in this work order.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☒ N/A ☐
Comments: Sample CACMW-006-060-071524 was submitted with additional volume for MS/MSD analysis. However, MS/MSD analysis was not run for methods SM2320B, SM2540C, and SM2540D.
Additionally, the laboratory performed MS/MSD analysis for batch QC purposes for the following samples: CACMW-006-160-071524, CACMW-007-060-071524, and CACMW-008-110-071624

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments: MS/MSD recoveries were below laboratory limits for the following:
CACMW-006-060-071524 – Hardness, Nitrate-nitrite, Chloride
CACMW-007-060-071524 – Dissolved Manganese
CACMW-008-110-071624 – Nitrate-Nitrite

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☐ No ☒ N/A ☐
Comments: MSD RPD was above the laboratory control limit (20%) for Nitrate-Nitrite in sample CACMW-008-110-071624.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: MS/MSD recovery failures are only considered to affect parent-sample data quality if the spiking concentration is greater than 1/4 the native concentration of the analyte in the parent sample. MS/MSD recovery failures are not considered to affect data quality when results exceed the calibration range. An MSD RPD failure only affects parent-sample data quality if the failing analyte is detected in the parent sample. No results were affected by MS/MSD RPD failures.
The following results were considered affected by low MS/MSD recovery:

CACMW-006-060-071524 – Nitrate-Nitrite, Chloride
CACMW-008-110-071624 – Nitrate-Nitrite

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Detected results affected by low MS/MSD recovery failures are qualified 'J-' as estimated with a low bias. Non-detect results affected by low MS/MSD recovery are qualified 'UJ' indicating there is uncertainty in the absence of the analyte at the reporting limit, due to a low bias.

vii. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☐ No ☐ N/A ☒
Comments: No organic methods were performed in this work order.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☒ No ☐ N/A ☐
Comments: The following field duplicate pairs were submitted in this work order:
CACMW-007-060-071524 / CACMW-GW-FD02-071524
CACMW-008-110-071624 / CACMW-GW-FD03-071624

ii. Was the duplicate submitted blind to lab?
Yes ☐ No ☒ N/A ☐
Comments: The field duplicate IDs included “FD” identifying it as a field duplicate; however, the associated primary sample could not be readily determined from the field duplicate IDs. Future sampling should not include identifiers such as “FD” so field duplicates are blind to the laboratory.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☒ No ☐ N/A ☐
Comments: The following field blanks and equipment blanks were reported in this work order: CACMW-EB02-071524, CACMW-EB03-071624, CACMW-FB02-071524, CACMW-FB03-071624

ii. Are all results less than LoQ or RL?
Yes ☒ No ☐ N/A ☐
Comments: The following were detected below the LOQ and LOD but above the DL:

CACMW-EB02-071524	Chloride	404 ug/l
CACMW-EB02-071524	Fluoride	134 ug/l
CACMW-EB03-071624	Calcium (dissolved)	103 ug/l
CACMW-EB03-071624	Chloride	394 ug/l
CACMW-EB03-071624	Fluoride	90.9 ug/l
CACMW-FB03-071524	Fluoride	118 ug/l

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated method blank concentration. Fluoride results for all samples in this work order are considered affected.

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Leslie Brooks	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical Services
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	ZG13006
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	August 19, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical Services – West Columbia, South Carolina. The laboratory is ADEC CS approved for the analyses performed, where required

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: : PFAS (1633)
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☒ No ☐ N/A ☐

Cooler temperature(s): 5.6
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☐ No ☒ N/A ☐
Comments: The laboratory report case narrative documented QC anomalies which are addressed in the following relevant sections of this checklist.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: The following corrective actions were noted in the case narrative. Surrogate recovery for the following sample was outside control limits: ZG13006-007. Re-extraction and/or re-analysis was performed outside of holding time and all data has been reported.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☐ No ☒ N/A ☐
Comments: Reanalysis for sample CACMW-003-160-071124 was extracted 5 days past the recommended 28-day extraction holding time. Affected results are qualified as estimated ('J' for detects and 'UJ' for non-detects).

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this workorder.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☐ No ☒ N/A ☐
Comments: LOQs and LODs for non-detect results were compared to the Project Screening Levels (PSLs) as defined in Worksheet #15 of the UFP-QAPP. LOQ and LODs for HFPO-DA were above PSLs for all samples

e. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: The following were detected in method blanks below the LOQ and LOD but above the DL:
Batch 16118 PFOS 0.028 ng/L

iii. If above LoQ or RL, what samples are affected?

Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated method blank concentration. No samples were affected.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☐ No ☒ N/A ☐
Comments: Batch 15603 had no sample duplicate.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R or RPD failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Sample CACMW-003-160-071124 was submitted with additional volume for MS/MSD analysis.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments: MS/MSD recoveries were below laboratory limits for PFDS, PFTrDA, 11Cl-PF3OUdS, and PFDoS for the initial analysis of parent sample CACMW-003-160-071124. Additionally, recoveries of 11Cl-PF3OUdS and PFDoS were extremely low (%R < 10%).

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☐ No ☒ N/A ☐
Comments: MSD RPD were above laboratory limits for PFDS, PFTrDA, 11Cl-PF3OUdS, and PFDoS for the initial analysis of parent sample CACMW-003-160-071124.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: Associated results in the initial analysis of parent sample CACMW-003-160-071124 are affected.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Non-detect results affected by low MS/MSD recovery are qualified 'UJ' indicating there is uncertainty in the absence of the analyte

at the reporting limit, due to a low bias. Non-detect results affected by extremely low recovery are qualified 'X' as recommended for rejection.

vii. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☒ N/A ☐
Comments: 1633 IDA recoveries for 13C2-Perfluorotetradecanoic acid, d7-MeFOSE, and d9-EtFOSE in the initial analysis of sample CACMW-003-160-071124 were below laboratory limits. Recoveries of d7-MeFOSE and d9-EtFOSE were extremely low (%R < 10%). Additionally, several IDA recoveries were below limits for the MS/MSD of CACMW-003-160-071124.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Non-detect results affected by low IDA recovery are qualified 'UJ' indicating there is uncertainty in the absence of the analyte at the reporting limit, due to a low bias. Non-detect results affected by extremely low recovery are qualified 'X' as recommended for rejection.

iv. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☐ No ☒ N/A ☐
Comments: No field duplicates were submitted in this work order. Refer to DQA for evaluation of overall field duplicate collection frequency.

ii. Was the duplicate submitted blind to lab?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☐ No ☐ N/A ☒
Comments: N/A; see above

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☒ No ☐ N/A ☐

Comments: The following field blanks and equipment blanks were reported in SDG ZG19005: CACMW-EB02-071524, CACMW-EB03-071624 CACMW-FB02-071524, CACMW-FB03-071624

ii. Are all results less than LoQ or RL?
Yes ☒ No ☐ N/A ☐
Comments: All detections were below LOD. See checklist ZG19005 for details.

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. No samples were affected.

iv. Are data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Leslie Brooks	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical Services
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	ZG18020
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	August 22, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical Services – West Columbia, South Carolina. The laboratory is ADEC CS approved for the analyses performed, where required

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: PFAS (1633)
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☒ No ☐ N/A ☐

Cooler temperature(s): 2.4
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☐ No ☒ N/A ☐
Comments: The laboratory report case narrative documented QC anomalies which are addressed in the following relevant sections of this checklist.

Additionally, the laboratory qualified PFOS results in both the initial and reanalysis of sample CACMW-004-110-071224 as having exceeded the calibration range. Affected results are qualified 'J' as estimated for exceeding the calibration range.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: The following corrective actions were noted in the case narrative. Surrogate recovery for the following sample was outside control limits: ZG18020-001, ZG18020-002, ZG18020-004, ZG18020-005. Re-extraction and/or re-analysis was performed outside of holding time and all data has been reported.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☐ No ☒ N/A ☐
Comments: Reanalysis for samples CACMW-004-110-071224, CACMW-004-160-071224, CACMW-005-160-071224, and CACMW-GW-FD01-071224 were extracted 5 days past the recommended 28-day extraction holding time. Affected results are qualified as estimated ('J' for detects and 'UJ' for non-detects).

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this workorder.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☐ No ☒ N/A ☐
Comments: LOQs and LODs for non-detect results were compared to the Project Screening Levels (PSLs) as defined in Worksheet #15 of the UFP-QAPP. LOQ and LODs for HFPO-DA were above PSLs for all samples

e. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: The following were detected in method blanks below the LOQ and LOD but above the DL:
Batch 16172 PFOS 0.36 ng/L

iii. If above LoQ or RL, what samples are affected?
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated method blank concentration. No samples were affected.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☐ No ☒ N/A ☐
Comments: Batches 15815 and 16172 had no sample duplicate.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R or RPD failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: There were no project-specific MS/MSD submitted in this work order. Refer to DQA for evaluation of overall MS/MSD collection frequency. Non-project related MS/MSDs are not reviewed

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; see above.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: N/A; see above.

vii. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☒ N/A ☐
Comments: 1633 IDA recoveries for 13C2-Perfluorotetradecanoic acid, d7-MeFOSE, and/or d9-EtFOSE in the initial analysis and reanalysis of samples CACMW-004-110-071224, CACMW-004-160-071224, CACMW-005-160-071224, and CACMW-GW-FD01-071224 were below laboratory limits. Recoveries of d7-MeFOSE and d9-EtFOSE were extremely low (%R < 10%) in several cases. Refer to DQA for details.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Non-detect results affected by low IDA recovery are qualified 'UJ' indicating there is uncertainty in the absence of the analyte at the reporting limit, due to a low bias. Non-detect results affected by extremely low recovery are qualified ‘X’ as recommended for rejection.

iv. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☒ No ☐ N/A ☐
Comments: The following field duplicate pair was submitted in this work order: CACMW-004-160-071224 / CACMW-GW-FD01-071224.

ii. Was the duplicate submitted blind to lab?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☒ No ☐ N/A ☐
Comments: The following field blanks and equipment blanks were reported in SDG ZG19005: CACMW-EB02-071524, CACMW-EB03-071624 CACMW-FB02-071524, CACMW-FB03-071624

ii. Are all results less than LoQ or RL?
Yes ☒ No ☐ N/A ☐
Comments: All detections were below LOD. See checklist ZG19005 for details.

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. FOSA in sample CACMW-GW-FD01-071224 is considered affected.

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Leslie Brooks	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical Services
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	ZG19005
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	August 28, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical Services – West Columbia, South Carolina. The laboratory is ADEC CS approved for the analyses performed, where required

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: : PFAS (1633)
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☒ No ☐ N/A ☐

Cooler temperature(s): 1.7, 2.4, 1.9, 2.7
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☐ No ☒ N/A ☐
Comments: The laboratory report case narrative documented QC anomalies which are addressed in the following relevant sections of this checklist.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: The following corrective actions were noted in the case narrative. The following samples were diluted due to the nature of the sample matrix: ZG19005-001, ZG19005-001MS, ZG19005-001MSD, ZG19005-005, ZG19005-006, ZG19005-007, ZG19005-008, ZG19005-009, ZG19005-014, ZG19005-015. The LOQ has been elevated to reflect the dilution. Samples were dark in color. Surrogate recovery for the following sample was outside control limits: ZG19005-011, ZG19005-013. Re-extraction and/or re-analysis was performed outside of holding time and all data has been reported.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☐ No ☒ N/A ☐
Comments: Reanalysis for samples CACMW-EB03-071624 and CACMW-FB04-071624 were extracted 8 days past the recommended 28-day extraction holding time. Field QC samples are not flagged

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this workorder.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☐ No ☒ N/A ☐
Comments: LOQs and LODs for non-detect results were compared to the Project Screening Levels (PSLs) as defined in Worksheet #15 of the UFP-QAPP. LOQ and LODs for HFPO-DA were above PSLs for all samples

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: Click or tap here to enter text.

iii. If above LoQ or RL, what samples are affected?
Comments: NA; there were no method blank detections.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☐ No ☒ N/A ☐
Comments: Batches 15901 and 16574 had no sample duplicate.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R or RPD failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Sample CACMW-006-060-071524 was submitted with additional volume for MS/MSD analysis.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments: MS/MSD recoveries were above laboratory limits for PFOS.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: MS/MSD recovery failures are only considered to affect parent-sample data quality if the spiking concentration is greater than 1/4 the native concentration of the analyte in the parent sample. No samples were affected.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☒ N/A ☐
Comments: 1633 IDA recoveries for 13C8-Perfluorooctane sulfonamide in the initial analysis of sample CACMW-EB03-071624 and 13C8-Perfluorooctane sulfonamide and d3-MeFOSSA in the initial analysis of sample CACMW-FB04-071624 were below laboratory limits.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: Field QC samples are not flagged.

iv. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☐ No ☒ N/A ☐
Comments: The following field duplicate pairs were submitted in this work order:
CACMW-007-060-071524 / CACMW-GW-FD02-071524
CACMW-008-110-071624 / CACMW-GW-FD03-071624

ii. Was the duplicate submitted blind to lab?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☒ No ☐ N/A ☐
Comments: The following field blanks and equipment blanks were reported in SDG ZG19005: CACMW-EB02-071524, CACMW-EB03-071624 CACMW-FB02-071524, CACMW-FB03-071624

ii. Are all results less than LoQ or RL?
Yes ☒ No ☐ N/A ☐
Comments: The following were detected below the LOQ and LOD but above the DL:
CACMW-EB03-071624 PFHxS 0.22 ng/l (initial)
CACMW-EB03-071624 PFOS 0.49 ng/l (initial)

CACMW-EB03-071624	PFOA	0.57 ng/l (initial)
CACMW-EB03-071624	PFHxS	0.23 ng/l (reanalysis)
CACMW-EB03-071624	PFHxA	0.28 ng/l (reanalysis)
CACMW-EB03-071624	FOSA	0.31 ng/l (reanalysis)
CACMW-EB03-071624	PFOS	0.51 ng/l (reanalysis)
CACMW-FB04-071624	PFHxS	0.21 ng/l (initial)
CACMW-FB04-071624	PFOS	0.47 ng/l (initial)
CACMW-FB04-071624	PFOA	0.48 ng/l (initial)
CACMW-FB04-071624	PFHxS	0.28 ng/l (reanalysis)
CACMW-FB04-071624	PFOS	0.82 ng/l (reanalysis)
CACMW-FB04-071624	PFOA	0.63 ng/l (reanalysis)

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. FOSA in samples CACMW-007-160-071524 and CACMW-008-160-071624 are considered affected.

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

SDG:	ZG13006
Lab Name:	Pace
Completed By:	Leslie Brooks
Date:	10/11/2024
Methods (types) reviewed	1633 (LC-MS/MS)

	Yes	No	N/A
Additional Stage 2A 1633 PFAS Checks			
Ion ratios within 50-150% of ion ratio of applicable calibration standard?		X	
Extracted Internal Standard (EIS) recovery within 20-150% or laboratory limits?		X	
EIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Non-Extracted Internal Standards (NIS) peak area greater than 30% of the average area of the calibration standards or within laboratory limits?		X	
NIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Laboratory Control (LCS) and Low-Level Laboratory Control Sample (LLLCS) are prepared in every preparation batch of 20 environmental samples and recovery within control limits?	X		
Bile Salt Interference Check reported and PFOS and TDCA separated by at least 1 minute	X		
Qualitative Identification Standard containing a mix of branched and linear isomers analyzed once daily prior to sample analysis?	X		
Comments:			
PFUnA in sample CACMW-004-060-071124 and PFOSA in initial analysis of sample CACMW-003-160-071124 had ion ratios outside 50-150% of the ion ratio of the midpoint calibration standard. Affected results are qualified 'J' as estimated. EIS recovery in sample CACMW-003-160-071124 and its MS/MSD were outside limits see ADEC checklist for details. NIS peak area for the dilution runs of samples CACMW-001-060-070924, CACMW-001-110-070924, CACMW-003-060-71024 were below 30% of the average area of the calibration standards. However, it was noted that IS standards were not refortified in the dilution. Only PFOS was reported from dilution runs and qualification is not required.			
General			
Preparation and analysis run logs reported and complete?	X		
Bench logs and data sheets reported and complete? *(where relevant)*	X		
Comments:			
Tuning and Instrument Performance			
Mass Calibration and Mass Calibration Verification performed prior to initial calibration	X		

	Yes	No	N/A
Verify the peak apex for each mass did not shift more than 0.2 Da (or amu) from the expected masses for each target analyte.	X		
Comments:			
Initial Calibration			
Initial calibration performed at the required frequency? *(generally prior to sample analysis or after ICV/CCV failure)*	X		
Does the calibration include the minimum number of levels? *(6 for Avg. RF or linear with 5 within quantification range and 1 additional if second order)*	X		
Does the calibration meet method criteria? *(RSD or RSE < 20%)*	X		
Comments:			
Initial (Secondary Source), Continuing Calibration Verification, and Instrument Sensitivity Check			
Initial calibration verification (ICV) performed after initial calibration with second source standard?	X		
ICV within method criteria? *(%D <30%)*	X		
Instrument Sensitivity Check (ISC) performed at least once daily prior to sample analysis?	X		
ISC within method criteria? *(%D <30%)*	X		
Continuing calibration verification (CCV) performed at the required frequency? *(bracketing all field samples and after every 10 field samples)*	X		
CCVs within method criteria? *(%D <30%)*	X		
Comments:			
Instrument Blanks			
Instrument Blanks performed at the required frequency? (*immediately following the highest standard analyzed, daily prior to analyzing standards, after each CV, and immediately following samples with PFAS concentrations exceeding the quantification range*)	X		
IB target analyte concentrations below ½ LOQ?	X		
Comments:			
Other QC			
No other instrument-level QC failures or anomalies?		X	
Comments:			

SDG:	ZG18020
Lab Name:	Pace
Completed By:	Leslie Brooks
Date:	10/11/2024
Methods (types) reviewed	1633 (LC-MS/MS)

	Yes	No	N/A
Additional Stage 2A 1633 PFAS Checks			
Ion ratios within 50-150% of ion ratio of applicable calibration standard?		X	
Extracted Internal Standard (EIS) recovery within 20-150% or laboratory limits?		X	
EIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Non-Extracted Internal Standards (NIS) peak area greater than 30% of the average area of the calibration standards or within laboratory limits?		X	
NIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Laboratory Control (LCS) and Low-Level Laboratory Control Sample (LLLCS) are prepared in every preparation batch of 20 environmental samples and recovery within control limits?	X		
Bile Salt Interference Check reported and PFOS and TDCA separated by at least 1 minute	X		
Qualitative Identification Standard containing a mix of branched and linear isomers analyzed once daily prior to sample analysis?	X		
Comments:			
PFUnA in the reanalysis of sample CACMW-004-110-071224 and PFNA and PFOSA in the reanalysis of sample CACMW-GW-FD01-071224 had ion ratios outside 50-150% of the ion ratio of the midpoint calibration standard. Affected results are qualified 'J' as estimated. EIS recoveries in samples CACMW-004-110-071224, CACMW-004-160-071224, CACMW-005-160-071224, and CACMW-GW-FD01-071224 were outside limits see ADEC checklist for details. NIS peak areas for the reanalysis of sample CACMW-005-110-071224 were below 30% of the average area of the calibration standards. However, it was noted that IS standards were not refortified in the dilution. Only PFOS was reported from dilution runs and qualification is not required.			
General			
Preparation and analysis run logs reported and complete?	X		
Bench logs and data sheets reported and complete? *(where relevant)*	X		
Comments:			
Tuning and Instrument Performance			
Mass Calibration and Mass Calibration Verification performed prior to initial calibration	X		
Verify the peak apex for each mass did not shift more than 0.2 Da (or amu) from the expected masses for each target analyte.	X		

	Yes	No	N/A
Comments:			
Initial Calibration			
Initial calibration performed at the required frequency? *(generally prior to sample analysis or after ICV/CCV failure)*	X		
Does the calibration include the minimum number of levels? *(6 for Avg. RF or linear with 5 within quantification range and 1 additional if second order)*	X		
Does the calibration meet method criteria? *(RSD or RSE < 20%)*	X		
Comments:			
Initial (Secondary Source), Continuing Calibration Verification, and Instrument Sensitivity Check			
Initial calibration verification (ICV) performed after initial calibration with second source standard?	X		
ICV within method criteria? *(%D <30%)*	X		
Instrument Sensitivity Check (ISC) performed at least once daily prior to sample analysis?	X		
ISC within method criteria? *(%D <30%)*	X		
Continuing calibration verification (CCV) performed at the required frequency? *(bracketing all field samples and after every 10 field samples)*	X		
CCVs within method criteria? *(%D <30%)*	X		
Comments:			
Instrument Blanks			
Instrument Blanks performed at the required frequency? (*immediately following the highest standard analyzed, daily prior to analyzing standards, after each CV, and immediately following samples with PFAS concentrations exceeding the quantification range*)	X		
IB target analyte concentrations below ½ LOQ?	X		
Comments:			
Other QC			
No other instrument-level QC failures or anomalies?	X	X	
Comments: The laboratory qualified PFOS results in both the initial and reanalysis of sample CACMW-004-110-071224 as having exceeded the calibration range. Affected results are qualified 'J' as estimated for exceeding the calibration range.			

SDG:	ZG19005
Lab Name:	Pace
Completed By:	Leslie Brooks
Date:	10/11/2024
Methods (types) reviewed	1633 (LC-MS/MS)

	Yes	No	N/A
Additional Stage 2A 1633 PFAS Checks			
Ion ratios within 50-150% of ion ratio of applicable calibration standard?		X	
Extracted Internal Standard (EIS) recovery within 20-150% or laboratory limits?		X	
EIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Non-Extracted Internal Standards (NIS) peak area greater than 30% of the average area of the calibration standards or within laboratory limits?		X	
NIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Laboratory Control (LCS) and Low-Level Laboratory Control Sample (LLLCS) are prepared in every preparation batch of 20 environmental samples and recovery within control limits?	X		
Bile Salt Interference Check reported and PFOS and TDCA separated by at least 1 minute	X		
Qualitative Identification Standard containing a mix of branched and linear isomers analyzed once daily prior to sample analysis?	X		
Comments:			
PFDA in samples CACMW-008-060-071624 and CACMW-GW-FD02-071624, NMeFOSAA in samples CACMW-006-160-071524 and CACMW-008-160-071624, and PFOSA in sample CACMW-007-160-071524 had ion ratios outside 50-150% of the ion ratio of the midpoint calibration standard. Affected results are qualified 'J' as estimated. EIS recoveries in samples CACMW-EB03-071624 and CACMW-FB04-071624 were outside limits see ADEC checklist for details. NIS peak areas for the dilution runs of samples CACMW-006-110-071524 and CACMW-007-060-071524 were below 30% of the average area of the calibration standards. However, it was noted that IS standards were not refortified in the dilution. Only PFOS was reported from dilution runs and qualification is not required.			
General			
Preparation and analysis run logs reported and complete?	X		
Bench logs and data sheets reported and complete? *(where relevant)*	X		
Comments:			
Tuning and Instrument Performance			
Mass Calibration and Mass Calibration Verification performed prior to initial calibration	X		

	Yes	No	N/A
Verify the peak apex for each mass did not shift more than 0.2 Da (or amu) from the expected masses for each target analyte.	X		
Comments:			
Initial Calibration			
Initial calibration performed at the required frequency? *(generally prior to sample analysis or after ICV/CCV failure)*	X		
Does the calibration include the minimum number of levels? *(6 for Avg. RF or linear with 5 within quantification range and 1 additional if second order)*	X		
Does the calibration meet method criteria? *(RSD or RSE < 20%)*	X		
Comments:			
Initial (Secondary Source), Continuing Calibration Verification, and Instrument Sensitivity Check			
Initial calibration verification (ICV) performed after initial calibration with second source standard?	X		
ICV within method criteria? *(%D <30%)*	X		
Instrument Sensitivity Check (ISC) performed at least once daily prior to sample analysis?	X		
ISC within method criteria? *(%D <30%)*	X		
Continuing calibration verification (CCV) performed at the required frequency? *(bracketing all field samples and after every 10 field samples)*	X		
CCVs within method criteria? *(%D <30%)*	X		
Comments:			
Instrument Blanks			
Instrument Blanks performed at the required frequency? (*immediately following the highest standard analyzed, daily prior to analyzing standards, after each CV, and immediately following samples with PFAS concentrations exceeding the quantification range*)	X		
IB target analyte concentrations below ½ LOQ?	X		
Comments:			
Other QC			
No other instrument-level QC failures or anomalies?		X	
Comments:			

Arctic Data Services

250 Cushman St. Suite 3D
Fairbanks, AK 99701
907-457-3147

Date:	11/27/2024
Project name:	Arcadis Eielson Data Gaps Investigation - Resin
Laboratory:	Pace Analytical Services, LLC, Columbia, SC
Sample delivery groups:	ZH22011, ZH22013, ZI12013, ZI12016, ZI12017
ADS Project Number:	D24007
Reviewed by:	Leslie Brooks, Environmental Scientist
Approved by:	Rodney Guritz, Principal Chemist

To: Mr. Timothy Bellis
Arcadis U.S., Inc
630 Plaza Drive
Suite 200
Highlands Ranch, CO 80129

Data Quality Assessment

This letter summarizes the findings of a data quality assessment (DQA) conducted by Arctic Data Services, LLC (ADS) for the above-referenced project data on behalf of Arcadis U.S., Inc. Precision, accuracy, sensitivity, representativeness, comparability, and completeness of the data was evaluated by reviewing laboratory-supplied quality assurance/quality control (QA/QC) information as well as conducting independent QA/QC checks on the data. A Stage 2B data validation was performed on 100% of project sample per- and polyfluoroalkyl substances (PFAS) data, in general accordance with the DoD *General Data Validation Guidelines* (2019) and method-specific modules, where they exist, and the *Uniform Federal Policy – Quality Assurance Project Plan, Data Gap Investigation & Groundwater Pilot Study Construction in Support of the Groundwater Response Action for PFAS Treatment at Site FT009P* (Ahtna Solutions-Arcadis 8(a) Joint Venture, LLC, 2024). Stage 2B validation includes reviewing sample handling, custody, sample-batch level QC information, and instrument-level QC data; applying data qualifiers to sample results affected by anomalies and QC failures; and summarizing the impacts to data quality. This validation exceeds the requirements of the Alaska Department of Environmental Conservation (ADEC) *Technical Memorandum 22-001, Guidelines for Data Reporting* (August 2022). Additionally, Stage 4 data validation was performed on 10% of the project sample data relating to analysis of PFAS as described in the Stage 4 Validation section below; Stage 4 data validation includes Stage 3 recalculation of field and QC sample results.

Laboratory QC-sample recoveries and relative percent differences (RPDs) were compared to measurement quality objectives (MQOs) specified in the UFP-QAPP, EPA Draft Method 1633, and/or laboratory control limits. Field-duplicate RPDs were compared to MQOs defined in Worksheet #12 of the UFP-QAPP for the applicable matrix. Limits of quantitation (LOQs) and limits of detection (LODs) were compared to project screening levels (PSLs) listed in Worksheet #15 of the 2024 UFP-QAPP to evaluate analytical sensitivity.

ADEC laboratory data review checklists (attached) were completed for each laboratory work order and summarize Stage 2A data validation findings. Separate checklists were prepared summarizing Stage 2B data validation findings and are also attached. Table 1 (attached) provides a list of qualified results. Table 2 lists the samples that were randomly selected for Stage 3/4 validation. Tables 3 through 5 summarize results recalculated in the course of Stage 3 data validation. The following sections provide a summary of data validation findings for each QA/QC element reviewed; failures or anomalies that had no impact to data quality are discussed in the checklists and are not further described herein.

Sample Analysis Summary

A total of 226 passive flux meter (PFM) resin samples (including field duplicates) were collected and submitted in five sample delivery groups (SDGs) to Pace Columbia for analysis of the following:

- Per- and polyfluoroalkyl substances (PFAS) by EPA Draft Method 1633

Stage 2A Data Validation

The following sections summarize findings of a Stage 2A data validation, which includes review of preparatory-batch-level QC information. Only failures affecting project-sample data quality are discussed here; for more information, refer to the attached ADEC laboratory data review checklists.

Sample Preservation, Handling, Custody, and Holding Times

Sample receipt forms were reviewed to check that samples were received in good condition, properly preserved, and within the required temperature range. Chain of custody forms were reviewed to confirm that custody was not breached during sample handling. Dates of sample collection, preparation, and analysis were compared to check that method holding times were not exceeded.

There were no handling, custody, or holding time failures determined to affect project-sample data quality; see checklists for details.

Method Blanks

The laboratories analyzed and reported a method blank (MB) sample for each preparatory batch, to check for laboratory-based sample contamination. If and where analytes were detected in a MB, corresponding project-sample results were compared to the MB concentration and were considered potentially affected if detected within 5 times the MB concentration. Affected results above the LOD are qualified with 'J+' flags indicating the results are estimated with a high bias and results below the LOD were qualified with 'UB' flags as false-positives and are considered non-detect up to the LOD. This flagging criteria is in accordance with the *Data Validation*

Guidelines Modules 1, 3, 3, and 4 Revised Table for Sample Qualification in the Presence of Blank Contamination (DoD, 2022).

The following method blank detections were determined to affect project-sample data quality:

- **ZI12013.** There was one method blank detection below the LOQ but above the DL. One perfluorooctane sulfonamide (FOSA) result was affected; refer to the checklist and Table 1 for details.
- **ZI12016.** There were five method blank detections below the LOQ but above the DL. A total of 16 FOSA results were affected; refer to the checklist and Table 1 for details.
- **ZI12017.** There were three method blank detections below the LOQ but above the DL. A total of 16 FOSA results were affected; refer to the checklist and Table 1 for details.

Laboratory Control Samples and Duplicates

The laboratory analyzed and reported a laboratory control sample (LCS) for each preparatory batch, to assess laboratory extraction efficiency and analytical accuracy. In some cases, LCS duplicates (LCSDs) were used to assess analytical precision. LCS/LCSD recovery information and LCSD RPD information (where available) were reviewed.

The following LCS/LCSD recovery and/or RPD failures were determined to affect project-sample data quality:

- **ZI12016**. LCS recovery of FOSA was above control limits in batches 18871, 18873, and 19251. FOSA results for 10 project samples are considered affected and were qualified 'J+' as estimated with high bias. See checklist and Table 1 for details.

Matrix Spike Samples

Matrix spikes (MS) and MS duplicates (MSD) were analyzed for select organic batches, to evaluate potential matrix interference affecting accuracy and/or precision. MS/MSD recovery and RPDs were evaluated only if the parent sample (the sample spiked for the MS/MSD) was in the project-sample set. Additionally, MS/MSD recovery failures are only considered to affect parent-sample data quality if the spiking concentration is at least 3 times greater than the native concentration of the analyte in the parent sample.

Samples CACMW-007-060-37.5-081724-FM-R and CACMW-008-060-27-090624-FM-R were submitted with additional volume for project-specific MS/MSD analysis. Additionally, the laboratory performed MS/MSD analysis on several other samples for batch QC purposes.

The following MS/MSD recovery and/or RPD failures were determined to affect project-sample data quality:

- **ZH22013.** MSD RPD for perfluorohexane sulfonic acid (PFHxS) was above control limits in the MSD of parent sample CACMW-007-060-37.5-081724-FM-R. The affected result was qualified 'J' as estimated; see checklist and Table 1 for details.
- **ZI12017.** MSD RPD for perfluorooctanoic acid (PFOA) was above control limits in the MSD of parent sample CACMW-005-110-82.25-090524-FM-R. The affected result was qualified 'J' as estimated; see checklist and Table 1 for details.

Extracted Internal Standard Recoveries

Samples submitted for PFAS analysis were spiked with radio-labelled extracted internal standards (EIS; also referred to as isotope dilution analytes) to evaluate accuracy, check for matrix interference on a sample-specific basis, and to quantify the associated target analyte(s). Due to the nature of isotope dilution, a direction of bias is not inferred for EIS recovery failures; the results are quantitated using the EIS as an analyte-specific internal standard, thereby correcting for low or high bias.

The following EIS recovery failures were determined to affect project-sample data quality:

- **ZH22013.** There were two EIS recovery failures for sample CACMW-003-160-153.25-081524-FM-R. 2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE) and 2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE) were qualified 'X' as recommended for rejection due to extremely low recovery. See checklist and Table 1 for details.

Field Duplicates

Ten field duplicate samples were collected and submitted blind to the laboratory for 216 primary samples just short of the required frequency of one per 20 primary samples (specified in the UFP-QAPP). RPDs between field-duplicate results were calculated; where analytes were not detected, the LOD was used in the calculation. RPDs were compared to a MQO of 50% for solids.

There were no field duplicate RPD failures considered to affect project-sample data quality.

Field Blanks

Samples CACMW-CO-1-081924, CACMW-CO-2-081924, CACMW-CO-3-081924, CACMW-CO-4-081924, and CACMW-CO-5-081924 were collected as field blanks (FB) and submitted with resin samples in SDG ZH22013; the FBs were conservatively assumed to correspond to all resin samples in SDGs ZH22011 and ZH22013.

Samples CACMW-CO-1-090924, CACMW-CO-2-090924, CACMW-CO-3-090924, and CACMW-CO-4-090924 were collected as field blanks (FB) and submitted with resin samples in SDG ZI12013; the FBs were conservatively assumed to correspond to all resin samples in SDGs ZI12013, ZI12016, and ZI12017.

The FBs were used to check for potential cross-contamination of samples from sample handling processes. Where analytes were detected in the blanks, corresponding project-sample results were compared to the blank concentration and were considered potentially affected if detected within 5 times the blank concentration in resin samples. Professional judgement was used to determine if data quality was affected for individual results, depending upon relative collection times and concentrations of associated samples. Affected results above the LOD are qualified with 'J+' flags indicating the results are estimated with a high bias and results below the LOD were qualified with 'UB' flags as false-positives and are considered non-detect up to the LOD.

The following FB detections were considered to affect project-sample data quality:

- **ZH22011**. Seven PFAS analytes were detected in one or more FBs (reported in SDG ZH22013). A total of 350 results were considered affected; see checklist and Table 1 for details.
- **ZH22013**. Seven PFAS analytes were detected in one or more FBs reported in this SDG. A total of 252 results were considered affected; see checklist and Table 1 for details.
- **ZI12013**. Six PFAS analytes were detected in one or more FBs reported in this SDG. A total of 117 results were considered affected; see checklist and Table 1 for details.
- **ZI12016**. Six PFAS analytes were detected in one or more FBs (reported in SDG ZI12013). A total of 189 results were considered affected; see checklist and Table 1 for details.
- **ZI12017**. Six PFAS analytes were detected in one or more FBs (reported in SDG ZI12013). A total of 148 results were considered affected; see checklist and Table 1 for details.

Other QC Anomalies

The laboratory reported the following QC failures that were considered to affect project-sample data quality:

- **ZH22011**. The laboratory qualified PFOS in sample CACMW-004-110-92.75-081624-FM-R as having exceeded the calibration range. The affected result is qualified 'J' as estimated for exceeding the calibration range.

Resolution of Multiple Qualifiers

In the instance that a single result was affected by multiple QC anomalies imparting differing qualifiers or a conflicting bias, a decision was made as to the most appropriate and conservative qualifier for the final result, as follows.

- Five results were affected by FB detections ('J+') and ion ratio failures ('J'). Since the direction of bias is not entirely clear, the 'J' flag is retained as the final qualifier.
- Two results were affected by MB detections ('UB') and high LCS recovery failures ('J+'). Because the results were below the LOD and likely attributable to laboratory-based sample contamination, the 'UB' flag is retained as the final qualifier.

Stage 2B Data Validation

The following sections summarize findings of a Stage 2B data validation of the PFAS dataset, which includes review of instrument-level QC information. Only failures affecting project-sample data quality are discussed here; for more information, refer to the attached Stage 2B data validation checklists.

Additional Stage 2A 1633 PFAS Checks

Additional Stage 2A checks are included in the Stage 2B data validation as they are method-specific and are not covered by the standard ADEC Laboratory Data Review Checklist. For LC-MS/MS Methods, additional Stage 2A checks include ion rations, non-extracted internal standards (NIS), low-level laboratory control samples (LLCS), bile salt interference, and qualitative identification standards compared to method or QSM criteria.

The following anomalies were determined to affect project-sample data quality:

- **ZH22011**. N-Methylperfluoroocatane sulfonamidoacetic acid (MeFOSAA) in sample CACMW-008-110-103.25-081724-FM-R and perfluoropentanoic acid (PFPA) in sample CACMW-004-060-37.5-081624-FM-R had ion ratios outside laboratory limits. Affected results were qualified 'J' as estimated; see checklist and Table 1 for details.
- **ZI12013**. PFPA in sample CACMW-007-060-27-090624-FM-R had ion ratios outside laboratory limits. Affected results were qualified 'J' as estimated; see checklist and Table 1 for details.
- **ZI12016**. Perfluorononanoic acid (PFNA) in samples CACMW-001-160-122.25-090424-FM-R and CACMW-002-110-66.5-090424-FM-R had ion ratios outside laboratory limits. Affected results were qualified 'J' as estimated; see checklist and Table 1 for details.
- **ZI12017**. Perfluorotridecanoic acid (PFTriA) in samples CACMW-006-160-132.25-090524-FM-R and CACMW-007-110-82.25-090624-FM-R and PFOA in sample CACMW-008-060-16.5-090624-FM-R had ion ratios outside laboratory limits. Affected results were qualified 'J' as estimated; see checklist and Table 1 for details.

Tuning & Instrument Performance

For LC-MS/MS methods, MS tune checks were evaluated against method-specific criteria. Instrument performance checks, such as mass calibration and mass peak, were reviewed where reported and compared to

method or QSM criteria. There were no tuning or instrument performance anomalies affecting project-sample data quality.

Initial Calibration and Verification

The initial calibration for each analysis was reviewed, to check for compliance with method and/or QSM requirements. This included checking that an appropriate number of standards (calibration points) were used, the frequency of calibrations met method and/or project-specific QC requirements, and that the calibration curve met method requirements (e.g. an $r^2 \geq 0.99$). Initial calibrations were acceptable for each analysis.

ICV samples were verified to be from a second source and were reviewed to verify the accuracy of the initial calibration.

The following ICV recovery failures were determined to affect project-sample data quality:

- **ZH22011**. ICV recovery for 8:2FTS for calibration 092224C-1633+ICAL.b was above laboratory limits. Ten results were considered affected and qualified 'J+' as estimated with high bias; see checklist and Table 1 for details.

Continuing Calibration Verification and Instrument Sensitivity Check

Laboratory batch summaries and/or run logs were reviewed to check that all project samples were bracketed by CCVs, and that CCV percent recoveries were within control limits for target analytes. CCV analysis frequency was acceptable.

The laboratory analyzed and reported instrument sensitivity checks (ISCs) to check instrument detection capabilities at the required reporting limits. Laboratory batch summaries and/or run logs were reviewed to check that an ISC was performed at least once daily prior to sample and analysis, and that ISC percent recoveries were within control limits. ISC analysis frequency and percent recoveries were acceptable.

There were no CCV/ISC recovery failures determined to affect project-sample data quality; see checklists for details.

Instrument Blanks

Laboratory batch summaries and/or run logs were reviewed to check that instrument blanks (IBs) were performed immediately following the highest standard analyzed, daily prior to analyzing standards, after each CCV, and immediately following samples with PFAS concentrations exceeding the quantitation range. Each IB analysis was reviewed to check that IB target analyte concentrations were below one half of the LOQ. IB performance and target analyte concentrations were acceptable.

Stage 3 and 4 Data Validation

The following sections summarize findings of the 10% Stage 3 and Stage 4 data validation, which includes recalculation of select results (Stage 3) and qualitative review of analyte identification and quantitation (Stage 4). A random selection of 10% of project field samples per SDG were selected for recalculation. All instrument QC samples related to field sample analysis were recalculated. Associated preparatory-batch QC samples (MB, LCS/LCSD, MS/MSD) were recalculated. Only target analytes that were detected in one or more field samples were recalculated. For all selected samples, EIS recoveries were recalculated and compared to reported recoveries. Standards traceability was also reviewed.

For Stage 4 validation, target compound identification and manual integrations were reviewed as described below; there were no tentatively identified compounds reported for this project.

Instrument Calibration, Performance, and Instrument QC Samples

Initial calibrations were recalculated using raw instrument responses from the quantitation reports for calibration standards. The laboratory used an average response factor (RF) calibration for all methods and analytes. Concentrations were calculated based on associated internal standards.

ICV and bracketing CCV percent recoveries were recalculated and verified against reported recoveries. IBs were recalculated and verified below one-half the LOQ.

Field Samples and Field/Lab QC Samples

A random selection of 10% of field samples for each SDG were selected for Stage 3 recalculation; see Table 2 for a list of selected samples. For the selected field samples, all detected target analyte results were recalculated and compared to the reported results. Additionally, all EIS recoveries were recalculated and verified against reported percent recoveries.

At least one MB, LCS/LCSD, and MS/MSD per SDG were recalculated. When detections were reported in an associated blank (MB or FB), the sample was selected for recalculation. Overall, recalculated results matched reported results, with occasional slight differences likely due to rounding. For recalculations, no rounding was performed until the very end; the laboratory may have rounded intermediate values, accounting for the slight differences.

No anomalies were identified during recalculation of project field sample and field and lab QC sample results that could not be attributed to rounding differences.

Standards Traceability

Laboratory reports were reviewed to verify the certificates of analysis were included for all stock standard solutions, and that the standards used in the ICV were from a secondary source. Standards preparation logs were reviewed to check that stock standards were diluted properly into working standards for the ICAL and spiking solutions. Standards preparation logs appeared complete and there were no anomalies identified.

Target Compound Identification

Target compound identification was evaluated by qualitatively reviewing signal to noise ratios and relative retention times for target analyte peaks, and presence of valid spectra with passing mass/ion ratios (for MS methods). This evaluation was performed for roughly 10% of positive detections within the randomly selected samples; no anomalies were identified.

Manual Integrations

Manual integrations were noted in the case narratives and with "M" flags on associated results. There was an unusually high frequency of manual integrations in all work orders, for laboratory instrument QC samples, batch QC samples, and field samples, including nearly all detections in field samples. In most cases, the justification listed was "incorrect auto integration". A representative selection of manual integrations was reviewed, comparing the chromatograms before and after manual integration. In general, manual integrations were consistently performed across all field and QC samples and appeared appropriate. However, justification for manual integrations could have been more descriptive (e.g. base-line correction, split peak, etc.).

Summary of Data Quality Indicators

The following sections summarize the findings of the above review with respect to the six data quality indicators: sensitivity, precision, accuracy, representativeness, comparability, and completeness.

Sensitivity

Sensitivity describes the ability of the sampling and analytical methodology to meet detection and/or quantitation limit objectives. Analytical sensitivity was evaluated by checking that LODs for non-detect results were below relevant PSLs. A non-detect result is considered to be adequately sensitive if the LOD is below the PSL.

There were no PSLs for the PFM resin samples. Overall analytical sensitivity is deemed acceptable for the purposes of this project.

Precision

Precision is a measure of the reproducibility of repetitive measurements. Precision was evaluated based on laboratory QC-sample RPDs and field-duplicate RPDs. Two sample results were affected by MSD RPD failures. No sample results were affected by field duplicate RPD failures. Overall precision is deemed acceptable for the purposes of this project.

Accuracy

Accuracy is a measure of the correctness, or the closeness, between the true value and the quantity detected. Accuracy was evaluated based on target-analyte recoveries for laboratory batch-level and instrument-level QC samples, and surrogate recoveries for project samples. Accuracy also may be affected by sample contamination identified in blank samples, or by sample handling, preservation, or holding time anomalies.

Ten results were affected by LCS/LCSD recovery failures. Two results were affected by EIS recovery failures. No results were affected by MS/MSD recovery failures. A total of 1,089 results were affected by sample contamination identified in blank samples (MB or FB). One result was affected by a calibration exceedance. Eight results were affected by ion ratio failures. A total of 10 results were affected by ICV recovery failures. Impact to data usability was generally minor, with the exception of two results that were recommended for rejection ('X'-flagged) due to extremely low EIS recovery. Target analyte and/or EIS recoveries for laboratory QC samples and select field samples were verified through Stage 3 recalculations, with no significant discrepancies identified that would impact project-sample data quality. Overall accuracy is deemed acceptable for the purposes of this project, with exceptions noted above.

Representativeness

Representativeness describes the degree to which data accurately and precisely represent site characteristics. Representativeness is affected by factors such as sample frequency and matrix or contaminant heterogeneity, as well as analytical performance (including sensitivity, accuracy, and precision), sample preservation, handling, and holding times, and sample cross-contamination.

Samples were collected in accordance with an approved work plan, and MQOs defined in the UFP-QAPP were generally met. Sensitivity, precision, and accuracy were acceptable for the purposes of this project. Results qualified due to QC anomalies affecting precision and accuracy are usable as qualified but are not wholly representative of site conditions. Overall, results were considered adequately representative of environmental conditions for the purposes of this project.

Comparability

Comparability describes whether two data sets can be considered equivalent with respect to project goals. Comparability is affected by factors such as sampling methodology and analytical performance (including sensitivity, accuracy, and precision). Comparability was evaluated by checking that standard analytical methods were employed, and analytical performance was acceptable.

Data review findings generally support that the dataset is comparable. Overall comparability should be evaluated by the project team considering sample collection methodology and historic results alongside data quality and analytical methodology.

Completeness

Completeness describes the amount of valid data obtained from the sampling event(s). It is calculated as the percentage of usable measurements compared to the total number of measurements. Two results were recommended for rejection in this review. The dataset is over 99.9% complete. Overall completeness should be reviewed by the project team during data usability assessment. Data usability assessment should include determining whether the two results recommended for rejection during data validation are indeed unusable for the purposes of this project. If so, the 'X' flags and results should be replaced with 'R' flags for final reporting.

Conclusions

Sensitivity, precision, accuracy, representativeness, comparability, and completeness were deemed acceptable, and the data are usable for the purposes of this project. Stage 3/4 validation confirmed target analytes were appropriately identified and quantitated and that results were appropriately calculated. A total of 1,108 results were qualified due to QC anomalies, and two results were recommended for rejection. Qualified results are listed in Table 1.

Limitations

This review was based solely on information provided by the analytical laboratory in the laboratory reports and staged electronic data deliverables for the SDGs reviewed. A data quality assessment reduces the risk of reliance on data of compromised quality; however, it does not eliminate that risk.

Attachments:

Table 1 – Summary of Qualified Data
Table 2 – Selected 10% of Field Samples
Tables 3a-3b – 1633 Calibration Recalculations
Tables 4a–4e – 1633 Recalculation Summary: Instrument QC Samples

Tables 5c–5e – 1633 Recalculation Summary: Field and QC Samples
ADEC Laboratory Data Review Checklists
Stage 2B Data Validation Checklists

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZH22011	CACMW-001-060-37.5-081424-FM-R	ZH22011-001	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	66		FB	J+	J+	66 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-060-37.5-081424-FM-R	ZH22011-001	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.65	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-001-060-37.5-081424-FM-R	ZH22011-001	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-37.5-081424-FM-R	ZH22011-001	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-37.5-081424-FM-R	ZH22011-001	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-42.75-081424-FM-R	ZH22011-002	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	92		FB	J+	J+	92 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-060-42.75-081424-FM-R	ZH22011-002	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.57	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-001-060-42.75-081424-FM-R	ZH22011-002	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5		FB	J+	J+	5 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-060-42.75-081424-FM-R	ZH22011-002	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-42.75-081424-FM-R	ZH22011-002	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.7	M-03	FB	J+	J+ M	4.7 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-48-081424-FM-R	ZH22011-003	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	89		FB	J+	J+	89 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-060-48-081424-FM-R	ZH22011-003	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.8	JM-03	FB	J+	J+ M	0.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-48-081424-FM-R	ZH22011-003	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.7		FB	J+	J+	4.7 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-060-48-081424-FM-R	ZH22011-003	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.7	M-03	FB	J+	J+ M	2.7 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-48-081424-FM-R	ZH22011-003	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-060-53.25-081524-FM-R	ZH22011-004	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	78	M-03	FB	J+	J+ M	78 [6.1] J+ M	N/A
PACE	ZH22011	CACMW-001-060-53.25-081524-FM-R	ZH22011-004	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-53.25-081524-FM-R	ZH22011-004	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.8	M-03	FB	J+	J+ M	2.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-53.25-081524-FM-R	ZH22011-004	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.5	M-03	FB	J+	J+ M	4.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-58.5-081524-FM-R	ZH22011-005	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	73		FB	J+	J+	73 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-060-58.5-081524-FM-R	ZH22011-005	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.66	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-001-060-58.5-081524-FM-R	ZH22011-005	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-58.5-081524-FM-R	ZH22011-005	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-060-58.5-081524-FM-R	ZH22011-005	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.5	M-03	FB	J+	J+ M	4.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-103.25-081424-FM-R	ZH22011-006	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	81		FB	J+	J+	81 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-110-103.25-081424-FM-R	ZH22011-006	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.88	JM-03	FB	J+	J+ M	0.88 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-103.25-081424-FM-R	ZH22011-006	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.5	M-03	FB	J+	J+ M	4.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-103.25-081424-FM-R	ZH22011-006	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-103.25-081424-FM-R	ZH22011-006	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5		FB	J+	J+	3.5 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-110-108.5-081424-FM-R	ZH22011-007	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	78		FB	J+	J+	78 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-110-108.5-081424-FM-R	ZH22011-007	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.61	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-001-110-108.5-081424-FM-R	ZH22011-007	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.5	M-03	FB	J+	J+ M	4.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-108.5-081424-FM-R	ZH22011-007	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-108.5-081424-FM-R	ZH22011-007	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5		FB	J+	J+	3.5 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-110-87.5-081424-FM-R	ZH22011-008	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	89		FB	J+	J+	89 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-110-87.5-081424-FM-R	ZH22011-008	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.96	JM-03	FB	J+	J+ M	0.96 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-87.5-081424-FM-R	ZH22011-008	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.7	M-03	FB	J+	J+ M	5.7 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-87.5-081424-FM-R	ZH22011-008	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.6		FB	J+	J+	2.6 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-110-87.5-081424-FM-R	ZH22011-008	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.2		FB	J+	J+	4.2 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-110-92.75-081424-FM-R	ZH22011-009	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	92		FB	J+	J+	92 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-110-92.75-081424-FM-R	ZH22011-009	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.91	JM-03	FB	J+	J+ M	0.91 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-92.75-081424-FM-R	ZH22011-009	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.5	M-03	FB	J+	J+ M	5.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-92.75-081424-FM-R	ZH22011-009	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-92.75-081424-FM-R	ZH22011-009	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.3	M-03	FB	J+	J+ M	4.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-98-081424-FM-R	ZH22011-010	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	88		FB	J+	J+	88 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-110-98-081424-FM-R	ZH22011-010	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.95	JM-03	FB	J+	J+ M	0.95 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-98-081424-FM-R	ZH22011-010	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-110-98-081424-FM-R	ZH22011-010	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2		FB	J+	J+	2.2 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-110-98-081424-FM-R	ZH22011-010	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6		FB	J+	J+	3.6 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-160-138-081524-FM-R	ZH22011-011	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	96		FB	J+	J+	96 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-160-138-081524-FM-R	ZH22011-011	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.39	J	FB	UB	UB	ND [0.8] UB	N/A
PACE	ZH22011	CACMW-001-160-138-081524-FM-R	ZH22011-011	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3	M-03	FB	J+	J+ M	3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-160-138-081524-FM-R	ZH22011-011	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1		FB	J+	J+	2.1 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-160-138-081524-FM-R	ZH22011-011	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2		FB	J+	J+	3.2 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-160-143.25-081524-FM-R	ZH22011-012	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	140		FB	J+	J+	140 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-160-143.25-081524-FM-R	ZH22011-012	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.71	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-001-160-143.25-081524-FM-R	ZH22011-012	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.2	M-03	FB	J+	J+ M	5.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-160-143.25-081524-FM-R	ZH22011-012	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-160-143.25-081524-FM-R	ZH22011-012	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9		FB	J+	J+	3.9 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-160-148.5-081524-FM-R	ZH22011-013	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	160		FB	J+	J+	160 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-160-148.5-081524-FM-R	ZH22011-013	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.72	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-001-160-148.5-081524-FM-R	ZH22011-013	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.4	M-03	FB	J+	J+ M	4.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-160-148.5-081524-FM-R	ZH22011-013	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3		FB	J+	J+	2.3 [0.8] J+	N/A
PACE	ZH22011	CACMW-001-160-148.5-081524-FM-R	ZH22011-013	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4	M-03	FB	J+	J+ M	4 [0.8] J+ M	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZH22011	CACMW-001-160-153.75-081524-FM-R	ZH22011-014	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	110		FB	J+	J+	110 [6.1] J+	N/A
PACE	ZH22011	CACMW-001-160-153.75-081524-FM-R	ZH22011-014	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.67	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-001-160-153.75-081524-FM-R	ZH22011-014	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3	M-03	FB	J+	J+ M	3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-160-153.75-081524-FM-R	ZH22011-014	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-001-160-153.75-081524-FM-R	ZH22011-014	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4		FB	J+	J+	4 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-160-159-081524-FM-R	ZH22011-015	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	59		FB	J+	J+	59 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-160-159-081524-FM-R	ZH22011-015	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.31	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-004-160-159-081524-FM-R	ZH22011-015	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-159-081524-FM-R	ZH22011-015	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.8		FB	J+	J+	4.8 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-160-159-081524-FM-R	ZH22011-015	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-159-081524-FM-R	ZH22011-015	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6		FB	J+	J+	3.6 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-060-37.5-081624-FM-R	ZH22011-016	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	92	M-03	FB	J+	J+ M	92 [6.1] J+ M	N/A
PACE	ZH22011	CACMW-004-060-37.5-081624-FM-R	ZH22011-016	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.1	JM-03	FB	J+	J+ M	1.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-37.5-081624-FM-R	ZH22011-016	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	6.3	M-03	FB	J+	J+ M	6.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-37.5-081624-FM-R	ZH22011-016	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-37.5-081624-FM-R	ZH22011-016	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.1		FB	J+	J+	3.1 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-060-42.75-081624-FM-R	ZH22011-017	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	97		FB	J+	J+	97 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-060-42.75-081624-FM-R	ZH22011-017	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.94	JM-03	FB	J+	J+ M	0.94 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-42.75-081624-FM-R	ZH22011-017	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.1	M-03	FB	J+	J+ M	5.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-42.75-081624-FM-R	ZH22011-017	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-42.75-081624-FM-R	ZH22011-017	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1	M-03	FB	J+	J+ M	4.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-48-081624-FM-R	ZH22011-018	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	73		FB	J+	J+	73 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-060-48-081624-FM-R	ZH22011-018	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.71	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-004-060-48-081624-FM-R	ZH22011-018	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-48-081624-FM-R	ZH22011-018	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-48-081624-FM-R	ZH22011-018	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-53.25-081624-FM-R	ZH22011-019	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	73		FB	J+	J+	73 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-060-53.25-081624-FM-R	ZH22011-019	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-53.25-081624-FM-R	ZH22011-019	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-53.25-081624-FM-R	ZH22011-019	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7		FB	J+	J+	3.7 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-060-58.5-081624-FM-R	ZH22011-020	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	81		FB	J+	J+	81 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-060-58.5-081624-FM-R	ZH22011-020	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.2	M-03	FB	J+	J+ M	4.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-58.5-081624-FM-R	ZH22011-020	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-060-58.5-081624-FM-R	ZH22011-020	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.2	M-03	FB	J+	J+ M	4.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-103.25-081624-FM-R	ZH22011-021	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	78		FB	J+	J+	78 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-110-103.25-081624-FM-R	ZH22011-021	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.8	JM-03	FB	J+	J+ M	0.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-103.25-081624-FM-R	ZH22011-021	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.9	M-03	FB	J+	J+ M	4.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-103.25-081624-FM-R	ZH22011-021	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4		FB	J+	J+	2.4 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-110-103.25-081624-FM-R	ZH22011-021	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-108.5-081624-FM-R	ZH22011-022	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	70		FB	J+	J+	70 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-110-108.5-081624-FM-R	ZH22011-022	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.4	M-03	FB	J+	J+ M	4.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-108.5-081624-FM-R	ZH22011-022	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.8		FB	J+	J+	2.8 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-110-108.5-081624-FM-R	ZH22011-022	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-87.5-081624-FM-R	ZH22011-023	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	91		FB	J+	J+	91 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-110-87.5-081624-FM-R	ZH22011-023	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1	JM-03	FB	J+	J+ M	1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-87.5-081624-FM-R	ZH22011-023	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.4	M-03	FB	J+	J+ M	4.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-87.5-081624-FM-R	ZH22011-023	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.5		FB	J+	J+	2.5 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-110-87.5-081624-FM-R	ZH22011-023	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.5	M-03	FB	J+	J+ M	4.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-92.75-081624-FM-R	ZH22011-024	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	110		FB	J+	J+	110 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-110-92.75-081624-FM-R	ZH22011-024	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.1	JM-03	FB	J+	J+ M	1.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-92.75-081624-FM-R	ZH22011-024	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	6.1	M-03	FB	J+	J+ M	6.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-92.75-081624-FM-R	ZH22011-024	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-92.75-081624-FM-R	ZH22011-024	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1	M-03	FB	J+	J+ M	4.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-98-081624-FM-R	ZH22011-025	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	87	M-03	FB	J+	J+ M	87 [6.1] J+ M	N/A
PACE	ZH22011	CACMW-004-110-98-081624-FM-R	ZH22011-025	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.72	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-004-110-98-081624-FM-R	ZH22011-025	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.5	M-03	FB	J+	J+ M	4.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-98-081624-FM-R	ZH22011-025	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3		FB	J+	J+	2.3 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-110-98-081624-FM-R	ZH22011-025	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-160-137.5-081624-FM-R	ZH22011-026	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	73		FB	J+	J+	73 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-160-137.5-081624-FM-R	ZH22011-026	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.4	M-09	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-137.5-081624-FM-R	ZH22011-026	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.6	M-09	FB	J+	J+ M	2.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-137.5-081624-FM-R	ZH22011-026	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.4		FB	J+	J+	4.4 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-160-142.75-081624-FM-R	ZH22011-027	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	74		FB	J+	J+	74 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-160-142.75-081624-FM-R	ZH22011-027	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZH22011	CACMW-004-160-142.75-081624-FM-R	ZH22011-027	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.5	M-03	FB	J+	J+ M	2.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-142.75-081624-FM-R	ZH22011-027	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-148-081624-FM-R	ZH22011-028	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	67		FB	J+	J+	67 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-160-148-081624-FM-R	ZH22011-028	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-148-081624-FM-R	ZH22011-028	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	8.2	M-03	FB	J+	J+ M	8.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-148-081624-FM-R	ZH22011-028	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-148-081624-FM-R	ZH22011-028	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-153.25-081624-FM-R	ZH22011-029	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	67		FB	J+	J+	67 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-160-153.25-081624-FM-R	ZH22011-029	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-153.25-081624-FM-R	ZH22011-029	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	7.9	M-03	FB	J+	J+ M	7.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-153.25-081624-FM-R	ZH22011-029	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-153.25-081624-FM-R	ZH22011-029	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4		FB	J+	J+	4 [0.8] J+	N/A
PACE	ZH22011	CACMW-004-160-158.5-081624-FM-R	ZH22011-030	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	53		FB	J+	J+	53 [6.1] J+	N/A
PACE	ZH22011	CACMW-004-160-158.5-081624-FM-R	ZH22011-030	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-158.5-081624-FM-R	ZH22011-030	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.8	M-03	FB	J+	J+ M	4.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-158.5-081624-FM-R	ZH22011-030	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-160-158.5-081624-FM-R	ZH22011-030	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1	M-03	FB	J+	J+ M	4.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-37.5-081624-FM-R	ZH22011-031	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	74		FB	J+	J+	74 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-060-37.5-081624-FM-R	ZH22011-031	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-37.5-081624-FM-R	ZH22011-031	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.5	M-03	FB	J+	J+ M	2.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-37.5-081624-FM-R	ZH22011-031	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.3	M-03	FB	J+	J+ M	4.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-42.75-081624-FM-R	ZH22011-032	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	88		FB	J+	J+	88 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-060-42.75-081624-FM-R	ZH22011-032	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.98	JM-03	FB	J+	J+ M	0.98 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-42.75-081624-FM-R	ZH22011-032	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5	M-03	FB	J+	J+ M	5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-42.75-081624-FM-R	ZH22011-032	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-42.75-081624-FM-R	ZH22011-032	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7		FB	J+	J+	3.7 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-060-53.25-081624-FM-R	ZH22011-033	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	90		FB	J+	J+	90 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-060-53.25-081624-FM-R	ZH22011-033	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.2	JM-03	FB	J+	J+ M	1.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-53.25-081624-FM-R	ZH22011-033	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.6	M-03	FB	J+	J+ M	5.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-53.25-081624-FM-R	ZH22011-033	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4		FB	J+	J+	2.4 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-060-53.25-081624-FM-R	ZH22011-033	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-58.5-081624-FM-R	ZH22011-034	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	91		FB	J+	J+	91 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-060-58.5-081624-FM-R	ZH22011-034	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.1	JM-03	FB	J+	J+ M	1.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-58.5-081624-FM-R	ZH22011-034	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	6.5	M-03	FB	J+	J+ M	6.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-58.5-081624-FM-R	ZH22011-034	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-060-58.5-081624-FM-R	ZH22011-034	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-110-103.25-081624-FM-R	ZH22011-035	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	85	M-03	FB	J+	J+ M	85 [6.1] J+ M	N/A
PACE	ZH22011	CACMW-005-110-103.25-081624-FM-R	ZH22011-035	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.89	JM-03	FB	J+	J+ M	0.89 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-110-103.25-081624-FM-R	ZH22011-035	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.2	M-03	FB	J+	J+ M	5.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-110-103.25-081624-FM-R	ZH22011-035	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-110-103.25-081624-FM-R	ZH22011-035	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4	M-03	FB	J+	J+ M	4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-110-108.5-081624-FM-R	ZH22011-036	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	65		FB	J+	J+	65 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-110-108.5-081624-FM-R	ZH22011-036	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.54	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-005-110-108.5-081624-FM-R	ZH22011-036	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.2		FB	J+	J+	3.2 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-110-108.5-081624-FM-R	ZH22011-036	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.5	M-03	FB	J+	J+ M	2.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-110-108.5-081624-FM-R	ZH22011-036	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7		FB	J+	J+	3.7 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-110-87.5-081624-FM-R	ZH22011-037	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	110		FB	J+	J+	110 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-110-87.5-081624-FM-R	ZH22011-037	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.6	JM-03	FB	J+	J+ M	1.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-110-87.5-081624-FM-R	ZH22011-037	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	6.7		FB	J+	J+	6.7 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-110-87.5-081624-FM-R	ZH22011-037	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.5	M-03	FB	J+	J+ M	2.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-110-87.5-081624-FM-R	ZH22011-037	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-110-92.75-081624-FM-R	ZH22011-038	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	140		FB	J+	J+	140 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-110-92.75-081624-FM-R	ZH22011-038	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.6		FB	J+	J+	2.6 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-110-92.75-081624-FM-R	ZH22011-038	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.5		FB	J+	J+	4.5 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-110-98-081624-FM-R	ZH22011-039	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	100		FB	J+	J+	100 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-110-98-081624-FM-R	ZH22011-039	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.5	J	FB	J+	J+	1.5 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-110-98-081624-FM-R	ZH22011-039	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	6.2	M-03	FB	J+	J+ M	6.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-110-98-081624-FM-R	ZH22011-039	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-110-98-081624-FM-R	ZH22011-039	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.3		FB	J+	J+	4.3 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-160-137.5-081624-FM-R	ZH22011-040	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	52		FB	J+	J+	52 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-160-137.5-081624-FM-R	ZH22011-040	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-137.5-081624-FM-R	ZH22011-040	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6.4		FB	J+	J+	6.4 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-160-137.5-081624-FM-R	ZH22011-040	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-137.5-081624-FM-R	ZH22011-040	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZH22011	CACMW-005-160-142.75-081624-FM-R	ZH22011-041	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	53		FB	J+	J+	53 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-160-142.75-081624-FM-R	ZH22011-041	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-142.75-081624-FM-R	ZH22011-041	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5.9	M-03	FB	J+	J+ M	5.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-142.75-081624-FM-R	ZH22011-041	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-160-142.75-081624-FM-R	ZH22011-041	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.6	M-03	FB	J+	J+ M	4.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-148-081624-FM-R	ZH22011-042	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	52		FB	J+	J+	52 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-160-148-081624-FM-R	ZH22011-042	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-148-081624-FM-R	ZH22011-042	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.6	M-03	FB	J+	J+ M	4.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-148-081624-FM-R	ZH22011-042	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-148-081624-FM-R	ZH22011-042	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-153.25-081624-FM-R	ZH22011-043	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	51		FB	J+	J+	51 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-160-153.25-081624-FM-R	ZH22011-043	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-153.25-081624-FM-R	ZH22011-043	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.1	M-03	FB	J+	J+ M	3.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-153.25-081624-FM-R	ZH22011-043	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-153.25-081624-FM-R	ZH22011-043	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-158.5-081624-FM-R	ZH22011-044	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54		FB	J+	J+	54 [6.1] J+	N/A
PACE	ZH22011	CACMW-005-160-158.5-081624-FM-R	ZH22011-044	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/g	0.25	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-158.5-081624-FM-R	ZH22011-044	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.5	JM-03	FB	J+	J+ M	1.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-158.5-081624-FM-R	ZH22011-044	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	2.8	M-03	FB	J+	J+ M	2.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-005-160-158.5-081624-FM-R	ZH22011-044	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZH22011	CACMW-005-160-158.5-081624-FM-R	ZH22011-044	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.3	M-03	FB	J+	J+ M	4.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-060-48-081724-FM-R	ZH22011-045	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	120		FB	J+	J+	120 [6.1] J+	N/A
PACE	ZH22011	CACMW-006-060-48-081724-FM-R	ZH22011-045	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	8.5	M-03	FB	J+	J+ M	8.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-060-48-081724-FM-R	ZH22011-045	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3		FB	J+	J+	2.3 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-060-48-081724-FM-R	ZH22011-045	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.3		FB	J+	J+	4.3 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-060-53.25-081724-FM-R	ZH22011-046	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	150		FB	J+	J+	150 [6.1] J+	N/A
PACE	ZH22011	CACMW-006-060-53.25-081724-FM-R	ZH22011-046	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	9.9		FB	J+	J+	9.9 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-060-53.25-081724-FM-R	ZH22011-046	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.5		FB	J+	J+	2.5 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-060-53.25-081724-FM-R	ZH22011-046	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.5		FB	J+	J+	4.5 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-060-58.5-081724-FM-R	ZH22011-047	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	58		FB	J+	J+	58 [6.1] J+	N/A
PACE	ZH22011	CACMW-006-060-58.5-081724-FM-R	ZH22011-047	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.39	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-006-060-58.5-081724-FM-R	ZH22011-047	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.9	M-03	FB	J+	J+ M	2.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-060-58.5-081724-FM-R	ZH22011-047	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-060-58.5-081724-FM-R	ZH22011-047	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.3		FB	J+	J+	4.3 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-110-103.25-081724-FM-R	ZH22011-048	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	100	M-03	FB	J+	J+ M	100 [6.1] J+ M	N/A
PACE	ZH22011	CACMW-006-110-103.25-081724-FM-R	ZH22011-048	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.94	JM-03	FB	J+	J+ M	0.94 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-110-103.25-081724-FM-R	ZH22011-048	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.2	M-03	FB	J+	J+ M	5.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-110-103.25-081724-FM-R	ZH22011-048	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-110-103.25-081724-FM-R	ZH22011-048	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.4	M-03	FB	J+	J+ M	4.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-110-108.5-081724-FM-R	ZH22011-049	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	61		FB	J+	J+	61 [6.1] J+	N/A
PACE	ZH22011	CACMW-006-110-108.5-081724-FM-R	ZH22011-049	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.42	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-006-110-108.5-081724-FM-R	ZH22011-049	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-110-108.5-081724-FM-R	ZH22011-049	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2		FB	J+	J+	3.2 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-160-142.75-081724-FM-R	ZH22011-050	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	57		FB	J+	J+	57 [6.1] J+	N/A
PACE	ZH22011	CACMW-006-160-142.75-081724-FM-R	ZH22011-050	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-160-142.75-081724-FM-R	ZH22011-050	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	7.3	M-03	FB	J+	J+ M	7.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-160-142.75-081724-FM-R	ZH22011-050	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-160-142.75-081724-FM-R	ZH22011-050	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6		FB	J+	J+	3.6 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-160-148-081724-FM-R	ZH22011-051	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	66		FB	J+	J+	66 [6.1] J+	N/A
PACE	ZH22011	CACMW-006-160-148-081724-FM-R	ZH22011-051	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.2		FB	J+	J+	2.2 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-160-148-081724-FM-R	ZH22011-051	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	7.2	M-03	FB	J+	J+ M	7.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-160-148-081724-FM-R	ZH22011-051	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2		FB	J+	J+	2.2 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-160-148-081724-FM-R	ZH22011-051	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8		FB	J+	J+	3.8 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-160-153.25-081724-FM-R	ZH22011-052	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54		FB	J+	J+	54 [6.1] J+	N/A
PACE	ZH22011	CACMW-006-160-153.25-081724-FM-R	ZH22011-052	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-160-153.25-081724-FM-R	ZH22011-052	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6.5	M-03	FB	J+	J+ M	6.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-006-160-153.25-081724-FM-R	ZH22011-052	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2		FB	J+	J+	2.2 [0.8] J+	N/A
PACE	ZH22011	CACMW-006-160-153.25-081724-FM-R	ZH22011-052	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8		FB	J+	J+	3.8 [0.8] J+	N/A
PACE	ZH22011	CACMW-007-060-42.75-081724-FM-R	ZH22011-053	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	100		FB	J+	J+	100 [6.1] J+	N/A
PACE	ZH22011	CACMW-007-060-42.75-081724-FM-R	ZH22011-053	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.1	JM-03	FB	J+	J+ M	1.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-060-42.75-081724-FM-R	ZH22011-053	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	6.3	M-03	FB	J+	J+ M	6.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-060-42.75-081724-FM-R	ZH22011-053	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-060-42.75-081724-FM-R	ZH22011-053	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6		FB	J+	J+	3.6 [0.8] J+	N/A
PACE	ZH22011	CACMW-007-060-48-081724-FM-R	ZH22011-054	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	140		FB	J+	J+	140 [6.1] J+	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZH22011	CACMW-007-060-48-081724-FM-R	ZH22011-054	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	8.5	M-03	FB	J+	J+ M	8.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-060-48-081724-FM-R	ZH22011-054	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.6		FB	J+	J+	2.6 [0.8] J+	N/A
PACE	ZH22011	CACMW-007-060-48-081724-FM-R	ZH22011-054	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A
PACE	ZH22011	CACMW-007-110-87.5-081724-FM-R	ZH22011-055	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	84		FB	J+	J+	84 [6.1] J+	N/A
PACE	ZH22011	CACMW-007-110-87.5-081724-FM-R	ZH22011-055	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.3	JM-03	FB	J+	J+ M	1.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-110-87.5-081724-FM-R	ZH22011-055	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.2	M-03	FB	J+	J+ M	5.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-110-87.5-081724-FM-R	ZH22011-055	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-110-87.5-081724-FM-R	ZH22011-055	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.2	M-03	FB	J+	J+ M	4.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-110-92.75-081724-FM-R	ZH22011-056	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	88		FB	J+	J+	88 [6.1] J+	N/A
PACE	ZH22011	CACMW-007-110-92.75-081724-FM-R	ZH22011-056	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.95	JM-03	FB	J+	J+ M	0.95 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-110-92.75-081724-FM-R	ZH22011-056	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.9		FB	J+	J+	4.9 [0.8] J+	N/A
PACE	ZH22011	CACMW-007-110-92.75-081724-FM-R	ZH22011-056	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-110-92.75-081724-FM-R	ZH22011-056	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7		FB	J+	J+	3.7 [0.8] J+	N/A
PACE	ZH22011	CACMW-007-160-148-081724-FM-R	ZH22011-057	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	55		FB	J+	J+	55 [6.1] J+	N/A
PACE	ZH22011	CACMW-007-160-148-081724-FM-R	ZH22011-057	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-160-148-081724-FM-R	ZH22011-057	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.6	M-03	FB	J+	J+ M	4.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-160-148-081724-FM-R	ZH22011-057	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-007-160-148-081724-FM-R	ZH22011-057	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-060-42.75-081724-FM-R	ZH22011-058	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	120		FB	J+	J+	120 [6.1] J+	N/A
PACE	ZH22011	CACMW-008-060-42.75-081724-FM-R	ZH22011-058	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	8.8	M-03	FB	J+	J+ M	8.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-060-42.75-081724-FM-R	ZH22011-058	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-060-42.75-081724-FM-R	ZH22011-058	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9		FB	J+	J+	3.9 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-060-53.25-081724-FM-R	ZH22011-059	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	170		FB	J+	J+	170 [6] J+	N/A
PACE	ZH22011	CACMW-008-060-53.25-081724-FM-R	ZH22011-059	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-060-53.25-081724-FM-R	ZH22011-059	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4		FB	J+	J+	4 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-060-58.5-081724-FM-R	ZH22011-060	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	81		FB	J+	J+	81 [6] J+	N/A
PACE	ZH22011	CACMW-008-060-58.5-081724-FM-R	ZH22011-060	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-060-58.5-081724-FM-R	ZH22011-060	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-060-58.5-081724-FM-R	ZH22011-060	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-110-103.25-081724-FM-R	ZH22011-061	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	82		FB	J+	J+	82 [6.1] J+	N/A
PACE	ZH22011	CACMW-008-110-103.25-081724-FM-R	ZH22011-061	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.62	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-008-110-103.25-081724-FM-R	ZH22011-061	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.8		FB	J+	J+	3.8 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-110-103.25-081724-FM-R	ZH22011-061	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.5	M-03	FB	J+	J+ M	2.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-103.25-081724-FM-R	ZH22011-061	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-108.5-081724-FM-R	ZH22011-062	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	57		FB	J+	J+	57 [6] J+	N/A
PACE	ZH22011	CACMW-008-110-108.5-081724-FM-R	ZH22011-062	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.53	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-008-110-108.5-081724-FM-R	ZH22011-062	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3	M-03	FB	J+	J+ M	3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-108.5-081724-FM-R	ZH22011-062	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2		FB	J+	J+	2.2 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-110-108.5-081724-FM-R	ZH22011-062	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-87.5-081724-FM-R	ZH22011-063	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	72		FB	J+	J+	72 [6.1] J+	N/A
PACE	ZH22011	CACMW-008-110-87.5-081724-FM-R	ZH22011-063	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.96	JM-03	FB	J+	J+ M	0.96 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-87.5-081724-FM-R	ZH22011-063	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.6	M-03	FB	J+	J+ M	4.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-87.5-081724-FM-R	ZH22011-063	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-87.5-081724-FM-R	ZH22011-063	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2		FB	J+	J+	3.2 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-110-92.75-081724-FM-R	ZH22011-064	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	82		FB	J+	J+	82 [6.1] J+	N/A
PACE	ZH22011	CACMW-008-110-92.75-081724-FM-R	ZH22011-064	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.8	M-03	FB	J+	J+ M	4.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-92.75-081724-FM-R	ZH22011-064	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-92.75-081724-FM-R	ZH22011-064	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-98-081724-FM-R	ZH22011-065	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	88		FB	J+	J+	88 [6] J+	N/A
PACE	ZH22011	CACMW-008-110-98-081724-FM-R	ZH22011-065	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.5	M-03	FB	J+	J+ M	5.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-98-081724-FM-R	ZH22011-065	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-110-98-081724-FM-R	ZH22011-065	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.2	M-03	FB	J+	J+ M	4.2 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-137.5-081724-FM-R	ZH22011-066	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	63		FB	J+	J+	63 [6.1] J+	N/A
PACE	ZH22011	CACMW-008-160-137.5-081724-FM-R	ZH22011-066	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-137.5-081724-FM-R	ZH22011-066	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	8	M-03	FB	J+	J+ M	8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-137.5-081724-FM-R	ZH22011-066	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-137.5-081724-FM-R	ZH22011-066	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-142.75-081724-FM-R	ZH22011-067	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	72		FB	J+	J+	72 [6.1] J+	N/A
PACE	ZH22011	CACMW-008-160-142.75-081724-FM-R	ZH22011-067	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.29	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-008-160-142.75-081724-FM-R	ZH22011-067	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-142.75-081724-FM-R	ZH22011-067	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	7.1	M-03	FB	J+	J+ M	7.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-142.75-081724-FM-R	ZH22011-067	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	3	M-03	FB	J+	J+ M	3 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-142.75-081724-FM-R	ZH22011-067	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.6		FB	J+	J+	4.6 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-160-148-081724-FM-R	ZH22011-068	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	58		FB	J+	J+	58 [6] J+	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZH22011	CACMW-008-160-148-081724-FM-R	ZH22011-068	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.33	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22011	CACMW-008-160-148-081724-FM-R	ZH22011-068	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-148-081724-FM-R	ZH22011-068	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5.9	M-03	FB	J+	J+ M	5.9 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-148-081724-FM-R	ZH22011-068	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-148-081724-FM-R	ZH22011-068	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-153.25-081724-FM-R	ZH22011-069	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	64		FB	J+	J+	64 [6] J+	N/A
PACE	ZH22011	CACMW-008-160-153.25-081724-FM-R	ZH22011-069	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-160-153.25-081724-FM-R	ZH22011-069	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.6	M-03	FB	J+	J+ M	4.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-153.25-081724-FM-R	ZH22011-069	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.5	M-03	FB	J+	J+ M	2.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-153.25-081724-FM-R	ZH22011-069	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A
PACE	ZH22011	CACMW-008-160-158.5-081724-FM-R	ZH22011-070	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	49		FB	J+	J+	49 [6.1] J+	N/A
PACE	ZH22011	CACMW-008-160-158.5-081724-FM-R	ZH22011-070	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/g	0.25	0.8	2	1.6	JM-03	FB	J+	J+ M	1.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-158.5-081724-FM-R	ZH22011-070	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.5	JM-03	FB	J+	J+ M	1.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-158.5-081724-FM-R	ZH22011-070	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	2.5	M-03	FB	J+	J+ M	2.5 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-158.5-081724-FM-R	ZH22011-070	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.6	M-03	FB	J+	J+ M	2.6 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-008-160-158.5-081724-FM-R	ZH22011-070	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZH22011	FD-1-081624-FM-R	ZH22011-071	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	130		FB	J+	J+	130 [6.1] J+	N/A
PACE	ZH22011	FD-1-081624-FM-R	ZH22011-071	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.4	JM-03	FB	J+	J+ M	1.4 [0.8] J+ M	N/A
PACE	ZH22011	FD-1-081624-FM-R	ZH22011-071	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	7.9	M-03	FB	J+	J+ M	7.9 [0.8] J+ M	N/A
PACE	ZH22011	FD-1-081624-FM-R	ZH22011-071	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22011	FD-1-081624-FM-R	ZH22011-071	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1	M-03	FB	J+	J+ M	4.1 [0.8] J+ M	N/A
PACE	ZH22011	FD-2-081724-FM-R	ZH22011-072	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	60		FB	J+	J+	60 [6] J+	N/A
PACE	ZH22011	FD-2-081724-FM-R	ZH22011-072	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZH22011	FD-2-081724-FM-R	ZH22011-072	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZH22011	FD-2-081724-FM-R	ZH22011-072	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22011	FD-2-081724-FM-R	ZH22011-072	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8		FB	J+	J+	3.8 [0.8] J+	N/A
PACE	ZH22011	FD-3-081724-FM-R	ZH22011-073	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	84		FB	J+	J+	84 [6.1] J+	N/A
PACE	ZH22011	FD-3-081724-FM-R	ZH22011-073	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.7	M-03	FB	J+	J+ M	4.7 [0.8] J+ M	N/A
PACE	ZH22011	FD-3-081724-FM-R	ZH22011-073	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.8	M-03	FB	J+	J+ M	2.8 [0.8] J+ M	N/A
PACE	ZH22011	FD-3-081724-FM-R	ZH22011-073	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZH22011	CACMW-004-110-92.75-081624-FM-R	ZH22011-024	E1633	Perfluorooctanoic Sulfonate	1763-23-1	ng/g	0.2	0.74	2	580	EM-03	Cal Exceed	J	J M	580 [0.74] J M	N/A
PACE	ZH22011	CACMW-008-110-103.25-081724-FM-R	ZH22011-061	E1633	N-Methylperfluoroocatane Sulfonamidoacetic Acid (MeFOSAA)	2355-31-9	ng/g	0.4	0.8	2	4	M-03	Ion_ratio	J	J M	4 [0.8] J M	N/A
PACE	ZH22011	CACMW-004-060-37.5-081624-FM-R	ZH22011-016	E1633	Perfluoropentanoic acid (PFPA)	2706-90-3	ng/g	0.41	1.6	4	13		Ion_ratio	J	J	13 [1.6] J	N/A
PACE	ZH22011	CACMW-004-160-137.5-081624-FM-R	ZH22011-026	E1633	8:2FTS	39108-34-4	ng/g	0.82	3.1	8	3.5	JM-03	ICV	J+	J+ M	3.5 [3.1] J+ M	N/A
PACE	ZH22011	CACMW-004-160-142.75-081624-FM-R	ZH22011-027	E1633	8:2FTS	39108-34-4	ng/g	0.82	3.1	8	3.9	JM-03	ICV	J+	J+ M	3.9 [3.1] J+ M	N/A
PACE	ZH22011	CACMW-004-160-148-081624-FM-R	ZH22011-028	E1633	8:2FTS	39108-34-4	ng/g	0.82	3.1	8	2.9	JM-03	ICV	J+	J+ M	2.9 [3.1] J+ M	N/A
PACE	ZH22011	CACMW-004-160-153.25-081624-FM-R	ZH22011-029	E1633	8:2FTS	39108-34-4	ng/g	0.82	3.1	8	3.3	JM-03	ICV	J+	J+ M	3.3 [3.1] J+ M	N/A
PACE	ZH22011	CACMW-004-160-158.5-081624-FM-R	ZH22011-030	E1633	8:2FTS	39108-34-4	ng/g	0.82	3.1	8	0.91	JM-03	ICV	J+	J+ M	0.91 [3.1] J+ M	N/A
PACE	ZH22011	CACMW-008-160-137.5-081724-FM-R	ZH22011-066	E1633	8:2FTS	39108-34-4	ng/g	0.82	3.1	8	1.8	JM-03	ICV	J+	J+ M	1.8 [3.1] J+ M	N/A
PACE	ZH22011	CACMW-008-160-142.75-081724-FM-R	ZH22011-067	E1633	8:2FTS	39108-34-4	ng/g	0.82	3.1	8	2.5	JM-03	ICV	J+	J+ M	2.5 [3.1] J+ M	N/A
PACE	ZH22011	CACMW-008-160-148-081724-FM-R	ZH22011-068	E1633	8:2FTS	39108-34-4	ng/g	0.81	3	7.9	1.4	JM-03	ICV	J+	J+ M	1.4 [3] J+ M	N/A
PACE	ZH22011	CACMW-008-160-153.25-081724-FM-R	ZH22011-069	E1633	8:2FTS	39108-34-4	ng/g	0.81	3	7.9	1.3	JM-03	ICV	J+	J+ M	1.3 [3] J+ M	N/A
PACE	ZH22011	FD-2-081724-FM-R	ZH22011-072	E1633	8:2FTS	39108-34-4	ng/g	0.81	3	7.9	0.9	JM-03	ICV	J+	J+ M	0.9 [3] J+ M	N/A
PACE	ZH22013	CACMW-003-160-153.25-081524-FM-R	ZH22013-029	E1633	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	ng/g	0.29	0.8	2	ND	UQM-03	Low EIS %R<10%	X	X	ND [0.8] X	N/A
PACE	ZH22013	CACMW-003-160-153.25-081524-FM-R	ZH22013-029	E1633	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	ng/g	0.21	0.8	2	ND	UQM-03	Low EIS %R<10%	X	X	ND [0.8] X	N/A
PACE	ZH22013	CACMW-002-060-37.5-081524-FM-R	ZH22013-001	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	75		FB	J+	J+	75 [6.1] J+	N/A
PACE	ZH22013	CACMW-002-060-37.5-081524-FM-R	ZH22013-001	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.54	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22013	CACMW-002-060-37.5-081524-FM-R	ZH22013-001	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-060-37.5-081524-FM-R	ZH22013-001	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-060-37.5-081524-FM-R	ZH22013-001	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7		FB	J+	J+	3.7 [0.8] J+	N/A
PACE	ZH22013	CACMW-002-060-42.75-081524-FM-R	ZH22013-002	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	70		FB	J+	J+	70 [6] J+	N/A
PACE	ZH22013	CACMW-002-060-42.75-081524-FM-R	ZH22013-002	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.56	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22013	CACMW-002-060-42.75-081524-FM-R	ZH22013-002	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4		FB	J+	J+	4 [0.8] J+	N/A
PACE	ZH22013	CACMW-002-060-42.75-081524-FM-R	ZH22013-002	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-060-42.75-081524-FM-R	ZH22013-002	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-060-48-081524-FM-R	ZH22013-003	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	76		FB	J+	J+	76 [0.61] J+	N/A
PACE	ZH22013	CACMW-002-060-48-081524-FM-R	ZH22013-003	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.58	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22013	CACMW-002-060-48-081524-FM-R	ZH22013-003	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-060-48-081524-FM-R	ZH22013-003	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-060-48-081524-FM-R	ZH22013-003	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-060-53.25-081524-FM-R	ZH22013-004	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	89		FB	J+	J+	89 [0.61] J+	N/A
PACE	ZH22013	CACMW-002-060-53.25-081524-FM-R	ZH22013-004	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.81	JM-03	FB	J+	J+ M	0.81 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-060-53.25-081524-FM-R	ZH22013-004	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.8		FB	J+	J+	5.8 [0.8] J+	N/A
PACE	ZH22013	CACMW-002-060-53.25-081524-FM-R	ZH22013-004	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZH22013	CACMW-002-060-53.25-081524-FM-R	ZH22013-004	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1	M-03	FB	J+	J+ M	4.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-060-58.5-081524-FM-R	ZH22013-005	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	79		FB	J+	J+	79 [0.61] J+	N/A
PACE	ZH22013	CACMW-002-060-58.5-081524-FM-R	ZH22013-005	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	5	M-03	FB	J+	J+ M	5 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-060-58.5-081524-FM-R	ZH22013-005	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	4		FB	J+	J+	4 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-060-58.5-081524-FM-R	ZH22013-005	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.3	JM-03	FB	J+	J+ M	1.3 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-060-58.5-081524-FM-R	ZH22013-005	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-110-103.25-081524-FM-R	ZH22013-006	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	67		FB	J+	J+	67 [0.61] J+	N/A
PACE	ZH22013	CACMW-002-110-103.25-081524-FM-R	ZH22013-006	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.53		FB	J+	J+	0.53 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-110-103.25-081524-FM-R	ZH22013-006	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	3.1	M-03	FB	J+	J+ M	3.1 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-110-103.25-081524-FM-R	ZH22013-006	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	2		FB	J+	J+	2 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-110-103.25-081524-FM-R	ZH22013-006	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.8		FB	J+	J+	3.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-110-108.5-081524-FM-R	ZH22013-007	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	57		FB	J+	J+	57 [0.61] J+	N/A
PACE	ZH22013	CACMW-002-110-108.5-081524-FM-R	ZH22013-007	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	2.6	M-03	FB	J+	J+ M	2.6 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-110-108.5-081524-FM-R	ZH22013-007	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.45	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22013	CACMW-002-110-108.5-081524-FM-R	ZH22013-007	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-110-108.5-081524-FM-R	ZH22013-007	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-110-87.5-081524-FM-R	ZH22013-008	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	51		FB	J+	J+	51 [0.61] J+	N/A
PACE	ZH22013	CACMW-002-110-87.5-081524-FM-R	ZH22013-008	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.37	M-03	FB	J+	J+ M	0.37 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-110-87.5-081524-FM-R	ZH22013-008	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	2.2	M-03	FB	J+	J+ M	2.2 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-110-87.5-081524-FM-R	ZH22013-008	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	2.9		FB	J+	J+	2.9 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-110-87.5-081524-FM-R	ZH22013-008	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-110-92.75-081524-FM-R	ZH22013-009	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	58		FB	J+	J+	58 [0.61] J+	N/A
PACE	ZH22013	CACMW-002-110-92.75-081524-FM-R	ZH22013-009	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.51	M-03	FB	J+	J+ M	0.51 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-110-92.75-081524-FM-R	ZH22013-009	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	2.8		FB	J+	J+	2.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-110-92.75-081524-FM-R	ZH22013-009	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.2		FB	J+	J+	3.2 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-110-92.75-081524-FM-R	ZH22013-009	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-110-98-081524-FM-R	ZH22013-010	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	64		FB	J+	J+	64 [6.1] J+	N/A
PACE	ZH22013	CACMW-002-110-98-081524-FM-R	ZH22013-010	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.51	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22013	CACMW-002-110-98-081524-FM-R	ZH22013-010	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-110-98-081524-FM-R	ZH22013-010	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-002-110-98-081524-FM-R	ZH22013-010	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8		FB	J+	J+	3.8 [0.8] J+	N/A
PACE	ZH22013	CACMW-002-160-137.5-081524-FM-R	ZH22013-011	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	62		FB	J+	J+	62 [0.61] J+	N/A
PACE	ZH22013	CACMW-002-160-137.5-081524-FM-R	ZH22013-011	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.28	M-03	FB	J+	J+ M	0.28 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-137.5-081524-FM-R	ZH22013-011	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	2	M-03	FB	J+	J+ M	2 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-137.5-081524-FM-R	ZH22013-011	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.7		FB	J+	J+	1.7 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-160-137.5-081524-FM-R	ZH22013-011	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.1		FB	J+	J+	3.1 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-160-142.75-081524-FM-R	ZH22013-012	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	77		FB	J+	J+	77 [0.61] J+	N/A
PACE	ZH22013	CACMW-002-160-142.75-081524-FM-R	ZH22013-012	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.29	M-03	FB	J+	J+ M	0.29 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-142.75-081524-FM-R	ZH22013-012	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	2.6	M-03	FB	J+	J+ M	2.6 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-142.75-081524-FM-R	ZH22013-012	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.7	M-03	FB	J+	J+ M	1.7 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-142.75-081524-FM-R	ZH22013-012	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.5		FB	J+	J+	3.5 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-160-148-081524-FM-R	ZH22013-013	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.6	0.79	64		FB	J+	J+	64 [0.6] J+	N/A
PACE	ZH22013	CACMW-002-160-148-081524-FM-R	ZH22013-013	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.29	M-03	FB	J+	J+ M	0.29 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-148-081524-FM-R	ZH22013-013	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	2.5	M-03	FB	J+	J+ M	2.5 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-148-081524-FM-R	ZH22013-013	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.8		FB	J+	J+	1.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-160-148-081524-FM-R	ZH22013-013	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.4		FB	J+	J+	3.4 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-160-153.25-081524-FM-R	ZH22013-014	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.6	0.79	61		FB	J+	J+	61 [0.6] J+	N/A
PACE	ZH22013	CACMW-002-160-153.25-081524-FM-R	ZH22013-014	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.19	JM-03	FB	J+	J+ M	0.19 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-153.25-081524-FM-R	ZH22013-014	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	2	M-03	FB	J+	J+ M	2 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-153.25-081524-FM-R	ZH22013-014	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.029	0.08	0.2	7.3		FB	J+	J+	7.3 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-160-153.25-081524-FM-R	ZH22013-014	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	2	M-03	FB	J+	J+ M	2 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-153.25-081524-FM-R	ZH22013-014	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.4		FB	J+	J+	3.4 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-160-158.5-081524-FM-R	ZH22013-015	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	44		FB	J+	J+	44 [0.61] J+	N/A
PACE	ZH22013	CACMW-002-160-158.5-081524-FM-R	ZH22013-015	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.15	JM-03	FB	J+	J+ M	0.15 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-158.5-081524-FM-R	ZH22013-015	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	1.8		FB	J+	J+	1.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-002-160-158.5-081524-FM-R	ZH22013-015	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.029	0.08	0.2	5.1	M-03	FB	J+	J+ M	5.1 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-158.5-081524-FM-R	ZH22013-015	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	2	M-03	FB	J+	J+ M	2 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-002-160-158.5-081524-FM-R	ZH22013-015	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3		FB	J+	J+	3 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-37.5-081624-FM-R	ZH22013-016	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	64		FB	J+	J+	64 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-060-37.5-081624-FM-R	ZH22013-016	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.59	M-03	FB	J+	J+ M	0.59 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-060-37.5-081624-FM-R	ZH22013-016	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	3.8	M-03	FB	J+	J+ M	3.8 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-060-37.5-081624-FM-R	ZH22013-016	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.8	M-03	FB	J+	J+ M	1.8 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-060-37.5-081624-FM-R	ZH22013-016	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.7		FB	J+	J+	3.7 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-42.75-081624-FM-R	ZH22013-017	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	56		FB	J+	J+	56 [0.61] J+	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZH22013	CACMW-003-060-42.75-081624-FM-R	ZH22013-017	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.35		FB	J+	J+	0.35 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-42.75-081624-FM-R	ZH22013-017	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	3.2		FB	J+	J+	3.2 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-42.75-081624-FM-R	ZH22013-017	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.9		FB	J+	J+	1.9 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-42.75-081624-FM-R	ZH22013-017	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.2		FB	J+	J+	3.2 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-48-081624-FM-R	ZH22013-018	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	61		FB	J+	J+	61 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-060-48-081624-FM-R	ZH22013-018	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.73	M-03	FB	J+	J+ M	0.73 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-060-48-081624-FM-R	ZH22013-018	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	3.8	M-03	FB	J+	J+ M	3.8 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-060-48-081624-FM-R	ZH22013-018	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.9		FB	J+	J+	1.9 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-48-081624-FM-R	ZH22013-018	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.5		FB	J+	J+	3.5 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-53.25-081624-FM-R	ZH22013-019	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	73		FB	J+	J+	73 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-060-53.25-081624-FM-R	ZH22013-019	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	1	M-03	FB	J+	J+ M	1 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-060-53.25-081624-FM-R	ZH22013-019	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	5.6	M-03	FB	J+	J+ M	5.6 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-060-53.25-081624-FM-R	ZH22013-019	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.8		FB	J+	J+	1.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-53.25-081624-FM-R	ZH22013-019	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.4		FB	J+	J+	3.4 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-58.5-081624-FM-R	ZH22013-020	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.6	0.79	62		FB	J+	J+	62 [0.6] J+	N/A
PACE	ZH22013	CACMW-003-060-58.5-081624-FM-R	ZH22013-020	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.69	M-03	FB	J+	J+ M	0.69 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-060-58.5-081624-FM-R	ZH22013-020	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	4	M-03	FB	J+	J+ M	4 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-060-58.5-081624-FM-R	ZH22013-020	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	2		FB	J+	J+	2 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-060-58.5-081624-FM-R	ZH22013-020	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.6		FB	J+	J+	3.6 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-103.25-081624-FM-R	ZH22013-021	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	74		FB	J+	J+	74 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-110-103.25-081624-FM-R	ZH22013-021	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.81	M-03	FB	J+	J+ M	0.81 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-110-103.25-081624-FM-R	ZH22013-021	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	4.7	M-03	FB	J+	J+ M	4.7 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-110-103.25-081624-FM-R	ZH22013-021	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.9		FB	J+	J+	1.9 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-103.25-081624-FM-R	ZH22013-021	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.5		FB	J+	J+	3.5 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-108.5-081624-FM-R	ZH22013-022	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	73		FB	J+	J+	73 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-110-108.5-081624-FM-R	ZH22013-022	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.52	M-03	FB	J+	J+ M	0.52 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-110-108.5-081624-FM-R	ZH22013-022	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	3.3		FB	J+	J+	3.3 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-108.5-081624-FM-R	ZH22013-022	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.9	M-03	FB	J+	J+ M	1.9 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-110-108.5-081624-FM-R	ZH22013-022	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.5		FB	J+	J+	3.5 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-870.5-081624-FM-R	ZH22013-023	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	67		FB	J+	J+	67 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-110-870.5-081624-FM-R	ZH22013-023	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.8		FB	J+	J+	0.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-870.5-081624-FM-R	ZH22013-023	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	4.9	M-03	FB	J+	J+ M	4.9 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-110-870.5-081624-FM-R	ZH22013-023	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.8		FB	J+	J+	1.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-870.5-081624-FM-R	ZH22013-023	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	4		FB	J+	J+	4 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-92.75-081624-FM-R	ZH22013-024	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	76		FB	J+	J+	76 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-110-92.75-081624-FM-R	ZH22013-024	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.69	M-03	FB	J+	J+ M	0.69 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-110-92.75-081624-FM-R	ZH22013-024	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	4.8	M-03	FB	J+	J+ M	4.8 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-110-92.75-081624-FM-R	ZH22013-024	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	2		FB	J+	J+	2 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-92.75-081624-FM-R	ZH22013-024	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.7		FB	J+	J+	3.7 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-98-081624-FM-R	ZH22013-025	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	68		FB	J+	J+	68 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-110-98-081624-FM-R	ZH22013-025	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.85	M-03	FB	J+	J+ M	0.85 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-110-98-081624-FM-R	ZH22013-025	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	5.1	M-03	FB	J+	J+ M	5.1 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-110-98-081624-FM-R	ZH22013-025	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.8		FB	J+	J+	1.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-110-98-081624-FM-R	ZH22013-025	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.4		FB	J+	J+	3.4 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-137.5-081524-FM-R	ZH22013-026	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	53		FB	J+	J+	53 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-160-137.5-081524-FM-R	ZH22013-026	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.19	JM-03	FB	J+	J+ M	0.19 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-160-137.5-081524-FM-R	ZH22013-026	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	1.9		FB	J+	J+	1.9 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-137.5-081524-FM-R	ZH22013-026	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.029	0.08	0.2	7.5		FB	J+	J+	7.5 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-137.5-081524-FM-R	ZH22013-026	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.7		FB	J+	J+	1.7 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-137.5-081524-FM-R	ZH22013-026	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.4		FB	J+	J+	3.4 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-142.75-081524-FM-R	ZH22013-027	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	58		FB	J+	J+	58 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-160-142.75-081524-FM-R	ZH22013-027	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.2		FB	J+	J+	0.2 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-142.75-081524-FM-R	ZH22013-027	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	2	M-03	FB	J+	J+ M	2 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-160-142.75-081524-FM-R	ZH22013-027	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.8		FB	J+	J+	1.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-142.75-081524-FM-R	ZH22013-027	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.3		FB	J+	J+	3.3 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-148-081524-FM-R	ZH22013-028	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.6	0.79	58		FB	J+	J+	58 [0.6] J+	N/A
PACE	ZH22013	CACMW-003-160-148-081524-FM-R	ZH22013-028	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.19	JM-03	FB	J+	J+ M	0.19 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-160-148-081524-FM-R	ZH22013-028	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	1.8		FB	J+	J+	1.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-148-081524-FM-R	ZH22013-028	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.029	0.08	0.2	7.2		FB	J+	J+	7.2 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-148-081524-FM-R	ZH22013-028	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.8		FB	J+	J+	1.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-148-081524-FM-R	ZH22013-028	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.1		FB	J+	J+	3.1 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-153.25-081524-FM-R	ZH22013-029	E1633	6:2FTS	27619-97-2	ng/g	0.17	0.61	0.8	57	S	FB	J+	J+	57 [0.61] J+	N/A
PACE	ZH22013	CACMW-003-160-153.25-081524-FM-R	ZH22013-029	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.029	0.08	0.2	0.16	JM-03	FB	J+	J+ M	0.16 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-160-153.25-081524-FM-R	ZH22013-029	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.026	0.08	0.2	1.8		FB	J+	J+	1.8 [0.08] J+	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZH22013	CACMW-003-160-153.25-081524-FM-R	ZH22013-029	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.029	0.08	0.2	6.2		FB	J+	J+	6.2 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-153.25-081524-FM-R	ZH22013-029	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.04	0.08	0.2	1.8		FB	J+	J+	1.8 [0.08] J+	N/A
PACE	ZH22013	CACMW-003-160-153.25-081524-FM-R	ZH22013-029	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.028	0.08	0.2	3.3	M-03	FB	J+	J+ M	3.3 [0.08] J+ M	N/A
PACE	ZH22013	CACMW-003-160-158.5-081524-FM-R	ZH22013-030	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	51		FB	J+	J+	51 [6.1] J+	N/A
PACE	ZH22013	CACMW-003-160-158.5-081524-FM-R	ZH22013-030	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.6	JM-03	FB	J+	J+ M	1.6 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-003-160-158.5-081524-FM-R	ZH22013-030	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5.2		FB	J+	J+	5.2 [0.8] J+	N/A
PACE	ZH22013	CACMW-003-160-158.5-081524-FM-R	ZH22013-030	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-003-160-158.5-081524-FM-R	ZH22013-030	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5		FB	J+	J+	3.5 [0.8] J+	N/A
PACE	ZH22013	CACMW-005-060-48-081624-FM-R	ZH22013-031	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	72		FB	J+	J+	72 [6.1] J+	N/A
PACE	ZH22013	CACMW-005-060-48-081624-FM-R	ZH22013-031	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.79	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22013	CACMW-005-060-48-081624-FM-R	ZH22013-031	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4	M-03	FB	J+	J+ M	4 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-005-060-48-081624-FM-R	ZH22013-031	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-005-060-48-081624-FM-R	ZH22013-031	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-060-37.5-081724-FM-R	ZH22013-032	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	120		FB	J+	J+	120 [6.1] J+	N/A
PACE	ZH22013	CACMW-006-060-37.5-081724-FM-R	ZH22013-032	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.3	JM-03	FB	J+	J+ M	1.3 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-060-37.5-081724-FM-R	ZH22013-032	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	6.9	M-03	FB	J+	J+ M	6.9 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-060-37.5-081724-FM-R	ZH22013-032	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-060-37.5-081724-FM-R	ZH22013-032	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-060-42.75-081724-FM-R	ZH22013-033	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	120		FB	J+	J+	120 [6.1] J+	N/A
PACE	ZH22013	CACMW-006-060-42.75-081724-FM-R	ZH22013-033	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	1.1	JM-03	FB	J+	J+ M	1.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-060-42.75-081724-FM-R	ZH22013-033	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	7.5		FB	J+	J+	7.5 [0.8] J+	N/A
PACE	ZH22013	CACMW-006-060-42.75-081724-FM-R	ZH22013-033	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1		FB	J+	J+	2.1 [0.8] J+	N/A
PACE	ZH22013	CACMW-006-060-42.75-081724-FM-R	ZH22013-033	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8		FB	J+	J+	3.8 [0.8] J+	N/A
PACE	ZH22013	CACMW-006-110-87.5-081724-FM-R	ZH22013-034	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	76		FB	J+	J+	76 [6.1] J+	N/A
PACE	ZH22013	CACMW-006-110-87.5-081724-FM-R	ZH22013-034	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.91	JM-03	FB	J+	J+ M	0.91 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-87.5-081724-FM-R	ZH22013-034	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.2	M-03	FB	J+	J+ M	4.2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-87.5-081724-FM-R	ZH22013-034	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-87.5-081724-FM-R	ZH22013-034	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-92.75-081724-FM-R	ZH22013-035	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	95		FB	J+	J+	95 [6.1] J+	N/A
PACE	ZH22013	CACMW-006-110-92.75-081724-FM-R	ZH22013-035	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.98	JM-03	FB	J+	J+ M	0.98 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-92.75-081724-FM-R	ZH22013-035	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.2	M-03	FB	J+	J+ M	4.2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-92.75-081724-FM-R	ZH22013-035	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-92.75-081724-FM-R	ZH22013-035	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-98-081724-FM-R	ZH22013-036	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	70		FB	J+	J+	70 [6.1] J+	N/A
PACE	ZH22013	CACMW-006-110-98-081724-FM-R	ZH22013-036	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.92	JM-03	FB	J+	J+ M	0.92 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-98-081724-FM-R	ZH22013-036	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4	M-03	FB	J+	J+ M	4 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-98-081724-FM-R	ZH22013-036	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-110-98-081724-FM-R	ZH22013-036	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6		FB	J+	J+	3.6 [0.8] J+	N/A
PACE	ZH22013	CACMW-006-160-137.5-081724-FM-R	ZH22013-037	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	59		FB	J+	J+	59 [6.1] J+	N/A
PACE	ZH22013	CACMW-006-160-137.5-081724-FM-R	ZH22013-037	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-160-137.5-081724-FM-R	ZH22013-037	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5.1	M-03	FB	J+	J+ M	5.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-160-137.5-081724-FM-R	ZH22013-037	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-160-137.5-081724-FM-R	ZH22013-037	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-160-158.5-081724-FM-R	ZH22013-038	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	47		FB	J+	J+	47 [6.1] J+	N/A
PACE	ZH22013	CACMW-006-160-158.5-081724-FM-R	ZH22013-038	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.5	JM-03	FB	J+	J+ M	1.5 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-160-158.5-081724-FM-R	ZH22013-038	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-006-160-158.5-081724-FM-R	ZH22013-038	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7		FB	J+	J+	3.7 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-060-37.5-081724-FM-R	ZH22013-039	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	74		FB	J+	J+	74 [6.1] J+	N/A
PACE	ZH22013	CACMW-007-060-37.5-081724-FM-R	ZH22013-039	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.68	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22013	CACMW-007-060-37.5-081724-FM-R	ZH22013-039	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.1	M-03	FB	J+	J+ M	3.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-060-37.5-081724-FM-R	ZH22013-039	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.6		FB	J+	J+	2.6 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-060-37.5-081724-FM-R	ZH22013-039	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6		FB	J+	J+	3.6 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-060-53.25-081724-FM-R	ZH22013-040	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	71		FB	J+	J+	71 [6.1] J+	N/A
PACE	ZH22013	CACMW-007-060-53.25-081724-FM-R	ZH22013-040	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.59	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22013	CACMW-007-060-53.25-081724-FM-R	ZH22013-040	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-060-53.25-081724-FM-R	ZH22013-040	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-060-53.25-081724-FM-R	ZH22013-040	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-060-58.5-081724-FM-R	ZH22013-041	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	58		FB	J+	J+	58 [6.1] J+	N/A
PACE	ZH22013	CACMW-007-060-58.5-081724-FM-R	ZH22013-041	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-060-58.5-081724-FM-R	ZH22013-041	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-060-58.5-081724-FM-R	ZH22013-041	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7		FB	J+	J+	3.7 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-110-103.25-081724-FM-R	ZH22013-042	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	71		FB	J+	J+	71 [6.1] J+	N/A
PACE	ZH22013	CACMW-007-110-103.25-081724-FM-R	ZH22013-042	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.2		FB	J+	J+	3.2 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-110-103.25-081724-FM-R	ZH22013-042	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZH22013	CACMW-007-110-103.25-081724-FM-R	ZH22013-042	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.8		FB	J+	J+	4.8 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-110-108.5-081724-FM-R	ZH22013-043	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	60		FB	J+	J+	60 [6.1] J+	N/A
PACE	ZH22013	CACMW-007-110-108.5-081724-FM-R	ZH22013-043	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.63	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22013	CACMW-007-110-108.5-081724-FM-R	ZH22013-043	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3	M-03	FB	J+	J+ M	3 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-110-108.5-081724-FM-R	ZH22013-043	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-110-108.5-081724-FM-R	ZH22013-043	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.2		FB	J+	J+	4.2 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-110-98-081724-FM-R	ZH22013-044	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	73		FB	J+	J+	73 [6.1] J+	N/A
PACE	ZH22013	CACMW-007-110-98-081724-FM-R	ZH22013-044	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.73	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZH22013	CACMW-007-110-98-081724-FM-R	ZH22013-044	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-110-98-081724-FM-R	ZH22013-044	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-110-98-081724-FM-R	ZH22013-044	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5		FB	J+	J+	3.5 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-160-137.5-081724-FM-R	ZH22013-045	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	59		FB	J+	J+	59 [6.1] J+	N/A
PACE	ZH22013	CACMW-007-160-137.5-081724-FM-R	ZH22013-045	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.6	JM-03	FB	J+	J+ M	1.6 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-137.5-081724-FM-R	ZH22013-045	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5.2	M-03	FB	J+	J+ M	5.2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-137.5-081724-FM-R	ZH22013-045	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-137.5-081724-FM-R	ZH22013-045	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-142.75-081724-FM-R	ZH22013-046	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54		FB	J+	J+	54 [6.1] J+	N/A
PACE	ZH22013	CACMW-007-160-142.75-081724-FM-R	ZH22013-046	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-142.75-081724-FM-R	ZH22013-046	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5	M-03	FB	J+	J+ M	5 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-142.75-081724-FM-R	ZH22013-046	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-142.75-081724-FM-R	ZH22013-046	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8		FB	J+	J+	3.8 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-160-153.25-081724-FM-R	ZH22013-047	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54		FB	J+	J+	54 [6.1] J+	N/A
PACE	ZH22013	CACMW-007-160-153.25-081724-FM-R	ZH22013-047	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/g	0.25	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-153.25-081724-FM-R	ZH22013-047	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-153.25-081724-FM-R	ZH22013-047	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-153.25-081724-FM-R	ZH22013-047	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-153.25-081724-FM-R	ZH22013-047	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-158.5-081724-FM-R	ZH22013-048	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	51		FB	J+	J+	51 [6.1] J+	N/A
PACE	ZH22013	CACMW-007-160-158.5-081724-FM-R	ZH22013-048	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/g	0.25	0.8	2	0.99	JM-03	FB	J+	J+ M	0.99 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-158.5-081724-FM-R	ZH22013-048	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.5	JM-03	FB	J+	J+ M	1.5 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-158.5-081724-FM-R	ZH22013-048	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	2.1		FB	J+	J+	2.1 [0.8] J+	N/A
PACE	ZH22013	CACMW-007-160-158.5-081724-FM-R	ZH22013-048	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-160-158.5-081724-FM-R	ZH22013-048	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7		FB	J+	J+	3.7 [0.8] J+	N/A
PACE	ZH22013	CACMW-008-060-37.5-081724-FM-R	ZH22013-049	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	87		FB	J+	J+	87 [6.1] J+	N/A
PACE	ZH22013	CACMW-008-060-37.5-081724-FM-R	ZH22013-049	E1633	Perfluorodecanoic acid (PFDA)	335-76-2	ng/g	0.29	0.8	2	0.87	JM-03	FB	J+	J+ M	0.87 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-008-060-37.5-081724-FM-R	ZH22013-049	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.5	M-03	FB	J+	J+ M	5.5 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-008-060-37.5-081724-FM-R	ZH22013-049	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-008-060-37.5-081724-FM-R	ZH22013-049	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-008-060-48-081724-FM-R	ZH22013-050	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	170		FB	J+	J+	170 [6.1] J+	N/A
PACE	ZH22013	CACMW-008-060-48-081724-FM-R	ZH22013-050	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-008-060-48-081724-FM-R	ZH22013-050	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1	M-03	FB	J+	J+ M	4.1 [0.8] J+ M	N/A
PACE	ZH22013	CACMW-007-060-37.5-081724-FM-R	ZH22013-039	E1633	perfluorohexane sulfonic acid	355-46-4	ng/g	0.2	0.73	2	49		MSD RPD	J	J	49 [0.73] J	N/A
PACE	ZI12013	CACMW-008-160-127-090624-FM-R	ZI12013-026	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.57	BJM-03	MB	J+	J+ M	0.57 [0.4] J+ M	N/A
PACE	ZI12013	CACMW-001-060-32.25-090424-FM-R	ZI12013-002	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	61		FB	J+	J+	61 [6.1] J+	N/A
PACE	ZI12013	CACMW-001-060-32.25-090424-FM-R	ZI12013-002	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-001-060-32.25-090424-FM-R	ZI12013-002	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	J	FB	J+	J+	1.9 [0.8] J+	N/A
PACE	ZI12013	CACMW-001-060-32.25-090424-FM-R	ZI12013-002	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.1		FB	J+	J+	3.1 [0.8] J+	N/A
PACE	ZI12013	CACMW-001-060-21.75-090424-FM-R	ZI12013-003	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	39		FB	J+	J+	39 [6.1] J+	N/A
PACE	ZI12013	CACMW-001-060-21.75-090424-FM-R	ZI12013-003	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-001-060-21.75-090424-FM-R	ZI12013-003	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-001-060-21.75-090424-FM-R	ZI12013-003	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1		FB	J+	J+	2.1 [0.8] J+	N/A
PACE	ZI12013	CACMW-001-060-21.75-090424-FM-R	ZI12013-003	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2		FB	J+	J+	3.2 [0.8] J+	N/A
PACE	ZI12013	CACMW-002-060-21.75-090424-FM-R	ZI12013-004	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	46		FB	J+	J+	46 [6.1] J+	N/A
PACE	ZI12013	CACMW-002-060-21.75-090424-FM-R	ZI12013-004	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.5	M-03	FB	J+	J+ M	2.5 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-002-060-21.75-090424-FM-R	ZI12013-004	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.6	M-03	FB	J+	J+ M	4.6 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-002-060-21.75-090424-FM-R	ZI12013-004	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-002-060-21.75-090424-FM-R	ZI12013-004	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-002-110-77-090424-FM-R	ZI12013-005	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	56		FB	J+	J+	56 [6.1] J+	N/A
PACE	ZI12013	CACMW-002-110-77-090424-FM-R	ZI12013-005	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.7	M-03	FB	J+	J+ M	2.7 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-002-110-77-090424-FM-R	ZI12013-005	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.7	J	FB	J+	J+	1.7 [0.8] J+	N/A
PACE	ZI12013	CACMW-002-110-77-090424-FM-R	ZI12013-005	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-003-160-116.5-090424-FM-R	ZI12013-006	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	42		FB	J+	J+	42 [6.1] J+	N/A
PACE	ZI12013	CACMW-003-160-116.5-090424-FM-R	ZI12013-006	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/g	0.25	0.8	2	1.4	J	FB	J+	J+	1.4 [0.8] J+	N/A
PACE	ZI12013	CACMW-003-160-116.5-090424-FM-R	ZI12013-006	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZI12013	CACMW-003-160-116.5-090424-FM-R	ZI12013-006	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-003-160-116.5-090424-FM-R	ZI12013-006	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZI12013	CACMW-003-160-116.5-090424-FM-R	ZI12013-006	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-003-160-127-090624-FM-R	ZI12013-007	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	55		FB	J+	J+	55 [6.1] J+	N/A
PACE	ZI12013	CACMW-003-160-127-090624-FM-R	ZI12013-007	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-003-160-127-090624-FM-R	ZI12013-007	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5.6	M-03	FB	J+	J+ M	5.6 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-003-160-127-090624-FM-R	ZI12013-007	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-003-160-127-090624-FM-R	ZI12013-007	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1	M-03	FB	J+	J+ M	4.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-006-110-77-090624-FM-R	ZI12013-008	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	77		FB	J+	J+	77 [6.1] J+	N/A
PACE	ZI12013	CACMW-006-110-77-090624-FM-R	ZI12013-008	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.8	M-03	FB	J+	J+ M	4.8 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-006-110-77-090624-FM-R	ZI12013-008	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1		FB	J+	J+	2.1 [0.8] J+	N/A
PACE	ZI12013	CACMW-006-110-77-090624-FM-R	ZI12013-008	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-006-110-82.25-090624-FM-R	ZI12013-009	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	77		FB	J+	J+	77 [6] J+	N/A
PACE	ZI12013	CACMW-006-110-82.25-090624-FM-R	ZI12013-009	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.5	M-03	FB	J+	J+ M	4.5 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-006-110-82.25-090624-FM-R	ZI12013-009	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-006-110-82.25-090624-FM-R	ZI12013-009	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	5.1	M-03	FB	J+	J+ M	5.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-006-160-121.75-090624-FM-R	ZI12013-010	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	51		FB	J+	J+	51 [6] J+	N/A
PACE	ZI12013	CACMW-006-160-121.75-090624-FM-R	ZI12013-010	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-006-160-121.75-090624-FM-R	ZI12013-010	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.1	M-03	FB	J+	J+ M	4.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-006-160-121.75-090624-FM-R	ZI12013-010	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-006-160-121.75-090624-FM-R	ZI12013-010	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-060-16.5-090624-FM-R	ZI12013-011	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3	M-03	FB	J+	J+ M	3 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-060-16.5-090624-FM-R	ZI12013-011	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-060-16.5-090624-FM-R	ZI12013-011	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8		FB	J+	J+	3.8 [0.8] J+	N/A
PACE	ZI12013	CACMW-007-060-21.75-090624-FM-R	ZI12013-012	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	54	M-03	FB	J+	J+ M	54 [6] J+ M	N/A
PACE	ZI12013	CACMW-007-060-21.75-090624-FM-R	ZI12013-012	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-060-21.75-090624-FM-R	ZI12013-012	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6.2	M-03	FB	J+	J+ M	6.2 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-060-21.75-090624-FM-R	ZI12013-012	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-060-21.75-090624-FM-R	ZI12013-012	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8		FB	J+	J+	3.8 [0.8] J+	N/A
PACE	ZI12013	CACMW-007-060-27-090624-FM-R	ZI12013-013	E1633	6:2FTS	27619-97-2	ng/g	1.7	5.9	7.8	63		FB	J+	J+	63 [5.9] J+	N/A
PACE	ZI12013	CACMW-007-060-27-090624-FM-R	ZI12013-013	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.9	M-03	FB	J+	J+ M	2.9 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-060-27-090624-FM-R	ZI12013-013	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1		FB	J+	J+	2.1 [0.8] J+	N/A
PACE	ZI12013	CACMW-007-060-27-090624-FM-R	ZI12013-013	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-060-32.25-090624-FM-R	ZI12013-014	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	52		FB	J+	J+	52 [6] J+	N/A
PACE	ZI12013	CACMW-007-060-32.25-090624-FM-R	ZI12013-014	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-060-32.25-090624-FM-R	ZI12013-014	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6.5		FB	J+	J+	6.5 [0.8] J+	N/A
PACE	ZI12013	CACMW-007-060-32.25-090624-FM-R	ZI12013-014	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3		FB	J+	J+	2.3 [0.8] J+	N/A
PACE	ZI12013	CACMW-007-060-32.25-090624-FM-R	ZI12013-014	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9		FB	J+	J+	3.9 [0.8] J+	N/A
PACE	ZI12013	CACMW-007-110-66.5090624-FM-R	ZI12013-015	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	71		FB	J+	J+	71 [6] J+	N/A
PACE	ZI12013	CACMW-007-110-66.5090624-FM-R	ZI12013-015	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A
PACE	ZI12013	CACMW-007-110-66.5090624-FM-R	ZI12013-015	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-110-66.5090624-FM-R	ZI12013-015	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A
PACE	ZI12013	CACMW-007-110-77-090624-FM-R	ZI12013-016	E1633	6:2FTS	27619-97-2	ng/g	1.6	5.9	7.7	97		FB	J+	J+	97 [5.9] J+	N/A
PACE	ZI12013	CACMW-007-110-77-090624-FM-R	ZI12013-016	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.25	0.76	1.9	5.1	M-03	FB	J+	J+ M	5.1 [0.76] J+ M	N/A
PACE	ZI12013	CACMW-007-110-77-090624-FM-R	ZI12013-016	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.39	1.9	1.9	2.3	M-03	FB	J+	J+ M	2.3 [1.9] J+ M	N/A
PACE	ZI12013	CACMW-007-110-77-090624-FM-R	ZI12013-016	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.27	0.76	1.9	4.2	M-03	FB	J+	J+ M	4.2 [0.76] J+ M	N/A
PACE	ZI12013	CACMW-007-160-116.5-090624-FM-R	ZI12013-017	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	55		FB	J+	J+	55 [6] J+	N/A
PACE	ZI12013	CACMW-007-160-116.5-090624-FM-R	ZI12013-017	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-160-116.5-090624-FM-R	ZI12013-017	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5.1	M-03	FB	J+	J+ M	5.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-160-116.5-090624-FM-R	ZI12013-017	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-160-116.5-090624-FM-R	ZI12013-017	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-160-121.75-090624-FM-R	ZI12013-018	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	51		FB	J+	J+	51 [6] J+	N/A
PACE	ZI12013	CACMW-007-160-121.75-090624-FM-R	ZI12013-018	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-160-121.75-090624-FM-R	ZI12013-018	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.9	M-03	FB	J+	J+ M	4.9 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-160-121.75-090624-FM-R	ZI12013-018	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-007-160-121.75-090624-FM-R	ZI12013-018	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A
PACE	ZI12013	CACMW-008-060-21.75-090624-FM-R	ZI12013-019	E1633	6:2FTS	27619-97-2	ng/g	1.6	5.9	7.7	51		FB	J+	J+	51 [5.9] J+	N/A
PACE	ZI12013	CACMW-008-060-21.75-090624-FM-R	ZI12013-019	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.25	0.76	1.9	2.2		FB	J+	J+	2.2 [0.76] J+	N/A
PACE	ZI12013	CACMW-008-060-21.75-090624-FM-R	ZI12013-019	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.28	0.76	1.9	6.9	M-03	FB	J+	J+ M	6.9 [0.76] J+ M	N/A
PACE	ZI12013	CACMW-008-060-21.75-090624-FM-R	ZI12013-019	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.39	1.9	1.9	2.3		FB	J+	J+	2.3 [1.9] J+	N/A
PACE	ZI12013	CACMW-008-060-21.75-090624-FM-R	ZI12013-019	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.27	0.76	1.9	3.9		FB	J+	J+	3.9 [0.76] J+	N/A
PACE	ZI12013	CACMW-008-060-27-090624-FM-R	ZI12013-020	E1633	6:2FTS	27619-97-2	ng/g	1.7	5.9	7.8	58		FB	J+	J+	58 [5.9] J+	N/A
PACE	ZI12013	CACMW-008-060-27-090624-FM-R	ZI12013-020	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.25	0.76	1.9	2.6	M-03	FB	J+	J+ M	2.6 [0.76] J+ M	N/A
PACE	ZI12013	CACMW-008-060-27-090624-FM-R	ZI12013-020	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.39	1.9	1.9	2		FB	J+	J+	2 [1.9] J+	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZI12013	CACMW-008-060-27-090624-FM-R	ZI12013-020	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.27	0.76	1.9	3.6		FB	J+	J+	3.6 [0.76] J+	N/A
PACE	ZI12013	CACMW-008-060-32.25090624-FM-R	ZI12013-021	E1633	6:2FTS	27619-97-2	ng/g	1.6	5.9	7.7	61		FB	J+	J+	61 [5.9] J+	N/A
PACE	ZI12013	CACMW-008-060-32.25090624-FM-R	ZI12013-021	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.25	0.76	1.9	3.4	M-03	FB	J+	J+ M	3.4 [0.76] J+ M	N/A
PACE	ZI12013	CACMW-008-060-32.25090624-FM-R	ZI12013-021	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.39	1.9	1.9	2.1	M-03	FB	J+	J+ M	2.1 [1.9] J+ M	N/A
PACE	ZI12013	CACMW-008-060-32.25090624-FM-R	ZI12013-021	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.27	0.76	1.9	3.9		FB	J+	J+	3.9 [0.76] J+	N/A
PACE	ZI12013	CACMW-008-110-66.5-090624-FM-R	ZI12013-022	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	56		FB	J+	J+	56 [6.1] J+	N/A
PACE	ZI12013	CACMW-008-110-66.5-090624-FM-R	ZI12013-022	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-110-66.5-090624-FM-R	ZI12013-022	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-110-66.5-090624-FM-R	ZI12013-022	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A
PACE	ZI12013	CACMW-008-110-71.75090624-FM-R	ZI12013-023	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	82	M-03	FB	J+	J+ M	82 [6.1] J+ M	N/A
PACE	ZI12013	CACMW-008-110-71.75090624-FM-R	ZI12013-023	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5	M-03	FB	J+	J+ M	5 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-110-71.75090624-FM-R	ZI12013-023	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-110-71.75090624-FM-R	ZI12013-023	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-110-82.25090624-FM-R	ZI12013-024	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	57		FB	J+	J+	57 [6.1] J+	N/A
PACE	ZI12013	CACMW-008-110-82.25090624-FM-R	ZI12013-024	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-110-82.25090624-FM-R	ZI12013-024	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-110-82.25090624-FM-R	ZI12013-024	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-160-121.75-090624-FM-R	ZI12013-025	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	44		FB	J+	J+	44 [6.1] J+	N/A
PACE	ZI12013	CACMW-008-160-121.75-090624-FM-R	ZI12013-025	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.6	JM-03	FB	J+	J+ M	1.6 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-160-121.75-090624-FM-R	ZI12013-025	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.8		FB	J+	J+	4.8 [0.8] J+	N/A
PACE	ZI12013	CACMW-008-160-121.75-090624-FM-R	ZI12013-025	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-160-121.75-090624-FM-R	ZI12013-025	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A
PACE	ZI12013	CACMW-008-160-127-090624-FM-R	ZI12013-026	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	64		FB	J+	J+	64 [6.1] J+	N/A
PACE	ZI12013	CACMW-008-160-127-090624-FM-R	ZI12013-026	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-160-127-090624-FM-R	ZI12013-026	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6.7	M-03	FB	J+	J+ M	6.7 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-160-127-090624-FM-R	ZI12013-026	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-160-127-090624-FM-R	ZI12013-026	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-160-132.25090624-FM-R	ZI12013-027	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54		FB	J+	J+	54 [6.1] J+	N/A
PACE	ZI12013	CACMW-008-160-132.25090624-FM-R	ZI12013-027	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.6	JM-03	FB	J+	J+ M	1.6 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-160-132.25090624-FM-R	ZI12013-027	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.5	M-03	FB	J+	J+ M	4.5 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-160-132.25090624-FM-R	ZI12013-027	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12013	CACMW-008-160-132.25090624-FM-R	ZI12013-027	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5		FB	J+	J+	3.5 [0.8] J+	N/A
PACE	ZI12013	CACMW-007-060-27-090624-FM-R	ZI12013-013	E1633	Perfluoropentanoic acid (PFPA)	2706-90-3	ng/g	0.4	1.6	3.9	4.2		Ion_ratio	J	J	4.2 [1.6] J	N/A
PACE	ZI12016	CACMW-001-110-66.5-090424-FM-R	ZI12016-003	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.85	BJ	MB	J+	J+	0.85 [0.4] J+	N/A
PACE	ZI12016	CACMW-001-160-117-090424-FM-R	ZI12016-007	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.23	BJLM-03	MB, High LCS %R	UB, J+	UB M	ND [0.4] UB M	N/A
PACE	ZI12016	CACMW-001-160-127.5-090424-FM-R	ZI12016-009	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.59	BJLM-03	MB, High LCS %R	J+, J+	J+ M	0.59 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-002-060-16.5-090424-FM-R	ZI12016-011	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.63	BJLM-03	MB, High LCS %R	J+, J+	J+ M	0.63 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-002-110-66.5-090424-FM-R	ZI12016-014	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.83	BJLM-03	MB, High LCS %R	J+, J+	J+ M	0.83 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-002-160-121.75-090424-FM-R	ZI12016-018	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.93	BJLM-03	MB, High LCS %R	J+, J+	J+ M	0.93 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-003-060-21.75-090424-FM-R	ZI12016-022	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.96	BJLM-03	MB, High LCS %R	J+, J+	J+ M	0.96 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-003-110-71.75-090524-FM-R	ZI12016-026	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.46	BJLM-03	MB, High LCS %R	J+, J+	J+ M	0.46 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-003-160-121.75-090524-FM-R	ZI12016-029	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.37	BJLM-03	MB, High LCS %R	UB, J+	UB M	ND [0.4] UB M	N/A
PACE	ZI12016	CACMW-003-160-132.25-090524-FM-R	ZI12016-030	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.88	BJLM-03	MB, High LCS %R	J+, J+	J+ M	0.88 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-004-160-116.5-090524-FM-R	ZI12016-039	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.5	BJM-03	MB	J+	J+ M	0.5 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-004-160-121.75-090524-FM-R	ZI12016-040	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.53	BJM-03	MB	J+	J+ M	0.53 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-004-160-127-090524-FM-R	ZI12016-041	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.76	BJM-03	MB	J+	J+ M	0.76 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-004-160-132.25-090524-FM-R	ZI12016-042	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.77	BJM-03	MB	J+	J+ M	0.77 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-005-060-16.5-090524-FM-R	ZI12016-043	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.58	BJM-03	MB	J+	J+ M	0.58 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-005-060-21.75-090524-FM-R	ZI12016-044	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.7	BJM-03	MB	J+	J+ M	0.7 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-002-160-127-090424-FM-R	ZI12016-019	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.64	JLM-03	High LCS %R	J+	J+ M	0.64 [0.4] J+ M	N/A
PACE	ZI12016	CACMW-001-060-16.5-090424-FM-R	ZI12016-001	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	52		FB	J+	J+	52 [6.1] J+	N/A
PACE	ZI12016	CACMW-001-060-16.5-090424-FM-R	ZI12016-001	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/g	0.25	0.8	2	0.73	JM-03	FB	UB	UB M	ND [0.8] UB M	N/A
PACE	ZI12016	CACMW-001-060-16.5-090424-FM-R	ZI12016-001	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-060-16.5-090424-FM-R	ZI12016-001	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-060-16.5-090424-FM-R	ZI12016-001	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-060-16.5-090424-FM-R	ZI12016-001	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-060-27-090424-FM-R	ZI12016-002	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	66		FB	J+	J+	66 [6.1] J+	N/A
PACE	ZI12016	CACMW-001-060-27-090424-FM-R	ZI12016-002	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A
PACE	ZI12016	CACMW-001-060-27-090424-FM-R	ZI12016-002	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-060-27-090424-FM-R	ZI12016-002	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3		FB	J+	J+	3.3 [0.8] J+	N/A
PACE	ZI12016	CACMW-001-110-66.5-090424-FM-R	ZI12016-003	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	57		FB	J+	J+	57 [6.1] J+	N/A
PACE	ZI12016	CACMW-001-110-66.5-090424-FM-R	ZI12016-003	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-110-66.5-090424-FM-R	ZI12016-003	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-110-66.5-090424-FM-R	ZI12016-003	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZI12016	CACMW-001-110-71.75-090424-FM-R	ZI12016-004	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	59		FB	J+	J+	59 [6.1] J+	N/A
PACE	ZI12016	CACMW-001-110-71.75-090424-FM-R	ZI12016-004	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.7	M-03	FB	J+	J+ M	2.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-110-71.75-090424-FM-R	ZI12016-004	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-110-71.75-090424-FM-R	ZI12016-004	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-110-77-090424-FM-R	ZI12016-005	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	80		FB	J+	J+	80 [6.1] J+	N/A
PACE	ZI12016	CACMW-001-110-77-090424-FM-R	ZI12016-005	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.5	M-03	FB	J+	J+ M	4.5 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-110-77-090424-FM-R	ZI12016-005	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-110-77-090424-FM-R	ZI12016-005	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-110-82.25-090424-FM-R	ZI12016-006	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	99		FB	J+	J+	99 [6.1] J+	N/A
PACE	ZI12016	CACMW-001-110-82.25-090424-FM-R	ZI12016-006	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	6.5	M-03	FB	J+	J+ M	6.5 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-110-82.25-090424-FM-R	ZI12016-006	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-110-82.25-090424-FM-R	ZI12016-006	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-117-090424-FM-R	ZI12016-007	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	44		FB	J+	J+	44 [6.1] J+	N/A
PACE	ZI12016	CACMW-001-160-117-090424-FM-R	ZI12016-007	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/g	0.25	0.8	2	1.6	J	FB	J+	J+	1.6 [0.8] J+	N/A
PACE	ZI12016	CACMW-001-160-117-090424-FM-R	ZI12016-007	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.4	JM-03	FB	J+	J+ M	1.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-117-090424-FM-R	ZI12016-007	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	2.8	M-03	FB	J+	J+ M	2.8 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-117-090424-FM-R	ZI12016-007	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.4	JM-03	FB	J+	J+ M	1.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-117-090424-FM-R	ZI12016-007	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-122.25-090424-FM-R	ZI12016-008	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	48		FB	J+	J+	48 [6.1] J+	N/A
PACE	ZI12016	CACMW-001-160-122.25-090424-FM-R	ZI12016-008	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.4	M-03	FB, Ion_ratio	J+, J	J M	2.4 [0.8] J M	N/A
PACE	ZI12016	CACMW-001-160-122.25-090424-FM-R	ZI12016-008	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-122.25-090424-FM-R	ZI12016-008	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-122.25-090424-FM-R	ZI12016-008	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-127.5-090424-FM-R	ZI12016-009	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54		FB	J+	J+	54 [6.1] J+	N/A
PACE	ZI12016	CACMW-001-160-127.5-090424-FM-R	ZI12016-009	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-127.5-090424-FM-R	ZI12016-009	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6.1	M-03	FB	J+	J+ M	6.1 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-127.5-090424-FM-R	ZI12016-009	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.4	JM-03	FB	J+	J+ M	1.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-127.5-090424-FM-R	ZI12016-009	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-132.75-090424-FM-R	ZI12016-010	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	110		FB	J+	J+	110 [6.1] J+	N/A
PACE	ZI12016	CACMW-001-160-132.75-090424-FM-R	ZI12016-010	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-132.75-090424-FM-R	ZI12016-010	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-001-160-132.75-090424-FM-R	ZI12016-010	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-060-16.5-090424-FM-R	ZI12016-011	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	49		FB	J+	J+	49 [6.1] J+	N/A
PACE	ZI12016	CACMW-002-060-16.5-090424-FM-R	ZI12016-011	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-060-16.5-090424-FM-R	ZI12016-011	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5.6	M-03	FB	J+	J+ M	5.6 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-060-16.5-090424-FM-R	ZI12016-011	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-060-16.5-090424-FM-R	ZI12016-011	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6		FB	J+	J+	3.6 [0.8] J+	N/A
PACE	ZI12016	CACMW-002-060-27-090424-FM-R	ZI12016-012	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	55		FB	J+	J+	55 [6.1] J+	N/A
PACE	ZI12016	CACMW-002-060-27-090424-FM-R	ZI12016-012	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3	M-03	FB	J+	J+ M	3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-060-27-090424-FM-R	ZI12016-012	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.6	JM-03	FB	J+	J+ M	1.6 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-060-27-090424-FM-R	ZI12016-012	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-060-32.25-090424-FM-R	ZI12016-013	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	58		FB	J+	J+	58 [6.1] J+	N/A
PACE	ZI12016	CACMW-002-060-32.25-090424-FM-R	ZI12016-013	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-060-32.25-090424-FM-R	ZI12016-013	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.8	J	FB	J+	J+	1.8 [0.8] J+	N/A
PACE	ZI12016	CACMW-002-060-32.25-090424-FM-R	ZI12016-013	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-110-66.5-090424-FM-R	ZI12016-014	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	59		FB	J+	J+	59 [6.1] J+	N/A
PACE	ZI12016	CACMW-002-110-66.5-090424-FM-R	ZI12016-014	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.9	M-03	FB, Ion_ratio	J+, J	J M	2.9 [0.8] J M	N/A
PACE	ZI12016	CACMW-002-110-66.5-090424-FM-R	ZI12016-014	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-110-66.5-090424-FM-R	ZI12016-014	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.4	M-03	FB	J+	J+ M	4.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-110-71.75-090424-FM-R	ZI12016-015	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	66		FB	J+	J+	66 [6.1] J+	N/A
PACE	ZI12016	CACMW-002-110-71.75-090424-FM-R	ZI12016-015	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3	M-03	FB	J+	J+ M	3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-110-71.75-090424-FM-R	ZI12016-015	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-110-71.75-090424-FM-R	ZI12016-015	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-110-82.25-090424-FM-R	ZI12016-016	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	57		FB	J+	J+	57 [6.1] J+	N/A
PACE	ZI12016	CACMW-002-110-82.25-090424-FM-R	ZI12016-016	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-110-82.25-090424-FM-R	ZI12016-016	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-110-82.25-090424-FM-R	ZI12016-016	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3		FB	J+	J+	3.3 [0.8] J+	N/A
PACE	ZI12016	CACMW-002-160-116.5-090424-FM-R	ZI12016-017	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54		FB	J+	J+	54 [6.1] J+	N/A
PACE	ZI12016	CACMW-002-160-116.5-090424-FM-R	ZI12016-017	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.5	M-03	FB	J+	J+ M	2.5 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-160-116.5-090424-FM-R	ZI12016-017	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-160-116.5-090424-FM-R	ZI12016-017	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-160-121.75-090424-FM-R	ZI12016-018	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	64	M-03	FB	J+	J+ M	64 [6.1] J+ M	N/A
PACE	ZI12016	CACMW-002-160-121.75-090424-FM-R	ZI12016-018	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.7	M-03	FB	J+	J+ M	2.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-160-121.75-090424-FM-R	ZI12016-018	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.5	JM-03	FB	J+	J+ M	1.5 [0.8] J+ M	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZI12016	CACMW-002-160-121.75-090424-FM-R	ZI12016-018	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-160-127-090424-FM-R	ZI12016-019	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	59		FB	J+	J+	59 [6.1] J+	N/A
PACE	ZI12016	CACMW-002-160-127-090424-FM-R	ZI12016-019	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.8	M-03	FB	J+	J+ M	2.8 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-160-127-090424-FM-R	ZI12016-019	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.4	JM-03	FB	J+	J+ M	1.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-160-127-090424-FM-R	ZI12016-019	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-160-132.25-090424-FM-R	ZI12016-020	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	61		FB	J+	J+	61 [6.1] J+	N/A
PACE	ZI12016	CACMW-002-160-132.25-090424-FM-R	ZI12016-020	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-160-132.25-090424-FM-R	ZI12016-020	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.4	JM-03	FB	J+	J+ M	1.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-002-160-132.25-090424-FM-R	ZI12016-020	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-16.5-090424-FM-R	ZI12016-021	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	70		FB	J+	J+	70 [6.1] J+	N/A
PACE	ZI12016	CACMW-003-060-16.5-090424-FM-R	ZI12016-021	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-16.5-090424-FM-R	ZI12016-021	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.5	JM-03	FB	J+	J+ M	1.5 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-16.5-090424-FM-R	ZI12016-021	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1	M-03	FB	J+	J+ M	4.1 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-21.75-090424-FM-R	ZI12016-022	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	61		FB	J+	J+	61 [6.1] J+	N/A
PACE	ZI12016	CACMW-003-060-21.75-090424-FM-R	ZI12016-022	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.5	M-03	FB	J+	J+ M	2.5 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-21.75-090424-FM-R	ZI12016-022	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-21.75-090424-FM-R	ZI12016-022	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-27-090424-FM-R	ZI12016-023	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	80		FB	J+	J+	80 [6.1] J+	N/A
PACE	ZI12016	CACMW-003-060-27-090424-FM-R	ZI12016-023	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.1	M-03	FB	J+	J+ M	5.1 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-27-090424-FM-R	ZI12016-023	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.7	J	FB	J+	J+	1.7 [0.8] J+	N/A
PACE	ZI12016	CACMW-003-060-27-090424-FM-R	ZI12016-023	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-32.25-090424-FM-R	ZI12016-024	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	74		FB	J+	J+	74 [6.1] J+	N/A
PACE	ZI12016	CACMW-003-060-32.25-090424-FM-R	ZI12016-024	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.5	M-03	FB	J+	J+ M	4.5 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-32.25-090424-FM-R	ZI12016-024	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.4	JM-03	FB	J+	J+ M	1.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-060-32.25-090424-FM-R	ZI12016-024	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-110-66.5-090424-FM-R	ZI12016-025	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	44		FB	J+	J+	44 [6.1] J+	N/A
PACE	ZI12016	CACMW-003-110-66.5-090424-FM-R	ZI12016-025	E1633	Perfluorohexanoic acid (PFHxA)	307-24-4	ng/g	0.25	0.8	2	1.3	JM-03	FB	J+	J+ M	1.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-110-66.5-090424-FM-R	ZI12016-025	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.8	J	FB	J+	J+	1.8 [0.8] J+	N/A
PACE	ZI12016	CACMW-003-110-66.5-090424-FM-R	ZI12016-025	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	2.6	M-03	FB	J+	J+ M	2.6 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-110-66.5-090424-FM-R	ZI12016-025	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-110-66.5-090424-FM-R	ZI12016-025	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-110-71.75-090524-FM-R	ZI12016-026	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	53		FB	J+	J+	53 [6.1] J+	N/A
PACE	ZI12016	CACMW-003-110-71.75-090524-FM-R	ZI12016-026	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-110-71.75-090524-FM-R	ZI12016-026	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5	M-03	FB	J+	J+ M	5 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-110-71.75-090524-FM-R	ZI12016-026	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2		FB	J+	J+	2.2 [0.8] J+	N/A
PACE	ZI12016	CACMW-003-110-71.75-090524-FM-R	ZI12016-026	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6		FB	J+	J+	3.6 [0.8] J+	N/A
PACE	ZI12016	CACMW-003-110-77-090524-FM-R	ZI12016-027	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	63		FB	J+	J+	63 [6.1] J+	N/A
PACE	ZI12016	CACMW-003-110-77-090524-FM-R	ZI12016-027	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3		FB	J+	J+	3 [0.8] J+	N/A
PACE	ZI12016	CACMW-003-110-77-090524-FM-R	ZI12016-027	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-110-77-090524-FM-R	ZI12016-027	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2		FB	J+	J+	3.2 [0.8] J+	N/A
PACE	ZI12016	CACMW-003-110-82.25-090524-FM-R	ZI12016-028	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	73		FB	J+	J+	73 [6.1] J+	N/A
PACE	ZI12016	CACMW-003-110-82.25-090524-FM-R	ZI12016-028	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-110-82.25-090524-FM-R	ZI12016-028	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-110-82.25-090524-FM-R	ZI12016-028	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4		FB	J+	J+	4 [0.8] J+	N/A
PACE	ZI12016	CACMW-003-160-121.75-090524-FM-R	ZI12016-029	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54		FB	J+	J+	54 [6.1] J+	N/A
PACE	ZI12016	CACMW-003-160-121.75-090524-FM-R	ZI12016-029	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-160-121.75-090524-FM-R	ZI12016-029	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.6		FB	J+	J+	3.6 [0.8] J+	N/A
PACE	ZI12016	CACMW-003-160-121.75-090524-FM-R	ZI12016-029	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2		FB	J+	J+	2.2 [0.8] J+	N/A
PACE	ZI12016	CACMW-003-160-121.75-090524-FM-R	ZI12016-029	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A
PACE	ZI12016	CACMW-003-160-132.25-090524-FM-R	ZI12016-030	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	76		FB	J+	J+	76 [6.1] J+	N/A
PACE	ZI12016	CACMW-003-160-132.25-090524-FM-R	ZI12016-030	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-160-132.25-090524-FM-R	ZI12016-030	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-003-160-132.25-090524-FM-R	ZI12016-030	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4	M-03	FB	J+	J+ M	4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-16.5-090524-FM-R	ZI12016-031	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.2	8.1	42		FB	J+	J+	42 [6.2] J+	N/A
PACE	ZI12016	CACMW-004-060-16.5-090524-FM-R	ZI12016-031	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-16.5-090524-FM-R	ZI12016-031	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.3	M-03	FB	J+	J+ M	4.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-16.5-090524-FM-R	ZI12016-031	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.3	JM-03	FB	J+	J+ M	1.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-16.5-090524-FM-R	ZI12016-031	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.1	M-03	FB	J+	J+ M	3.1 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-21.75-090524-FM-R	ZI12016-032	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	45		FB	J+	J+	45 [6.1] J+	N/A
PACE	ZI12016	CACMW-004-060-21.75-090524-FM-R	ZI12016-032	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-21.75-090524-FM-R	ZI12016-032	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.9	M-03	FB	J+	J+ M	4.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-21.75-090524-FM-R	ZI12016-032	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.3	JM-03	FB	J+	J+ M	1.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-21.75-090524-FM-R	ZI12016-032	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3	M-03	FB	J+	J+ M	3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-27-090524-FM-R	ZI12016-033	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	58		FB	J+	J+	58 [6] J+	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZI12016	CACMW-004-060-27-090524-FM-R	ZI12016-033	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.9	M-03	FB	J+	J+ M	2.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-27-090524-FM-R	ZI12016-033	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.3	JM-03	FB	J+	J+ M	1.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-27-090524-FM-R	ZI12016-033	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-32.25-090524-FM-R	ZI12016-034	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	86		FB	J+	J+	86 [6] J+	N/A
PACE	ZI12016	CACMW-004-060-32.25-090524-FM-R	ZI12016-034	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	6.8	M-03	FB	J+	J+ M	6.8 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-32.25-090524-FM-R	ZI12016-034	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.4	JM-03	FB	J+	J+ M	1.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-060-32.25-090524-FM-R	ZI12016-034	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-66.5-090524-FM-R	ZI12016-035	E1633	6:2FTS	27619-97-2	ng/g	1.7	5.9	7.8	57		FB	J+	J+	57 [5.9] J+	N/A
PACE	ZI12016	CACMW-004-110-66.5-090524-FM-R	ZI12016-035	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.9	M-03	FB	J+	J+ M	2.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-66.5-090524-FM-R	ZI12016-035	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.2	JM-03	FB	J+	J+ M	1.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-66.5-090524-FM-R	ZI12016-035	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-71.75-090524-FM-R	ZI12016-036	E1633	6:2FTS	27619-97-2	ng/g	1.7	6	7.9	64		FB	J+	J+	64 [6] J+	N/A
PACE	ZI12016	CACMW-004-110-71.75-090524-FM-R	ZI12016-036	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.2	M-03	FB	J+	J+ M	4.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-71.75-090524-FM-R	ZI12016-036	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.4	JM-03	FB	J+	J+ M	1.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-71.75-090524-FM-R	ZI12016-036	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-77-090524-FM-R	ZI12016-037	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	70		FB	J+	J+	70 [6.1] J+	N/A
PACE	ZI12016	CACMW-004-110-77-090524-FM-R	ZI12016-037	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.8	M-03	FB	J+	J+ M	4.8 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-77-090524-FM-R	ZI12016-037	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.3	JM-03	FB	J+	J+ M	1.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-77-090524-FM-R	ZI12016-037	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3		FB	J+	J+	3 [0.8] J+	N/A
PACE	ZI12016	CACMW-004-110-82.25-090524-FM-R	ZI12016-038	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	82		FB	J+	J+	82 [6.1] J+	N/A
PACE	ZI12016	CACMW-004-110-82.25-090524-FM-R	ZI12016-038	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.3	M-03	FB	J+	J+ M	4.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-82.25-090524-FM-R	ZI12016-038	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-110-82.25-090524-FM-R	ZI12016-038	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-160-116.5-090524-FM-R	ZI12016-039	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	67		FB	J+	J+	67 [6.1] J+	N/A
PACE	ZI12016	CACMW-004-160-116.5-090524-FM-R	ZI12016-039	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.7	M-03	FB	J+	J+ M	2.7 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-160-116.5-090524-FM-R	ZI12016-039	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-160-116.5-090524-FM-R	ZI12016-039	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4		FB	J+	J+	4 [0.8] J+	N/A
PACE	ZI12016	CACMW-004-160-121.75-090524-FM-R	ZI12016-040	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	65		FB	J+	J+	65 [6.1] J+	N/A
PACE	ZI12016	CACMW-004-160-121.75-090524-FM-R	ZI12016-040	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-160-121.75-090524-FM-R	ZI12016-040	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-160-121.75-090524-FM-R	ZI12016-040	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-160-127-090524-FM-R	ZI12016-041	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	61		FB	J+	J+	61 [6.1] J+	N/A
PACE	ZI12016	CACMW-004-160-127-090524-FM-R	ZI12016-041	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-160-127-090524-FM-R	ZI12016-041	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-160-127-090524-FM-R	ZI12016-041	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2		FB	J+	J+	3.2 [0.8] J+	N/A
PACE	ZI12016	CACMW-004-160-132.25-090524-FM-R	ZI12016-042	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	62		FB	J+	J+	62 [6.1] J+	N/A
PACE	ZI12016	CACMW-004-160-132.25-090524-FM-R	ZI12016-042	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZI12016	CACMW-004-160-132.25-090524-FM-R	ZI12016-042	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-004-160-132.25-090524-FM-R	ZI12016-042	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3		FB	J+	J+	3.3 [0.8] J+	N/A
PACE	ZI12016	CACMW-005-060-16.5-090524-FM-R	ZI12016-043	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54		FB	J+	J+	54 [6.1] J+	N/A
PACE	ZI12016	CACMW-005-060-16.5-090524-FM-R	ZI12016-043	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.6	M-03	FB	J+	J+ M	2.6 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-005-060-16.5-090524-FM-R	ZI12016-043	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-005-060-16.5-090524-FM-R	ZI12016-043	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7		FB	J+	J+	3.7 [0.8] J+	N/A
PACE	ZI12016	CACMW-005-060-21.75-090524-FM-R	ZI12016-044	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	58		FB	J+	J+	58 [6.1] J+	N/A
PACE	ZI12016	CACMW-005-060-21.75-090524-FM-R	ZI12016-044	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.4		FB	J+	J+	2.4 [0.8] J+	N/A
PACE	ZI12016	CACMW-005-060-21.75-090524-FM-R	ZI12016-044	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12016	CACMW-005-060-21.75-090524-FM-R	ZI12016-044	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7		FB	J+	J+	3.7 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-110-66.5-090524-FM-R	ZI12017-003	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.49	BJM-03	MB	J+	J+ M	0.49 [0.4] J+ M	N/A
PACE	ZI12017	CACMW-005-160-116.5-090524-FM-R	ZI12017-007	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.15	BJM-08	MB	UB	UB M	ND [0.4] UB M	N/A
PACE	ZI12017	CACMW-005-160-121.75-090524-FM-R	ZI12017-008	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.2	BJM-03	MB	UB	UB M	ND [0.4] UB M	N/A
PACE	ZI12017	CACMW-005-160-127-090524-FM-R	ZI12017-009	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.36	BJ	MB	UB	UB	ND [0.4] UB	N/A
PACE	ZI12017	CACMW-005-160-132.25-090524-FM-R	ZI12017-010	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.27	BJM-03	MB	UB	UB M	ND [0.4] UB M	N/A
PACE	ZI12017	CACMW-006-060-21.75-090524-FM-R	ZI12017-012	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.53	BJM-03	MB	J+	J+ M	0.53 [0.4] J+ M	N/A
PACE	ZI12017	CACMW-006-060-27-090524-FM-R	ZI12017-013	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.86	BJM-03	MB	J+	J+ M	0.86 [0.4] J+ M	N/A
PACE	ZI12017	CACMW-006-110-66.5-090524-FM-R	ZI12017-015	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.83	BJM-03	MB	J+	J+ M	0.83 [0.4] J+ M	N/A
PACE	ZI12017	CACMW-006-160-116.5-090524-FM-R	ZI12017-017	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.27	BJM-03	MB	UB	UB M	ND [0.4] UB M	N/A
PACE	ZI12017	CACMW-006-160-127-090524-FM-R	ZI12017-018	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.39	BJM-03	MB	UB	UB M	ND [0.4] UB M	N/A
PACE	ZI12017	CACMW-006-160-132.25-090524-FM-R	ZI12017-019	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.26	BJM-03	MB	UB	UB M	ND [0.4] UB M	N/A
PACE	ZI12017	CACMW-007-160-132.25-090624-FM-R	ZI12017-023	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.25	BJM-03	MB	UB	UB M	ND [0.4] UB M	N/A
PACE	ZI12017	CACMW-008-160-116.5-090624-FM-R	ZI12017-026	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.27	BJM-09	MB	UB	UB M	ND [0.4] UB M	N/A
PACE	ZI12017	FD-5-090424-FM-R	ZI12017-029	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.41	BJM-03	MB	J+	J+ M	0.41 [0.4] J+ M	N/A
PACE	ZI12017	FD-8-090524-FM-R	ZI12017-031	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.51	BJM-03	MB	J+	J+ M	0.51 [0.4] J+ M	N/A
PACE	ZI12017	FD-09-090624-FM-R	ZI12017-032	E1633	Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/g	0.14	0.4	2	0.78	BJM-03	MB	J+	J+ M	0.78 [0.4] J+ M	N/A
PACE	ZI12017	CACMW-005-060-27-090524-FM-R	ZI12017-001	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	76		FB	J+	J+	76 [6.1] J+	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZI12017	CACMW-005-060-27-090524-FM-R	ZI12017-001	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-060-27-090524-FM-R	ZI12017-001	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1		FB	J+	J+	2.1 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-060-27-090524-FM-R	ZI12017-001	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-060-32.25-090524-FM-R	ZI12017-002	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	84	M-03	FB	J+	J+ M	84 [6.1] J+ M	N/A
PACE	ZI12017	CACMW-005-060-32.25-090524-FM-R	ZI12017-002	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-060-32.25-090524-FM-R	ZI12017-002	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-060-32.25-090524-FM-R	ZI12017-002	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-110-66.5-090524-FM-R	ZI12017-003	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54	M-03	FB	J+	J+ M	54 [6.1] J+ M	N/A
PACE	ZI12017	CACMW-005-110-66.5-090524-FM-R	ZI12017-003	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-110-66.5-090524-FM-R	ZI12017-003	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6.8	M-03	FB	J+	J+ M	6.8 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-110-66.5-090524-FM-R	ZI12017-003	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-110-66.5-090524-FM-R	ZI12017-003	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-110-71.75-090524-FM-R	ZI12017-004	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	74		FB	J+	J+	74 [6.1] J+	N/A
PACE	ZI12017	CACMW-005-110-71.75-090524-FM-R	ZI12017-004	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.9		FB	J+	J+	3.9 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-110-71.75-090524-FM-R	ZI12017-004	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-110-71.75-090524-FM-R	ZI12017-004	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.2		FB	J+	J+	3.2 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-110-77-090524-FM-R	ZI12017-005	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	140		FB	J+	J+	140 [6.1] J+	N/A
PACE	ZI12017	CACMW-005-110-77-090524-FM-R	ZI12017-005	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	11	M-03	FB	J+	J+ M	11 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-110-77-090524-FM-R	ZI12017-005	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-110-77-090524-FM-R	ZI12017-005	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.1	M-03	FB	J+	J+ M	3.1 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-110-82.25-090524-FM-R	ZI12017-006	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	90		FB	J+	J+	90 [6.1] J+	N/A
PACE	ZI12017	CACMW-005-110-82.25-090524-FM-R	ZI12017-006	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	6.2	M-03	FB	J+	J+ M	6.2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-110-82.25-090524-FM-R	ZI12017-006	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-110-82.25-090524-FM-R	ZI12017-006	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.1		FB	J+	J+	3.1 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-160-116.5-090524-FM-R	ZI12017-007	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	48		FB	J+	J+	48 [6.1] J+	N/A
PACE	ZI12017	CACMW-005-160-116.5-090524-FM-R	ZI12017-007	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.4	JM-08	FB	J+	J+ M	1.4 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-160-116.5-090524-FM-R	ZI12017-007	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.2	M-08	FB	J+	J+ M	4.2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-160-116.5-090524-FM-R	ZI12017-007	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-160-116.5-090524-FM-R	ZI12017-007	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6		FB	J+	J+	3.6 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-160-121.75-090524-FM-R	ZI12017-008	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	50		FB	J+	J+	50 [6.1] J+	N/A
PACE	ZI12017	CACMW-005-160-121.75-090524-FM-R	ZI12017-008	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.9	J	FB	J+	J+	1.9 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-160-121.75-090524-FM-R	ZI12017-008	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.7	M-03	FB	J+	J+ M	4.7 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-160-121.75-090524-FM-R	ZI12017-008	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2		FB	J+	J+	2.2 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-160-121.75-090524-FM-R	ZI12017-008	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4.1		FB	J+	J+	4.1 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-160-127-090524-FM-R	ZI12017-009	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	52		FB	J+	J+	52 [6.1] J+	N/A
PACE	ZI12017	CACMW-005-160-127-090524-FM-R	ZI12017-009	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.9	J	FB	J+	J+	1.9 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-160-127-090524-FM-R	ZI12017-009	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5	M-03	FB	J+	J+ M	5 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-160-127-090524-FM-R	ZI12017-009	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1		FB	J+	J+	2.1 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-160-127-090524-FM-R	ZI12017-009	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5		FB	J+	J+	3.5 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-160-132.25-090524-FM-R	ZI12017-010	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	44		FB	J+	J+	44 [6.1] J+	N/A
PACE	ZI12017	CACMW-005-160-132.25-090524-FM-R	ZI12017-010	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.6	JM-03	FB	J+	J+ M	1.6 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-160-132.25-090524-FM-R	ZI12017-010	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-160-132.25-090524-FM-R	ZI12017-010	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-005-160-132.25-090524-FM-R	ZI12017-010	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A
PACE	ZI12017	CACMW-006-060-16.5-090524-FM-R	ZI12017-011	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	47		FB	J+	J+	47 [6.1] J+	N/A
PACE	ZI12017	CACMW-006-060-16.5-090524-FM-R	ZI12017-011	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-060-16.5-090524-FM-R	ZI12017-011	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.1	M-03	FB	J+	J+ M	4.1 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-060-16.5-090524-FM-R	ZI12017-011	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-060-16.5-090524-FM-R	ZI12017-011	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9	M-03	FB	J+	J+ M	3.9 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-060-21.75-090524-FM-R	ZI12017-012	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	56		FB	J+	J+	56 [6.1] J+	N/A
PACE	ZI12017	CACMW-006-060-21.75-090524-FM-R	ZI12017-012	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-060-21.75-090524-FM-R	ZI12017-012	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6.5	M-03	FB	J+	J+ M	6.5 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-060-21.75-090524-FM-R	ZI12017-012	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-060-21.75-090524-FM-R	ZI12017-012	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-060-27-090524-FM-R	ZI12017-013	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	56		FB	J+	J+	56 [6.1] J+	N/A
PACE	ZI12017	CACMW-006-060-27-090524-FM-R	ZI12017-013	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.6	M-03	FB	J+	J+ M	2.6 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-060-27-090524-FM-R	ZI12017-013	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2		FB	J+	J+	2.2 [0.8] J+	N/A
PACE	ZI12017	CACMW-006-060-27-090524-FM-R	ZI12017-013	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5		FB	J+	J+	3.5 [0.8] J+	N/A
PACE	ZI12017	CACMW-006-060-32.25-090524-FM-R	ZI12017-014	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	89		FB	J+	J+	89 [6.1] J+	N/A
PACE	ZI12017	CACMW-006-060-32.25-090524-FM-R	ZI12017-014	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	5.4		FB	J+	J+	5.4 [0.8] J+	N/A
PACE	ZI12017	CACMW-006-060-32.25-090524-FM-R	ZI12017-014	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-060-32.25-090524-FM-R	ZI12017-014	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-110-66.5-090524-FM-R	ZI12017-015	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	45		FB	J+	J+	45 [6.1] J+	N/A
PACE	ZI12017	CACMW-006-110-66.5-090524-FM-R	ZI12017-015	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZI12017	CACMW-006-110-66.5-090524-FM-R	ZI12017-015	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-110-66.5-090524-FM-R	ZI12017-015	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A
PACE	ZI12017	CACMW-006-110-71.75-090524-FM-R	ZI12017-016	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	61		FB	J+	J+	61 [6.1] J+	N/A
PACE	ZI12017	CACMW-006-110-71.75-090524-FM-R	ZI12017-016	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.8	M-03	FB	J+	J+ M	2.8 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-110-71.75-090524-FM-R	ZI12017-016	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-110-71.75-090524-FM-R	ZI12017-016	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-160-116.5-090524-FM-R	ZI12017-017	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	50		FB	J+	J+	50 [6.1] J+	N/A
PACE	ZI12017	CACMW-006-160-116.5-090524-FM-R	ZI12017-017	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-160-116.5-090524-FM-R	ZI12017-017	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-160-116.5-090524-FM-R	ZI12017-017	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-160-116.5-090524-FM-R	ZI12017-017	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	5.3		FB	J+	J+	5.3 [0.8] J+	N/A
PACE	ZI12017	CACMW-006-160-127-090524-FM-R	ZI12017-018	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	57		FB	J+	J+	57 [6.1] J+	N/A
PACE	ZI12017	CACMW-006-160-127-090524-FM-R	ZI12017-018	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-160-127-090524-FM-R	ZI12017-018	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5.1	M-03	FB	J+	J+ M	5.1 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-160-127-090524-FM-R	ZI12017-018	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.4	M-03	FB	J+	J+ M	2.4 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-160-127-090524-FM-R	ZI12017-018	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-160-132.25-090524-FM-R	ZI12017-019	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	49		FB	J+	J+	49 [6.1] J+	N/A
PACE	ZI12017	CACMW-006-160-132.25-090524-FM-R	ZI12017-019	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-160-132.25-090524-FM-R	ZI12017-019	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-006-160-132.25-090524-FM-R	ZI12017-019	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB, Ion_ratio	J+, J	J M	2.2 [0.8] J M	N/A
PACE	ZI12017	CACMW-006-160-132.25-090524-FM-R	ZI12017-019	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	4		FB	J+	J+	4 [0.8] J+	N/A
PACE	ZI12017	CACMW-007-110-71.75-090624-FM-R	ZI12017-020	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	74		FB	J+	J+	74 [6.1] J+	N/A
PACE	ZI12017	CACMW-007-110-71.75-090624-FM-R	ZI12017-020	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.6	M-03	FB	J+	J+ M	3.6 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-110-71.75-090624-FM-R	ZI12017-020	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-110-71.75-090624-FM-R	ZI12017-020	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-110-82.25-090624-FM-R	ZI12017-021	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	65		FB	J+	J+	65 [6.1] J+	N/A
PACE	ZI12017	CACMW-007-110-82.25-090624-FM-R	ZI12017-021	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.2	M-03	FB	J+	J+ M	3.2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-110-82.25-090624-FM-R	ZI12017-021	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.3	M-03	FB, Ion_ratio	J+, J	J M	2.3 [0.8] J M	N/A
PACE	ZI12017	CACMW-007-110-82.25-090624-FM-R	ZI12017-021	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.9		FB	J+	J+	3.9 [0.8] J+	N/A
PACE	ZI12017	CACMW-007-160-127-090624-FM-R	ZI12017-022	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	48		FB	J+	J+	48 [6.1] J+	N/A
PACE	ZI12017	CACMW-007-160-127-090624-FM-R	ZI12017-022	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-160-127-090624-FM-R	ZI12017-022	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6.4	M-03	FB	J+	J+ M	6.4 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-160-127-090624-FM-R	ZI12017-022	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-160-127-090624-FM-R	ZI12017-022	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.1	M-03	FB	J+	J+ M	3.1 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-160-132.25-090624-FM-R	ZI12017-023	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	50		FB	J+	J+	50 [6.1] J+	N/A
PACE	ZI12017	CACMW-007-160-132.25-090624-FM-R	ZI12017-023	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-160-132.25-090624-FM-R	ZI12017-023	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6	M-03	FB	J+	J+ M	6 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-160-132.25-090624-FM-R	ZI12017-023	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-007-160-132.25-090624-FM-R	ZI12017-023	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3		FB	J+	J+	3.3 [0.8] J+	N/A
PACE	ZI12017	CACMW-008-060-16.5-090624-FM-R	ZI12017-024	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	46		FB	J+	J+	46 [6.1] J+	N/A
PACE	ZI12017	CACMW-008-060-16.5-090624-FM-R	ZI12017-024	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-008-060-16.5-090624-FM-R	ZI12017-024	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	3.1	M-03	FB, Ion_ratio	J+, J	J M	3.1 [0.8] J M	N/A
PACE	ZI12017	CACMW-008-060-16.5-090624-FM-R	ZI12017-024	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-008-060-16.5-090624-FM-R	ZI12017-024	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-008-110-77-090624-FM-R	ZI12017-025	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	87		FB	J+	J+	87 [6.1] J+	N/A
PACE	ZI12017	CACMW-008-110-77-090624-FM-R	ZI12017-025	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.4	M-03	FB	J+	J+ M	4.4 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-008-110-77-090624-FM-R	ZI12017-025	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2	M-03	FB	J+	J+ M	2 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-008-110-77-090624-FM-R	ZI12017-025	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.8	M-03	FB	J+	J+ M	3.8 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-008-160-116.5-090624-FM-R	ZI12017-026	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	53		FB	J+	J+	53 [6.1] J+	N/A
PACE	ZI12017	CACMW-008-160-116.5-090624-FM-R	ZI12017-026	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-008-160-116.5-090624-FM-R	ZI12017-026	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	4.6	M-03	FB	J+	J+ M	4.6 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-008-160-116.5-090624-FM-R	ZI12017-026	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12017	CACMW-008-160-116.5-090624-FM-R	ZI12017-026	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.1	M-03	FB	J+	J+ M	3.1 [0.8] J+ M	N/A
PACE	ZI12017	FD-6-090524-FM-R	ZI12017-027	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	62		FB	J+	J+	62 [6.1] J+	N/A
PACE	ZI12017	FD-6-090524-FM-R	ZI12017-027	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZI12017	FD-6-090524-FM-R	ZI12017-027	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2		FB	J+	J+	2 [0.8] J+	N/A
PACE	ZI12017	FD-6-090524-FM-R	ZI12017-027	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.5	M-03	FB	J+	J+ M	3.5 [0.8] J+ M	N/A
PACE	ZI12017	FD-4-090424-FM-R	ZI12017-028	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	58		FB	J+	J+	58 [6.1] J+	N/A
PACE	ZI12017	FD-4-090424-FM-R	ZI12017-028	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3	M-03	FB	J+	J+ M	3 [0.8] J+ M	N/A
PACE	ZI12017	FD-4-090424-FM-R	ZI12017-028	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12017	FD-4-090424-FM-R	ZI12017-028	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.3	M-03	FB	J+	J+ M	3.3 [0.8] J+ M	N/A
PACE	ZI12017	FD-5-090424-FM-R	ZI12017-029	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	54		FB	J+	J+	54 [6.1] J+	N/A
PACE	ZI12017	FD-5-090424-FM-R	ZI12017-029	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	1.7	JM-03	FB	J+	J+ M	1.7 [0.8] J+ M	N/A
PACE	ZI12017	FD-5-090424-FM-R	ZI12017-029	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	5.3	M-03	FB	J+	J+ M	5.3 [0.8] J+ M	N/A

Lab	SDG	Client Sample ID	Lab Sample ID	Method	Analyte	CAS	Units	DL	LOD	LOQ	Result	Lab Flag	Note	QC Flags	Final QC Flag	Final Qualified Result	PSL
PACE	ZI12017	FD-5-090424-FM-R	ZI12017-029	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12017	FD-5-090424-FM-R	ZI12017-029	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.7	M-03	FB	J+	J+ M	3.7 [0.8] J+ M	N/A
PACE	ZI12017	FD-7-090524-FM-R	ZI12017-030	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	83		FB	J+	J+	83 [6.1] J+	N/A
PACE	ZI12017	FD-7-090524-FM-R	ZI12017-030	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	4.8	M-03	FB	J+	J+ M	4.8 [0.8] J+ M	N/A
PACE	ZI12017	FD-7-090524-FM-R	ZI12017-030	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.1	M-03	FB	J+	J+ M	2.1 [0.8] J+ M	N/A
PACE	ZI12017	FD-7-090524-FM-R	ZI12017-030	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12017	FD-8-090524-FM-R	ZI12017-031	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	44		FB	J+	J+	44 [6.1] J+	N/A
PACE	ZI12017	FD-8-090524-FM-R	ZI12017-031	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12017	FD-8-090524-FM-R	ZI12017-031	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	6.4	M-03	FB	J+	J+ M	6.4 [0.8] J+ M	N/A
PACE	ZI12017	FD-8-090524-FM-R	ZI12017-031	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.9	JM-03	FB	J+	J+ M	1.9 [0.8] J+ M	N/A
PACE	ZI12017	FD-8-090524-FM-R	ZI12017-031	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.4	M-03	FB	J+	J+ M	3.4 [0.8] J+ M	N/A
PACE	ZI12017	FD-09-090624-FM-R	ZI12017-032	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	69		FB	J+	J+	69 [6.1] J+	N/A
PACE	ZI12017	FD-09-090624-FM-R	ZI12017-032	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	2.3	M-03	FB	J+	J+ M	2.3 [0.8] J+ M	N/A
PACE	ZI12017	FD-09-090624-FM-R	ZI12017-032	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	1.8	JM-03	FB	J+	J+ M	1.8 [0.8] J+ M	N/A
PACE	ZI12017	FD-09-090624-FM-R	ZI12017-032	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.1		FB	J+	J+	3.1 [0.8] J+	N/A
PACE	ZI12017	FD-10-090624-FM-R	ZI12017-033	E1633	6:2FTS	27619-97-2	ng/g	1.7	6.1	8	69	M-03	FB	J+	J+ M	69 [6.1] J+ M	N/A
PACE	ZI12017	FD-10-090624-FM-R	ZI12017-033	E1633	Perfluorononanoic acid (PFNA)	375-95-1	ng/g	0.26	0.8	2	3.4		FB	J+	J+	3.4 [0.8] J+	N/A
PACE	ZI12017	FD-10-090624-FM-R	ZI12017-033	E1633	Perfluorotridecanoic Acid (PFTriA)	72629-94-8	ng/g	0.4	0.8	2	2.2	M-03	FB	J+	J+ M	2.2 [0.8] J+ M	N/A
PACE	ZI12017	FD-10-090624-FM-R	ZI12017-033	E1633	Perfluoroundecanoic acid (PFUnA)	2058-94-8	ng/g	0.28	0.8	2	3.1		FB	J+	J+	3.1 [0.8] J+	N/A
PACE	ZI12017	CACMW-005-110-82.25-090524-FM-R	ZI12017-006	E1633	Perfluorooctanoic acid	335-67-1	ng/g	0.29	0.8	2	45	SM-03	MSD RPD	J	J M	45 [0.8] J M	N/A

Definitions:

ng/g	nanograms per gram
SDG	sample delivery group
CAS	Chemical Abstract Service registry number
DL	detection limit
LOD	limit of detection
LOQ	limit of quantitiation
QC	quality control
N/A	not applicable

Notes:

MB	Method blank detection
FB	Field or equipment blank detection
Ion_ratio	Ion ratio failure
LCS %R	Laboratory control sample percent recovery failure
Cal Exceed	Instrument calibration range was exceeded
HT	Analyzed outside of holding time
Low EIS %R	Extracted internal standard percent recovery below lower control limit
MSD RPD	Matrix spike duplicate sample relative percent difference failure
R<10%	Percent recovery less than 10 percent
ICV	Initial calibration verification failure
CCV	Continuing calibration verification failure

Flags:

J-	The result is estimated with a low bias.
J+	The result is estimated with a high bias.
J	The result is estimated with an unknown bias.
UJ	Not detected and reported less than limit of detection, estimated.
M	The manual integration laboratory qualifier has been preserved with the data as informational data for the end user; there was no impact on the data usability.
UB	The result is considered not detected (less than the listed reporting limit) due to sample contamination identified in an associated blank sample.
X	The result is recommended for rejection

Lab Flags:

B	Detected in the method blank
E	Quantitation of compound exceeded the calibration range
J	Estimated result < LOQ and > DL
L	LCS/LCSD failure
M	Manual integration
Q	Surrogate failure
S	MS/MSD failure
U	Not detected at or above the LOD

Table 2 - Selected 10% of Field Samples

SDG	Method	Client Sample ID	Lab Sample ID
ZH22011	1633	CACMW-008-060-42.75-081724-FM-R	ZH22011-058
ZH22011	1633	CACMW-008-160-137.5-081724-FM-R	ZH22011-066
ZH22011	1633	FD-1-081624-FM-R	ZH22011-071
ZH22011	1633	CACMW-005-110-92.75-081624-FM-R	ZH22011-038
ZH22011	1633	CACMW-001-160-148.5-081524-FM-R	ZH22011-013
ZH22011	1633	CACMW-004-060-53.25-081624-FM-R	ZH22011-019
ZH22011	1633	CACMW-006-060-48-081724-FM-R	ZH22011-045
ZH22013	1633	CACMW-002-060-58.5-081524-FM-R	ZH22013-005
ZH22013	1633	CACMW-002-110-92.75-081524-FM-R	ZH22013-009
ZH22013	1633	CACMW-006-060-42.75-081724-FM-R	ZH22013-033
ZH22013	1633	CACMW-CO-1-081924	ZH22013-054
ZH22013	1633	CACMW-CO-2-081924	ZH22013-055
ZH22013	1633	CACMW-CO-3-081924	ZH22013-056
ZH22013	1633	CACMW-CO-4-081924	ZH22013-057
ZH22013	1633	CACMW-CO-5-081924	ZH22013-058
ZH22013	1633	CACMW-002-160-137.5-081524-FM-R	ZH22013-011
ZH22013	1633	CACMW-003-110-108.5-081624-FM-R	ZH22013-022
ZH22013	1633	CACMW-003-110-98-081624-FM-R	ZH22013-025
ZI12013	1633	CACMW-008-060-27-090624-FM-R	ZI12013-020
ZI12013	1633	CACMW-CO-2-090924	ZI12013-001
ZI12013	1633	CACMW-002-110-77-090424-FM-R	ZI12013-005
ZI12013	1633	CACMW-008-160-127-090624-FM-R	ZI12013-026
ZI12013	1633	CACMW-CO-1-090924	ZI12013-028
ZI12013	1633	CACMW-CO-3-090924	ZI12013-029
ZI12013	1633	CACMW-CO-4-090924	ZI12013-030
ZI12016	1633	CACMW-003-110-77-090524-FM-R	ZI12016-027
ZI12016	1633	CACMW-003-060-27-090424-FM-R	ZI12016-023
ZI12016	1633	CACMW-004-060-32.25-090524-FM-R	ZI12016-034
ZI12016	1633	CACMW-003-110-82.25-090524-FM-R	ZI12016-028
ZI12016	1633	CACMW-002-060-32.25-090424-FM-R	ZI12016-013
ZI12017	1633	CACMW-005-110-82.25-090524-FM-R	ZI12017-006
ZI12017	1633	CACMW-005-110-77-090524-FM-R	ZI12017-005

Table 3a – 1633 Calibration Recalculations

Calibration: **092524-1633+ICAL.b**

	Level	1	2	3	4	5	6	7	8	9	10		Avg RF					
	Data File	092524006.d	092524007.d	092524008.d	092524009.d	092524010.d	092524011.d	092524012.d	092524013.d	092524015.d	092524017.d		or		RSD/	Calc.	Calc.	Match	Match
Analyte	CAS	Calculated RF										Fit	Linear	Constant	RSE	Avg RF	RSD	Avg RF	RSD
13C4-PFBA	SESI-0111	1.1459	1.1665	1.1812	1.1480	1.1454	1.1040	1.1181	1.1016	1.1170	1.1411	Avg	1.136894		2.3	1.1369	2.3	Yes	Yes
Perfluorobutanoic acid (PFBA)	375-22-4	1.0391	0.9341	0.9440	0.8850	0.9713	0.9315	0.8676	0.8533	0.7958	0.7380	Avg	0.895963		9.8	0.8960	9.8	Yes	Yes
13C5-PFPeA	SESI-0112	0.9194	0.8887	0.8972	0.9336	0.9166	0.8617	0.8787	0.8749	0.8709	0.8700	Avg	0.891167		2.8	0.8912	2.8	Yes	Yes
Perfluoropentanoic acid (PFPeA)	2706-90-3	1.2085	1.1609	1.1771	1.0414	1.1172	1.1156	1.0924	1.0491	1.0678	1.0188	Avg	1.104878		5.7	1.1049	5.7	Yes	Yes
13C2-4:2FTS	SESI-0104	0.1540	0.1654	0.1672	0.1448	0.1716	0.1577	0.1604	0.1723	0.1810	0.1749	Avg	0.164935		6.6	0.1649	6.6	Yes	Yes
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1.9076	1.7565	1.8129	1.7698	1.8282	1.8608	1.7097	1.6545	1.6685	1.5736	Avg	1.754213		5.9	1.7542	5.9	Yes	Yes
13C5-PFHxA	SESI-0113	1.0203	0.9612	0.9433	0.9778	0.9896	0.9583	0.9916	0.9438	0.9559	0.9312	Avg	0.967301		2.8	0.9673	2.8	Yes	Yes
Perfluorohexanoic acid (PFHxA)	307-24-4	1.5594	1.3855	1.3437	1.2760	1.2909	1.2335	1.1987	1.2416	1.1990	1.1422	Avg	1.287042		9.3	1.2870	9.3	Yes	Yes
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	0.1927	0.1980	0.1989	0.1885	0.1902	0.1833	0.1702	0.1678	0.1410	0.1277	Avg	0.175826		13.9	0.1758	13.9	Yes	Yes
13C3-PFBS	SESI-0116	1.4245	1.4838	1.5190	1.4144	1.5665	1.4479	1.4460	1.4845	1.4433	1.3096	Avg	1.453938		4.7	1.4539	4.7	Yes	Yes
Perfluorobutanesulfonic acid (PFBS)	375-73-5	1.9958	1.6781	1.8579	1.6555	1.8464	1.8610	1.7947	1.8821	1.8177	1.8116	Avg	1.820068		5.4	1.8201	5.4	Yes	Yes
13C3-HFPO-DA	SESI-0121	0.2657	0.2473	0.2718	0.2629	0.2620	0.2596	0.2527	0.2520	0.2430	0.2458	Avg	0.256272		3.7	0.2563	3.7	Yes	Yes
13C4-PFHpA	SESI-0114	0.9774	0.9966	0.9924	1.0191	1.0465	0.9825	1.0111	1.0085	0.9465	0.9385	Avg	0.991907		3.3	0.9919	3.3	Yes	Yes
Perfluoroheptanoic acid (PFHpA)	375-85-9	1.5435	1.1470	1.2503	1.1501	1.1930	1.1899	1.1401	1.0941	1.1181	1.0898	Avg	1.191595		11.2	1.1916	11.2	Yes	Yes
13C2-6:2FTS	SESI-0105	0.2127	0.2334	0.2100	0.2066	0.2150	0.2261	0.2165	0.2290	0.2309	0.2107	Avg	0.219087		4.5	0.2191	4.5	Yes	Yes
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	2.5660	1.8994	2.4475	2.2003	2.2070	2.0385	2.2346	2.0504	1.9281	1.9154	Avg	2.148719		10.6	2.1487	10.6	Yes	Yes
13C8-PFOA	SESI-0097	4.2592	4.1297	4.3898	3.8807	4.1143	3.8736	3.9632	4.4852	3.9120	4.7448	Avg	4.175238		7.0	4.1752	7.0	Yes	Yes
Perfluorooctanoic acid (PFOA)	335-67-1	1.6278	1.2476	1.2340	1.0940	1.2572	1.1903	1.1540				Avg	1.257832		13.8	1.2578	13.8	Yes	Yes
13C3-PFHxS	SESI-0096	0.9885	1.0982	1.1901	1.0155	1.0973	1.0344	1.0311	1.1375	1.1027	1.0039	Avg	1.069919		6.1	1.0699	6.1	Yes	Yes
Perfluoropentansulfonic acid (PFPeS)	2706-91-4	1.4478	1.2186	1.1566	1.1674	1.2379	1.2154	1.1640	1.0494	1.1611	1.0778	Avg	1.189606		9.1	1.1896	9.1	Yes	Yes
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1.2911	0.9893	1.0919	1.0744	1.0632	1.0639	1.0367	0.9466	0.9674	0.9930	Avg	1.051753		9.3	1.0518	9.3	Yes	Yes
13C9-PFNA	SESI-0099	0.7667	0.7520	0.7394	0.7571	0.7794	0.7813	0.6501	0.7186	0.7825	0.7716	Avg	0.749868		5.4	0.7499	5.4	Yes	Yes
Perfluorononanoic acid (PFNA)	375-95-1	1.7404	1.3754	1.1824	1.3332	1.4274	1.1615	1.3134	1.2490			Avg	1.347846		13.6	1.3478	13.6	Yes	Yes
13C2-8:2FTS	SESI-0106	0.1925	0.1995	0.2007	0.1881	0.1991	0.1863	0.2194	0.2155	0.2472	0.2182	Avg	0.206645		9.0	0.2066	9.0	Yes	Yes
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	2.2009	1.8618	2.0152	1.7583	1.9155	1.9498	1.5158	1.5869	1.4121	1.4419	Avg	1.765809		15.1	1.7658	15.1	Yes	Yes
D3-NMeFOSAA	SESI-0102	0.3945	0.3832	0.3634	0.3334	0.3610	0.3555	0.3739	0.3342	0.3464	0.3573	Avg	0.360298		5.5	0.3603	5.5	Yes	Yes
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	0.9581	0.6469	0.8263	0.7546	0.7732	0.7740	0.6958	0.7872	0.7804	0.7299	Ln	0.747099	13.75900	9.9	See below			
13C6-PFDA	SESI-0115	0.9244	0.8785	0.9714	0.9228	0.9528	0.9356	0.9850	0.9695	0.8218	0.8099	Avg	0.917163		6.7	0.9172	6.7	Yes	Yes
Perfluorodecanoic acid (PFDA)	335-76-2	1.2310	1.3048	0.9942	1.0882	1.0904	1.0731	1.0104	0.9510	1.0270	0.9524	Avg	1.072259		10.8	1.0723	10.8	Yes	Yes
D5-NEtFOSAA	SESI-0110	0.3674	0.3848	0.3663	0.3217	0.4027	0.3920	0.4113	0.3848	0.3664	0.3752	Avg	0.377269		6.6	0.3773	6.6	Yes	Yes
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	0.8903	0.9881	1.0109	0.9858	0.8635	0.9315	0.8956	0.8850	0.9523	0.8819	Avg	0.928484		5.7	0.9285	5.7	Yes	Yes
13C8-PFOS	SESI-0098	0.9423	0.9655	0.9109	0.9074	0.9352	0.9819	0.9394	0.9507	0.8947	0.9124	Avg	0.934050		3.0	0.9340	3.0	Yes	Yes
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1.3238	1.0325	0.9504	0.8770	0.9159	0.9115	0.9566	0.8760	0.9785	0.8838	Ln	0.918199	26.91490	6.5	See below			
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1.2261	1.0722	1.0088	0.9887	1.0015	0.9189	0.9591	0.9050	1.0051	0.9197	Avg	1.000521		9.4	1.0005	9.4	Yes	Yes
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1.1896	1.0905	1.1107	0.9789	1.0904	0.9489	1.0247	1.0145	1.0277	0.9056	Avg	1.038139		8.1	1.0381	8.1	Yes	Yes
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1.0955	0.9765	0.9735	0.8998	0.9368	0.9204	0.9024	0.8641	0.9030	0.8098	Avg	0.928176		8.2	0.9282	8.2	Yes	Yes
13C7-PFUnA	SESI-0117	0.7138	0.7504	0.7571	0.6850	0.8446	0.7911	0.7678	0.7290	0.6948	0.6112	Avg	0.734493		8.7	0.7345	8.7	Yes	Yes
Perfluoroundecanoic acid (PFUnA)	2058-94-8	0.8189	1.0820	1.0092	1.0397	0.9251	0.9304	1.0029	0.9456	0.9384	0.9951	Avg	0.968723		7.6	0.9687	7.6	Yes	Yes
13C2-PFDoA	SESI-0118	0.6791	0.6507	0.6564	0.6558	0.7182	0.7000	0.7232	0.6668	0.6031	0.5997	Avg	0.665310		6.4	0.6653	6.4	Yes	Yes
Perfluorododecanoic acid (PFDoA)	307-55-1	1.3499	1.3986	1.3037	1.2920	1.2519	1.2815	1.1483	1.1130	1.1555	1.0879	Avg	1.238225		8.5	1.2382	8.5	Yes	Yes
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.6874	0.6728	0.7171	0.6513	0.6820	0.6479	0.6594	0.6182	0.6497	0.6093	Avg	0.659525		4.9	0.6595	4.9	Yes	Yes
13C8-PFOSA	SESI-0107	2.0250	1.9998	1.9363	1.8087	1.9429	1.9702	1.9555	1.9729	1.8986	1.7525	Avg	1.926242		4.4	1.9262	4.4	Yes	Yes
Perfluorooctanesulfonamide (PFOSA)	754-91-6	1.3123	1.1421	1.1475	1.0989	1.1099	1.0782	1.0866	1.0265	1.0005	1.0174	Avg	1.101995		8.1	1.1020	8.1	Yes	Yes
13C2-PFTeDA	SESI-0119	0.5364	0.5002	0.4863	0.5023	0.5650	0.5436	0.5418	0.5021	0.4795	0.4902	Avg	0.514737		5.7	0.5147	5.7	Yes	Yes
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1.0519	1.0158	1.0701	0.9071	0.9557	0.9327	0.9575	0.9203	0.8772	0.7984	Avg	0.948648		8.6	0.9486	8.6	Yes	Yes
D7-NMeFOSE	SESI-0129	0.8072	0.7862	0.7409	0.6990	0.7448	0.7647	0.7661	0.7366	0.7235	0.7030	Avg	0.747197		4.6	0.7472	4.6	Yes	Yes
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1.2838	1.1939	1.2277	1.1862	1.2543	1.2112	1.1479	0.9949			Avg	1.187485		7.4	1.1875	7.4	Yes	Yes
D3-NMeFOSA	SESI-0109	0.5011	0.4597	0.4399	0.4171	0.4419	0.4603	0.4930	0.4683	0.4972	0.5086	Avg	0.468708		6.5	0.4687	6.5	Yes	Yes
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1.2271	1.3217	1.3816	1.2404	1.3352	1.2175	1.1829	1.1716	1.1384	1.0723	Avg	1.228879		7.7	1.2289	7.7	Yes	Yes
D9-NEtFOSE	SESI-0130	1.0306	1.0320	0.9781	0.9219	0.9662	0.9808	1.0043	0.9257	0.9314	0.9066	Avg	0.967764		4.7	0.9678	4.7	Yes	Yes
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1.1767	1.0667	1.0879	1.0267	1.0882	1.0721	0.9894	0.8451			Avg	1.044104		9.3	1.0441	9.3	Yes	Yes
D5-NEtFOSA	SESI-0108	0.5718	0.5576	0.5498	0.5068	0.5350	0.5500	0.5787	0.5392	0.5570	0.5430	Avg	0.548881		3.7	0.5489	3.7	Yes	Yes

Key

	from reported calibration
	from lab report/SEDD
	calculated value/comparison

Avg	average
RF	response factor
Conc.	concentration
Calc.	calculated
RSD	relative standard deviation
RSE	relative standard error
IS	internal standard

Linear Regressions

Analyte	Data File	Response	Conc., x	IS Response	IS Conc.	Response Ratio, y
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	092524006.d	5442	100	284013	5000	95.805
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	092524007.d	7915	200	305889	5000	129.377
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	092524008.d	24127	500	291989	5000	413.149
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	092524009.d	52830	1250	280049	5000	943.228
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	092524010.d	109702	2500	283758	5000	1933.020
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	092524011.d	217745	5000	281314	5000	3870.142
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	092524012.d	495340	12500	284769	5000	8697.225
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	092524013.d	1107581	25000	281410	5000	19679.134
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	092524015.d	2183513	50000	279802	5000	39018.896
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	092524017.d	2759481	62500	302440	5000	45620.305

formula = y ~ x, weights = 1/x^2

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	13.7586	7.53507	1.826	0.105
x	0.7471	0.02715	27.515	3.28E-09

Residual standard error: 0.0736 on 8 degrees of freedo
Multiple R-squared: 0.9895, Adjusted R-squared: 0.9882
F-statistic: 757.1 on 1 and 8 DF, p-value: 3.282e-09

Analyte	Data File	Response	Conc., x	IS Response	IS Conc.	Response Ratio, y
Perfluoroheptanesulfonic acid (PFHpS)	092524006.d	17116	95.3	339187	2500	126.155
Perfluoroheptanesulfonic acid (PFHpS)	092524007.d	30333	190.6	385324	2500	196.802
Perfluoroheptanesulfonic acid (PFHpS)	092524008.d	66293	476.5	365966	2500	452.863
Perfluoroheptanesulfonic acid (PFHpS)	092524009.d	159218	1191	381096	2500	1044.474
Perfluoroheptanesulfonic acid (PFHpS)	092524010.d	320850	2383	367526	2500	2182.499
Perfluoroheptanesulfonic acid (PFHpS)	092524011.d	674852	4765	388437	2500	4343.381
Perfluoroheptanesulfonic acid (PFHpS)	092524012.d	1631003	11913	357787	2500	11396.466
Perfluoroheptanesulfonic acid (PFHpS)	092524013.d	3341478	23825	400243	2500	20871.558
Perfluoroheptanesulfonic acid (PFHpS)	092524015.d	6738442	47650	361310	2500	46625.073
Perfluoroheptanesulfonic acid (PFHpS)	092524017.d	8130613	59563	386111	2500	52644.272

formula = y ~ x, weights = 1/x

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	26.91511	45.40459	0.593	0.57
x	0.9182	0.01625	56.512	1.07E-11

Residual standard error: 6.228 on 8 degrees of freedom
Multiple R-squared: 0.9975, Adjusted R-squared: 0.9972
F-statistic: 3194 on 1 and 8 DF, p-value: 1.067e-11

Response Ratio = Response/IS Response * IS Conc

Table 3b – 1633 Calibration Recalculations

Calibration: **101124A-1633+ICAL.b**

	Level	1	2	3	4	5	6	7	8	9	10		Avg RF		RSD/	Calc.	Calc.	Match	Match
	Data File	101124A001.d	101124A002.d	101124A003.d	101124A004.d	101124A005.d	101124A006.d	101124A007.d	101124A008.d	101124A010.d	101124A012.d		or						
Analyte	**CAS**	**Calculated RF**										Fit	Linear	Constant	RSE	Avg RF	RSD	Avg RF	RSD
13C4-PFBA	SESI-0111	1.1237	1.1599	1.1675	1.1245	1.1001	1.1050	1.1246	1.0910	1.0842	1.1049	Avg	1.118527		2.5	1.1185	2.5	Yes	Yes
13C5-PFPeA	SESI-0112	0.9090	0.8663	0.8984	0.8841	0.8604	0.8796	0.8524	0.9011	0.8239	0.8412	Avg	0.871653		3.2	0.8717	3.2	Yes	Yes
Perfluoropentanoic acid (PFPeA)	2706-90-3	1.3373	1.2176	1.1044	1.1239	1.1253	1.0945	1.1027	1.0667	1.0901	1.0358	Avg	1.129824		7.7	1.1298	7.7	Yes	Yes
13C2-4:2FTS	SESI-0104	0.1761	0.1786	0.1721	0.1859	0.1845	0.1767	0.1757	0.1804	0.2101	0.2015	Avg	0.184152		6.7	0.1842	6.7	Yes	Yes
13C5-PFHxA	SESI-0113	0.9878	0.9393	0.9737	0.9466	0.9227	0.9243	0.8986	0.9453	0.9037	0.9025	Avg	0.934444		3.2	0.9344	3.2	Yes	Yes
Perfluorohexanoic acid (PFHxA)	307-24-4	1.5018	1.2290	1.3242	1.2940	1.2536	1.2711	1.2553	1.2561	1.1789	1.1648	Avg	1.272886		7.4	1.2729	7.4	Yes	Yes
13C3-PFBS	SESI-0116	1.5667	1.4179	1.5060	1.4946	1.4721	1.3686	1.4045	1.3539	1.4007	1.2851	Avg	1.427010		5.8	1.4270	5.8	Yes	Yes
Perfluorobutanesulfonic acid (PFBS)	375-73-5	1.8784	1.8150	1.8647	1.8298	1.8006	1.8618	1.7775	1.8192	1.8644	1.7881	Avg	1.829947		1.9	1.8299	1.9	Yes	Yes
13C3-HFPO-DA	SESI-0121	0.2596	0.2553	0.2735	0.2752	0.2546	0.2505	0.2488	0.2543	0.2383	0.2489	Avg	0.255897		4.4	0.2559	4.4	Yes	Yes
13C4-PFHpA	SESI-0114	1.0220	0.9793	0.9925	0.9853	0.9500	0.9403	0.9606	0.9681	0.8577	0.9342	Avg	0.958996		4.6	0.9590	4.6	Yes	Yes
Perfluoroheptanoic acid (PFHpA)	375-85-9	1.4580	1.3783	1.2908	1.2629	1.2330	1.1746	1.1359	1.1523	1.2216	1.0729	Avg	1.238034		9.4	1.2380	9.4	Yes	Yes
13C2-6:2FTS	SESI-0105	0.2450	0.2526	0.2476	0.2343	0.2284	0.2404	0.2277	0.2311	0.2362	0.2271	Avg	0.237031		3.8	0.2370	3.8	Yes	Yes
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	2.2836	2.1701	2.2919	2.3152	2.1946	2.0142	2.0299	1.9560	1.9445	1.8240	Avg	2.102409		8.1	2.1024	8.1	Yes	Yes
13C8-PFOA	SESI-0097	4.2697	3.9929	4.2192	3.8286	4.3143	4.5140	4.2717	3.9554	3.9841	3.7901	Avg	4.113993		5.7	4.1140	5.7	Yes	Yes
Perfluorooctanoic acid (PFOA)	335-67-1	1.6750	1.4509	1.1343	1.0977	1.0843	1.1194	1.1385	1.2143	1.0907	1.0302	Ln	1.093564	59.2597	5.9	See below			
13C3-PFHxS	SESI-0096	1.0334	1.0627	1.0964	1.1970	1.1039	1.0163	1.0459	0.9306	1.0292	1.0774	Avg	1.059286		6.5	1.0593	6.5	Yes	Yes
Perfluoropentansulfonic acid (PFPeS)	2706-91-4	1.4921	1.2119	1.2011	0.9525	1.1249	1.1665	1.0198	1.2560	1.1613	1.0101	Avg	1.159630		13.2	1.1596	13.2	Yes	Yes
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1.3358	0.9808	1.1890	0.9633	1.0659	1.1502	0.9950	1.0725	1.1233	0.9647	Avg	1.084036		11.0	1.0840	11.0	Yes	Yes
13C9-PFNA	SESI-0099	0.6874	0.7936	0.7212	0.7055	0.6696	0.7178	0.6827	0.6673	0.7573	0.6824	Avg	0.708475		5.7	0.7085	5.7	Yes	Yes
Perfluorononanoic acid (PFNA)	375-95-1	1.5639	1.3048	1.2827	1.2477	1.3736	1.1528	1.2035	1.2503	1.1659	1.2418	Avg	1.278701		9.3	1.2787	9.3	Yes	Yes
13C2-8:2FTS	SESI-0106	0.2156	0.1862	0.2143	0.2194	0.2134	0.2182	0.2104	0.2266	0.2566	0.2550	Avg	0.221570		9.4	0.2216	9.4	Yes	Yes
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	2.1971	2.0543	1.6332	1.5960	1.6483	1.6983	1.5254	1.4245	1.3252	1.2022	Ln	1.479635	312.0000	10.9	See below			
D3-NMeFOSAA	SESI-0102	0.3677	0.3031	0.3674	0.3733	0.3265	0.3042	0.3409	0.3734	0.3479	0.3455	Avg	0.344978		7.7	0.3450	7.7	Yes	Yes
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	1.1084	0.9670	0.8345	0.6385	0.8436	0.8335	0.7533	0.7345	0.7902	0.7666	Ln	0.761390	35.3665	8.6	See below			
13C6-PFDA	SESI-0115	1.0298	0.9922	0.9401	1.0113	0.9223	0.9929	0.9321	0.9162	0.8865	0.8425	Avg	0.946606		6.3	0.9466	6.3	Yes	Yes
Perfluorodecanoic acid (PFDA)	335-76-2	1.3328	1.0951	1.1808	0.9963	1.0812	0.9562	0.9900	0.9371	1.0088	1.0136	Avg	1.059188		11.4	1.0592	11.4	Yes	Yes
D5-NEtFOSAA	SESI-0110	0.4122	0.4330	0.4338	0.4096	0.4095	0.3917	0.4156	0.4361	0.3881	0.3902	Avg	0.411975		4.4	0.4120	4.4	Yes	Yes
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1.1345	0.7254	0.8048	0.9329	0.9445	0.9230	0.9068	0.8765	0.9306	0.9156	Avg	0.909463		11.5	0.9095	11.5	Yes	Yes
13C8-PFOS	SESI-0098	0.9428	0.9793	1.0428	0.9364	0.9837	0.9506	0.9741	0.9934	0.9797	0.9223	Avg	0.970524		3.6	0.9705	3.6	Yes	Yes
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1.2443	0.8109	0.8759	0.8891	0.8483	0.8579	0.8796	0.9320	0.8804	0.9299	Ln	0.863557	26.3302	10.0	See below			
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1.1183	0.8822	0.9693	0.9467	0.9511	0.9328	0.9372	0.9713	0.9511	1.0143	Avg	0.967431		6.5	0.9674	6.5	Yes	Yes
13C7-PFUnA	SESI-0117	0.7705	0.7302	0.7764	0.8252	0.7303	0.7803	0.6903	0.6894	0.7321	0.7420	Avg	0.746662		5.6	0.7467	5.6	Yes	Yes
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1.0785	1.2152	0.9901	1.0406	1.0255	0.9594	0.9845	0.9569	0.9252	0.8817	Avg	1.005752		9.3	1.0058	9.3	Yes	Yes
13C2-PFDoA	SESI-0118	0.7286	0.7249	0.6851	0.7123	0.6699	0.6629	0.6364	0.6893	0.6240	0.6885	Avg	0.682188		5.1	0.6822	5.1	Yes	Yes
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.7166	0.7056	0.7376	0.6378	0.6662	0.7087	0.6910	0.6185	0.7119	0.6100	Avg	0.680400		6.6	0.6804	6.6	Yes	Yes
13C8-PFOSA	SESI-0107	1.8977	1.8024	1.9676	1.8127	1.8478	1.7930	1.8928	1.9740	1.9540	1.8857	Avg	1.882752		3.6	1.8828	3.6	Yes	Yes
Perfluorooctanesulfonamide (PFOSA)	754-91-6	1.2361	1.1075	1.0795	1.1011	1.1380	1.0792	1.0451	1.0683	0.9986	0.9628	Avg	1.081611		6.9	1.0816	6.9	Yes	Yes
13C2-PFTeDA	SESI-0119	0.5392	0.4977	0.5343	0.5495	0.5450	0.4999	0.4813	0.5209	0.5269	0.4809	Avg	0.517569		5.0	0.5176	5.0	Yes	Yes
D7-NMeFOSE	SESI-0129	0.7003	0.6838	0.6956	0.6898	0.6808	0.6741	0.6870	0.7199	0.6840	0.6975	Avg	0.691275		1.9	0.6913	1.9	Yes	Yes
D3-NMeFOSA	SESI-0109	0.4290	0.3995	0.4137	0.4045	0.3897	0.3915	0.4139	0.4586	0.4659	0.4677	Avg	0.423406		7.2	0.4234	7.2	Yes	Yes
D9-NEtFOSE	SESI-0130	0.8925	0.8476	0.8764	0.8790	0.8542	0.8344	0.8884	0.9273	0.8821	0.8858	Avg	0.876774		3.0	0.8768	3.0	Yes	Yes
D5-NEtFOSA	SESI-0108	0.5056	0.4719	0.5015	0.4878	0.4862	0.4720	0.4950	0.5218	0.5110	0.5150	Avg	0.496780		3.5	0.4968	3.5	Yes	Yes

Key

	from reported calibration
	from lab report/SEDD
	calculated value/comparison

Avg	average
RF	response factor
Conc.	concentration
Calc.	calculated
RSD	relative standard deviation
RSE	relative standard error
IS	internal standard

Linear Regressions

Analyte	Data File	Response	Conc., x	IS Response	IS Conc.	Response Ratio, y
Perfluorooctanoic acid (PFOA)	101124A001.d	21591	100	322245	2500	167.505
Perfluorooctanoic acid (PFOA)	101124A002.d	40560	200	349448	2500	290.172
Perfluorooctanoic acid (PFOA)	101124A003.d	86640	500	381918	2500	567.137
Perfluorooctanoic acid (PFOA)	101124A004.d	196776	1250	358539	2500	1372.068
Perfluorooctanoic acid (PFOA)	101124A005.d	438095	2500	404030	2500	2710.783
Perfluorooctanoic acid (PFOA)	101124A006.d	818979	5000	365824	2500	5596.810
Perfluorooctanoic acid (PFOA)	101124A007.d	2050084	12500	360131	2500	14231.516
Perfluorooctanoic acid (PFOA)	101124A008.d	4245626	25000	349638	2500	30357.298
Perfluorooctanoic acid (PFOA)	101124A010.d	7863508	50000	360473	2500	54536.040
Perfluorooctanoic acid (PFOA)	101124A012.d	9095089	62500	353131	2500	64388.917

formula = y ~ x, weights = 1/x^2

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	59.26013	6.55818	9.036	1.80E-05
x	1.09356	0.02363	46.275	5.26E-11

Residual standard error: 0.06406 on 8 degrees of freedom
Multiple R-squared: 0.9963, Adjusted R-squared: 0.9958
F-statistic: 2141 on 1 and 8 DF, p-value: 5.256e-11

1.093564	59.2597	5.9

Analyte	Data File	Response	Conc., x	IS Response	IS Conc.	Response Ratio, y
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	101124A001.d	15968	384	94634	5000	843.671
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	101124A002.d	28348	768	89840	5000	1577.694
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	101124A003.d	62829	1920	100183	5000	3135.712
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	101124A004.d	151550	4800	98911	5000	7660.928
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	101124A005.d	327452	9600	103467	5000	15823.983
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	101124A006.d	657232	19200	100782	5000	32606.616
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	101124A007.d	1451561	48000	99127	5000	73217.236
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	101124A008.d	3003797	96000	109828	5000	136750.055
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	101124A010.d	5870993	192000	115368	5000	254446.337
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	101124A012.d	7073726	240000	122586	5000	288520.957

formula = y ~ x, weights = 1/x^2

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	312.07862	63.17845	4.94	0.00114
x	1.47963	0.05929	24.96	7.11E-09

Residual standard error: 0.1607 on 8 degrees of freedom
Multiple R-squared: 0.9873, Adjusted R-squared: 0.9857
F-statistic: 622.9 on 1 and 8 DF, p-value: 7.107e-09

1.479635	312.00	10.9

Analyte	Data File	Response	Conc., x	IS Response	IS Conc.	Response Ratio, y
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101124A001.d	5313	100	239668	5000	110.841
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101124A002.d	8269	200	213783	5000	193.397
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101124A003.d	20447	500	245023	5000	417.247
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101124A004.d	40146	1250	251508	5000	798.106
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101124A005.d	97960	2500	232249	5000	2108.943
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101124A006.d	174928	5000	209868	5000	4167.572
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101124A007.d	422789	12500	224490	5000	9416.656
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101124A008.d	880555	25000	239766	5000	18362.800
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101124A010.d	1812825	50000	229401	5000	39512.142
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	101124A012.d	2182835	62500	227792	5000	47912.899

formula = y ~ x, weights = 1/x^2

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	35.3666	6.70646	5.274	0.00075
x	0.76139	0.02417	31.506	1.12E-09

Residual standard error: 0.06551 on 8 degrees of freedom
Multiple R-squared: 0.992, Adjusted R-squared: 0.991
F-statistic: 992.6 on 1 and 8 DF, p-value: 1.121e-09

0.761390	35.3665	8.6

Analyte	Data File	Response	Conc., x	IS Response	IS Conc.	Response Ratio, y
Perfluoroheptanesulfonic acid (PFHpS)	101124A001.d	14576	95.3	307300	2500	118.581
Perfluoroheptanesulfonic acid (PFHpS)	101124A002.d	21351	190.6	345340	2500	154.565
Perfluoroheptanesulfonic acid (PFHpS)	101124A003.d	58059	476.5	347778	2500	417.357
Perfluoroheptanesulfonic acid (PFHpS)	101124A004.d	133614	1191	315451	2500	1058.912
Perfluoroheptanesulfonic acid (PFHpS)	101124A005.d	282926	2383	349897	2500	2021.495
Perfluoroheptanesulfonic acid (PFHpS)	101124A006.d	536268	4765	327943	2500	4088.119
Perfluoroheptanesulfonic acid (PFHpS)	101124A007.d	1344431	11913	320754	2500	10478.677
Perfluoroheptanesulfonic acid (PFHpS)	101124A008.d	2832514	23825	318915	2500	22204.302
Perfluoroheptanesulfonic acid (PFHpS)	101124A010.d	5420040	47650	323015	2500	41948.826
Perfluoroheptanesulfonic acid (PFHpS)	101124A012.d	6736146	59563	304057	2500	55385.553

formula = y ~ x, weights = 1/x^2

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	26.33002	8.39936	3.135	0.0139
x	0.86356	0.03176	27.191	3.61E-09

Residual standard error: 0.08609 on 8 degrees of freedom
Multiple R-squared: 0.9893, Adjusted R-squared: 0.988
F-statistic: 739.3 on 1 and 8 DF, p-value: 3.606e-09

0.863557	26.3302	10.0

Response Ratio = Response/IS Response * IS Conc

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2982819	13C3-PFBA	1323420	5000	Avg	1.161292				9704.15	9704.16	Yes	10000	97	97.0	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	228548	13C4-PFBA	2982819	10000	Avg	0.790145				969.71	969.71	Yes	1000	97	97	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1298668	13C2-PFHxA	803116	2500	Avg	0.828627				4878.67	4878.66	Yes	5000	98	97.6	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	209137	13C5-PFPeA	1298668	5000	Avg	0.845037				952.86	952.86	Yes	1000	95	95.3	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	195506	18O2-PFHxS	491805	2500	Avg	0.219423				4529.23	4529.24	Yes	5000	91	90.6	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	72526	13C2-4:2FTS	195506	5000	Avg	1.781468				1041.18	1041.18	Yes	937.5	111	111.1	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	873369	13C2-PFHxA	803116	2500	Avg	1.121098				2425.02	2425.02	Yes	2500	97	97.0	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	273243	13C5-PFHxA	873369	2500	Avg	0.809879				965.76	965.76	Yes	1000	97	96.6	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	585019	18O2-PFHxS	491805	2500	Avg	1.313089				2264.76	2264.76	Yes	2500	91	90.6	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	280870	13C3-PFBS	585019	2500	Avg	1.143965				1049.21	1049.21	Yes	887	118	118.3	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	644573	13C2-PFHxA	803116	2500	Avg	0.19845				10111	10110.74	Yes	10000	101	101.1	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	891314	13C2-PFHxA	803116	2500	Avg	1.194702				2322.38	2322.38	Yes	2500	93	92.9	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	316594	13C4-PFHpA	891314	2500	Avg	0.995725				891.81	891.81	Yes	1000	89	89.2	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	195677	18O2-PFHxS	491805	2500	Avg	0.237162				4194.13	4194.13	Yes	5000	84	83.9	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	78577	13C2-6:2FTS	195677	5000	Avg	1.761997				1139.52	1139.52	Yes	950	120	119.9	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1183616	13C4-PFOA	161889	2500	Avg	7.142863				2558.95	2558.95	Yes	2500	102	102.4	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	305045	13C8-PFOA	1183616	2500	Avg	0.838198				768.68	768.68	Yes	1000	77	76.9	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	554187	18O2-PFHxS	491805	2500	Avg	1.219515				2310.02	2310.02	Yes	2500	92	92.4	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	257019	13C3-PFHxS	554187	2500	Avg	1.0639				1089.8	1089.8	Yes	941	116	115.8	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	228437	13C3-PFHxS	554187	2500	Avg	1.030748				999.76	999.76	Yes	914	109	109.4	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	585908	13C5-PFNA	640302	1250	Avg	0.86335				1324.85	1324.85	Yes	1250	106	106.0	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	348172	13C9-PFNA	585908	1250	Avg	0.776752				956.3	956.3	Yes	1000	96	95.6	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	191360	18O2-PFHxS	491805	2500	Avg	0.213504				4556.09	4556.09	Yes	5000	91	91.1	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	79634	13C2-8:2FTS	191360	5000	Avg	1.619153				1285.08	1285.08	Yes	960	134	133.9	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	567459	13C4-PFOS	586429	2500	Avg	0.522181				4632.74	4632.74	Yes	5000	93	92.7	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	85362	D3-NMeFOSAA	567459	5000	Avg	0.711099				1057.72	1057.72	Yes	1000	106	105.8	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	556403	13C2-PFDA	478225	1250	Avg	1.19879				1213.18	1213.18	Yes	1250	97	97.1	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	306130	13C6-PFDA	556403	1250	Avg	0.773597				889.02	889.02	Yes	1000	89	88.9	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	415154	13C4-PFOS	586429	2500	Avg	0.396254				4466.43	4466.43	Yes	5000	89	89.3	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	90564	D5-NEtFOSAA	415154	5000	Avg	1.043077				1045.68	1045.68	Yes	1000	105	104.6	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	604966	13C4-PFOS	586429	2500	Avg	1.036214				2488.89	2488.89	Yes	2500	100	99.6	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	198797	13C8-PFOS	604966	2500	Avg	0.886401				926.81	926.81	Yes	953	97	97.3	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	195598	13C8-PFOS	604966	2500	Avg	0.934293				865.15	865.15	Yes	928	93	93.2	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	280343	13C8-PFOS	604966	2500	Avg	1.12962				1025.57	1025.57	Yes	962	107	106.6	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	498855	13C2-PFDA	478225	1250	Avg	1.090348				1195.88	1195.88	Yes	1250	96	95.7	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	280351	13C7-PFUnA	498855	1250	Avg	0.852827				823.72	823.71	Yes	1000	82	82.4	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	495927	13C2-PFDA	478225	1250	Avg	1.058364				1224.79	1224.79	Yes	1250	98	98	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	232465	13C2-PFDoA	495927	1250	Avg	0.691664				847.14	847.14	Yes	1000	85	84.7	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	998778	13C4-PFOS	586429	2500	Avg	1.770989				2404.24	2404.24	Yes	2500	96	96.2	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	322608	13C8-PFOSA	998778	2500	Avg	0.902242				895	895	Yes	1000	89	89.5	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	424936	13C2-PFDA	478225	1250	Avg	0.976439				1137.51	1137.51	Yes	1250	91	91	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3964384	13C4-PFOS	586429	2500	Avg	0.714673				23648	23647.92	Yes	25000	95	94.6	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	243436	13C4-PFOS	586429	2500	Avg	0.435575				2382.58	2382.57	Yes	2500	95	95.3	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4268786	13C4-PFOS	586429	2500	Avg	0.798258				22797	22797.42	Yes	25000	91	91.2	Yes
092224C013.d	ICV_SVLC-4043	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	253150	13C4-PFOS	586429	2500	Avg	0.461946				2336.21	2336.21	Yes	2500	93	93.4	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2155067	13C3-PFBA	965989	5000	Avg	1.14978				9701.61	9701.61	Yes	10000	97	97	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	178446	13C4-PFBA	2155067	10000	Avg	0.799533				1035.64	1035.64	Yes	1000	104	103.6	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	827278	13C2-PFHxA	483705	2500	Avg	0.912806				4684.17	4684.17	Yes	5000	94	93.7	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	161867	13C5-PFPeA	827278	5000	Avg	1.00198				976.38	976.38	Yes	1000	98	97.6	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	99727	18O2-PFHxS	306067	2500	Avg	0.174396				4670.89	4670.89	Yes	5000	93	93.4	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	33277	13C2-4:2FTS	99727	5000	Avg	1.561581				1068.41	1068.41	Yes	937.5	114	114	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	457106	13C2-PFHxA	483705	2500	Avg	1.004407				2352.16	2352.16	Yes	2500	94	94.1	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	194930	13C5-PFHxA	457106	2500	Avg	1.138995				936.01	936.01	Yes	1000	94	93.6	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	438049	18O2-PFHxS	306067	2500	Avg	1.514202				2362.99	2362.99	Yes	2500	95	94.5	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	287827	13C3-PFBS	438049	2500	Avg	1.653717				993.32	993.32	Yes	887	112	112	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	470046	13C2-PFHxA	483705	2500	Avg	0.258101				9412.6	9412.61	Yes	10000	94	94.1	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	463633	13C2-PFHxA	483705	2500	Avg	0.971591				2466.32	2466.32	Yes	2500	99	98.7	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	183549	13C4-PFHpA	463633	2500	Avg	1.086825				910.66	910.66	Yes	1000	91	91.1	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	132299	18O2-PFHxS	306067	2500	Avg	0.237573				4548.66	4548.65	Yes	5000	91	91	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	53826	13C2-6:2FTS	132299	5000	Ln	1.924681	-117			1117.92	1117.72	Yes	950	118	117.7	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	504353	13C4-PFOA	130391	2500	Avg	4.183914				2311.24	2311.24	Yes	2500	92	92.4	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	181791	13C8-PFOA	504353	2500	Avg	1.102996				816.97	816.97	Yes	1000	82	81.7	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	342257	18O2-PFHxS	306067	2500	Avg	1.112944				2511.9	2511.9	Yes	2500	100	100.5	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	150090	13C3-PFHxS	342257	2500	Avg	1.02469				1069.91	1069.91	Yes	941	114	113.7	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	132219	13C3-PFHxS	342257	2500	Avg	0.961146				1004.83	1004.83	Yes	914	110	109.9	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	174070	13C5-PFNA	257741	1250	Avg	0.672232				1255.83	1255.83	Yes	1250	100	100.5	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	148092	13C9-PFNA	174070	1250	Avg	1.184726				897.63	897.63	Yes	1000	90	89.8	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	130818	18O2-PFHxS	306067	2500	Avg	0.217572				4911.2	4911.2	Yes	5000	98	98.2	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	42325	13C2-8:2FTS	130818	5000	Ln	1.582433	-143			1113.06	1112.66	Yes	960	116	115.9	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	304164	13C4-PFOS	500681	2500	Avg	0.325783				4661.85	4661.85	Yes	5000	93	93.2	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	45587	D3-NMeFOSAA	304164	5000	Avg	0.714909				1048.22	1048.22	Yes	1000	105	104.8	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	212595	13C2-PFDA	227462	1250	Avg	0.940314				1242.46	1242.46	Yes	1250	99	99.4	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	160139	13C6-PFDA	212595	1250	Avg	0.958302				982.54	982.54	Yes	1000	98	98.3	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	362303	13C4-PFOS	500681	2500	Avg	0.345606				5234.44	5234.43	Yes	5000	105	104.7	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	72688	D5-NEtFOSAA	362303	5000	Avg	0.841671				1191.84	1191.84	Yes	1000	119	119.2	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	458882	13C4-PFOS	500681	2500	Avg	0.993393				2306.53	2306.53	Yes	2500	92	92.3	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	139461	13C8-PFOS	458882	2500	Avg	0.750488				1012.39	1012.39	Yes	953	106	106.2	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	160601	13C8-PFOS	458882	2500	Avg	0.872096				1003.28	1003.28	Yes	928	108	108.1	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	162774	13C8-PFOS	458882	2500	Avg	0.836875				1059.65	1059.65	Yes	962	110	110.2	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	209304	13C2-PFDA	227462	1250	Avg	0.934831				1230.4	1230.4	Yes	1250	98	98.4	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	126551	13C7-PFUnA	209304	1250	Avg	0.930416				812.31	812.31	Yes	1000	81	81.2	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	164648	13C2-PFDA	227462	1250	Avg	0.793171				1140.75	1140.75	Yes	1250	91	91.3	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	70619	13C2-PFDoA	164648	1250	Avg	0.592818				904.39	904.39	Yes	1000	90	90.4	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	124540	13C2-PFDA	227462	1250	Avg	0.578567				1182.92	1182.92	Yes	1250	95	94.6	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	910864	13C4-PFOS	500681	2500	Avg	1.917495				2371.91	2371.91	Yes	2500	95	94.9	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	326600	13C8-PFOSA	910864	2500	Avg	0.98714				908.08	908.08	Yes	1000	91	90.8	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3380865	13C4-PFOS	500681	2500	Avg	0.709879				23781	23780.58	Yes	25000	95	95.1	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	207480	13C4-PFOS	500681	2500	Avg	0.446899				2318.17	2318.17	Yes	2500	93	92.7	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4237321	13C4-PFOS	500681	2500	Avg	0.877222				24119	24119.08	Yes	25000	96	96.5	Yes
092324B015.d	ICV_SVLC-4043	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	246239	13C4-PFOS	500681	2500	Avg	0.510919				2406.49	2406.49	Yes	2500	96	96.3	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1979018	13C3-PFBA	902847	5000	Avg	1.153035				9505.24	9505.24	Yes	10000	95	95.1	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	166939	13C4-PFBA	1979018	10000	Avg	0.798354				1056.6	1056.6	Yes	1000	106	105.7	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	779280	13C2-PFHxA	465398	2500	Avg	0.891292				4696.66	4696.66	Yes	5000	94	93.9	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	161630	13C5-PFPeA	779280	5000	Avg	1.018879				1017.83	1017.83	Yes	1000	102	101.8	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	90946	18O2-PFHxS	269132	2500	Avg	0.16784				5033.41	5033.42	Yes	5000	101	100.7	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	33261	13C2-4:2FTS	90946	5000	Avg	1.621025				1128.06	1128.06	Yes	937.5	120	120.3	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	418072	13C2-PFHxA	465398	2500	Avg	0.983356				2283.79	2283.79	Yes	2500	91	91.4	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	183981	13C5-PFHxA	418072	2500	Avg	1.153986				953.37	953.37	Yes	1000	95	95.3	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	444528	18O2-PFHxS	269132	2500	Avg	1.4649				2818.81	2818.81	Yes	2500	113	112.8	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	275139	13C3-PFBS	444528	2500	Avg	1.649991				937.8	937.8	Yes	887	106	105.7	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	472581	13C2-PFHxA	465398	2500	Avg	0.255296				9943.7	9943.69	Yes	10000	99	99.4	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	417975	13C2-PFHxA	465398	2500	Avg	0.972655				2308.38	2308.38	Yes	2500	92	92.3	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	167104	13C4-PFHpA	417975	2500	Avg	1.095097				912.69	912.69	Yes	1000	91	91.3	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	129842	18O2-PFHxS	269132	2500	Avg	0.235608				5119.17	5119.17	Yes	5000	102	102.4	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	50497	13C2-6:2FTS	129842	5000	Avg	1.87751				1035.71	1035.71	Yes	950	109	109	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	484175	13C4-PFOA	120637	2500	Avg	4.359235				2301.71	2301.72	Yes	2500	92	92.1	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	179386	13C8-PFOA	484175	2500	Avg	1.129938				819.73	819.73	Yes	1000	82	82	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	323311	18O2-PFHxS	269132	2500	Avg	1.087071				2762.72	2762.72	Yes	2500	111	110.5	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	139653	13C3-PFHxS	323311	2500	Avg	1.036407				1041.93	1041.93	Yes	941	111	110.7	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	126256	13C3-PFHxS	323311	2500	Avg	0.948151				1029.66	1029.66	Yes	914	113	112.7	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	165816	13C5-PFNA	238668	1250	Avg	0.681638				1274.06	1274.06	Yes	1250	102	101.9	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	143276	13C9-PFNA	165816	1250	Avg	1.15809				932.64	932.64	Yes	1000	93	93.3	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	118150	18O2-PFHxS	269132	2500	Avg	0.22089				4968.59	4968.58	Yes	5000	99	99.4	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	43872	13C2-8:2FTS	118150	5000	Avg	1.486942				1248.62	1248.62	Yes	960	130	130.1	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	297716	13C4-PFOS	495452	2500	Avg	0.319821				4697.14	4697.14	Yes	5000	94	93.9	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	40658	D3-NMeFOSAA	297716	5000	Avg	0.724285				942.77	942.77	Yes	1000	94	94.3	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	195741	13C2-PFDA	191060	1250	Avg	0.949905				1348.16	1348.16	Yes	1250	108	107.9	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	129178	13C6-PFDA	195741	1250	Avg	0.945859				872.15	872.15	Yes	1000	87	87.2	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	255254	13C4-PFOS	495452	2500	Avg	0.294766				4369.51	4369.52	Yes	5000	87	87.4	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	40962	D5-NEtFOSAA	255254	5000	Avg	0.91407				877.81	877.81	Yes	1000	88	87.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	435487	13C4-PFOS	495452	2500	Avg	0.984793				2231.35	2231.35	Yes	2500	89	89.3	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	123252	13C8-PFOS	435487	2500	Avg	0.747625				946.4	946.4	Yes	953	99	99.3	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	148362	13C8-PFOS	435487	2500	Avg	0.870004				978.96	978.96	Yes	928	105	105.5	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	151927	13C8-PFOS	435487	2500	Avg	0.82691				1054.73	1054.73	Yes	962	110	109.6	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	199067	13C2-PFDA	191060	1250	Avg	0.997704				1305.38	1305.38	Yes	1250	104	104.4	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	140620	13C7-PFUnA	199067	1250	Avg	0.893971				987.72	987.72	Yes	1000	99	98.8	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	152908	13C2-PFDA	191060	1250	Avg	0.795406				1257.71	1257.71	Yes	1250	101	100.6	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	62116	13C2-PFDoA	152908	1250	Avg	0.599359				847.22	847.22	Yes	1000	85	84.7	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	115656	13C2-PFDA	191060	1250	Avg	0.588079				1286.69	1286.69	Yes	1250	103	102.9	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	837035	13C4-PFOS	495452	2500	Avg	1.895997				2227.64	2227.64	Yes	2500	89	89.1	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	309974	13C8-PFOSA	837035	2500	Avg	0.985796				939.15	939.15	Yes	1000	94	93.9	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3154685	13C4-PFOS	495452	2500	Avg	0.700486				22725	22724.53	Yes	25000	91	90.9	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	192617	13C4-PFOS	495452	2500	Avg	0.437202				2223.06	2223.06	Yes	2500	89	88.9	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4115969	13C4-PFOS	495452	2500	Avg	0.870998				23845	23844.78	Yes	25000	95	95.4	Yes
092424A018.d	ICV_A_SVLC-4043	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	233872	13C4-PFOS	495452	2500	Avg	0.508417				2321.12	2321.11	Yes	2500	93	92.8	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2357469	13C3-PFBA	1026571	5000	Avg	1.132459				10139	10139.22	Yes	10000	101	101.4	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2128254	13C4-PFBA	2357469	10000	Ln	0.838689	-69.5185			10847	10846.96	Yes	10000	108	108.5	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	940347	13C2-PFHxA	533585	2500	Avg	0.88245				4992.69	4992.69	Yes	5000	100	99.9	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1029096	13C5-PFPeA	940347	5000	Ln	1.069127	-60.1589			5174.36	5174.37	Yes	5000	103	103.5	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	113957	18O2-PFHxS	377941	2500	Avg	0.169914				4436.37	4436.37	Yes	5000	89	88.7	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	377884	13C2-4:2FTS	113957	5000	Avg	1.573929				10534	10534.22	Yes	9375	112	112.4	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	512773	13C2-PFHxA	533585	2500	Avg	0.99614				2411.8	2411.8	Yes	2500	96	96.5	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	651057	13C5-PFHxA	512773	2500	Ln	1.168552	-27.9091			2740.24	2740.23	Yes	2500	110	109.6	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	503014	18O2-PFHxS	377941	2500	Avg	1.445824				2301.34	2301.34	Yes	2500	92	92.1	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	805960	13C3-PFBS	503014	2500	Avg	1.690931				2368.9	2368.9	Yes	2218	107	106.8	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	529683	13C2-PFHxA	533585	2500	Avg	0.253851				9776.28	9776.28	Yes	10000	98	97.8	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	544231	13C2-PFHxA	533585	2500	Avg	0.963985				2645.14	2645.14	Yes	2500	106	105.8	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	623277	13C4-PFHpA	544231	2500	Ln	1.128349	-29.8343			2563.87	2563.87	Yes	2500	103	102.6	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	163369	18O2-PFHxS	377941	2500	Avg	0.227833				4743.18	4743.17	Yes	5000	95	94.9	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	633555	13C2-6:2FTS	163369	5000	Avg	1.91644				10118	10117.88	Yes	9500	107	106.5	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	549903	13C4-PFOA	131643	2500	Avg	4.051267				2577.73	2577.73	Yes	2500	103	103.1	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	711816	13C8-PFOA	549903	2500	Ln	1.165767	-28.2708			2800.19	2800.19	Yes	2500	112	112	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	382793	18O2-PFHxS	377941	2500	Avg	1.06234				2383.51	2383.51	Yes	2500	95	95.3	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	407371	13C3-PFHxS	382793	2500	Ln	1.101826	-34.5562			2446.01	2446.01	Yes	2353	104	104	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	364770	13C3-PFHxS	382793	2500	Avg	0.960514				2480.23	2480.23	Yes	2285	109	108.5	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	194134	13C5-PFNA	263530	1250	Avg	0.659954				1395.3	1395.3	Yes	1250	112	111.6	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	455457	13C9-PFNA	194134	1250	Avg	1.161623				2524.59	2524.59	Yes	2500	101	101	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	149064	18O2-PFHxS	377941	2500	Avg	0.220738				4466.95	4466.96	Yes	5000	89	89.3	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	471527	13C2-8:2FTS	149064	5000	Avg	1.466136				10788	10787.72	Yes	9600	112	112.4	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	369163	13C4-PFOS	575977	2500	Avg	0.32346				4953.73	4953.73	Yes	5000	99	99.1	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	145950	D3-NMeFOSAA	369163	5000	Avg	0.708746				2789.11	2789.11	Yes	2500	112	111.6	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	215155	13C2-PFDA	242657	1250	Avg	0.956495				1158.74	1158.74	Yes	1250	93	92.7	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	452516	13C6-PFDA	215155	1250	Ln	1.02029	-46.5375			2622.34	2622.34	Yes	2500	105	104.9	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	346901	13C4-PFOS	575977	2500	Avg	0.319265				4716.16	4716.17	Yes	5000	94	94.3	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	158093	D5-NEtFOSAA	346901	5000	Ln	0.903902	-27.6568			2551.5	2551.5	Yes	2500	102	102.1	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	557222	13C4-PFOS	575977	2500	Avg	0.983323				2459.61	2459.61	Yes	2500	98	98.4	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	423468	13C8-PFOS	557222	2500	Avg	0.766112				2479.93	2479.93	Yes	2383	104	104.1	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	497560	13C8-PFOS	557222	2500	Avg	0.891307				2504.55	2504.55	Yes	2320	108	108	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	505065	13C8-PFOS	557222	2500	Avg	0.83787				2704.47	2704.47	Yes	2405	112	112.5	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	219030	13C2-PFDA	242657	1250	Avg	0.950697				1186.8	1186.8	Yes	1250	95	94.9	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	472516	13C7-PFUnA	219030	1250	Avg	0.921833				2925.3	2925.3	Yes	2500	117	117	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	183950	13C2-PFDA	242657	1250	Avg	0.795811				1190.71	1190.71	Yes	1250	95	95.3	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	255706	13C2-PFDoA	183950	1250	Avg	0.597037				2910.38	2910.38	Yes	2500	116	116.4	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	149016	13C2-PFDA	242657	1250	Avg	0.593931				1292.45	1292.45	Yes	1250	103	103.4	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	1006195	13C4-PFOS	575977	2500	Avg	1.890633				2309.99	2309.99	Yes	2500	92	92.4	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1124569	13C8-PFOSA	1006195	2500	Ln	1.03613	-30.6114			2726.23	2726.23	Yes	2500	109	109	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3848407	13C4-PFOS	575977	2500	Avg	0.699585				23877	23876.76	Yes	25000	96	95.5	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	245285	13C4-PFOS	575977	2500	Avg	0.446776				2382.96	2382.96	Yes	2500	95	95.3	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4852311	13C4-PFOS	575977	2500	Avg	0.887621				23728	23727.72	Yes	25000	95	94.9	Yes
092124B121.d	CCV L5G_SVLC-4085	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	283013	13C4-PFOS	575977	2500	Avg	0.512381				2397.44	2397.44	Yes	2500	96	95.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2174996	13C3-PFBA	960824	5000	Avg	1.132459				9994.53	9994.52	Yes	10000	100	99.9	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2034746	13C4-PFBA	2174996	10000	Ln	0.838689	-69.5185			11237	11237.41	Yes	10000	112	112.4	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	851607	13C2-PFHxA	491382	2500	Avg	0.88245				4909.87	4909.87	Yes	5000	98	98.2	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	960128	13C5-PFPeA	851607	5000	Ln	1.069127	-60.1589			5328.94	5328.94	Yes	5000	107	106.6	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	107556	18O2-PFHxS	344122	2500	Avg	0.169914				4598.67	4598.68	Yes	5000	92	92	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	364524	13C2-4:2FTS	107556	5000	Avg	1.573929				10767	10766.54	Yes	9375	115	114.8	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	470940	13C2-PFHxA	491382	2500	Avg	0.99614				2405.28	2405.28	Yes	2500	96	96.2	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	594860	13C5-PFHxA	470940	2500	Ln	1.168552	-27.9091			2726.23	2726.23	Yes	2500	109	109	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	469579	18O2-PFHxS	344122	2500	Avg	1.445824				2359.5	2359.5	Yes	2500	94	94.4	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	737706	13C3-PFBS	469579	2500	Avg	1.690931				2322.68	2322.68	Yes	2218	105	104.7	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	517744	13C2-PFHxA	491382	2500	Avg	0.253851				10377	10376.65	Yes	10000	104	103.8	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	486906	13C2-PFHxA	491382	2500	Avg	0.963985				2569.78	2569.78	Yes	2500	103	102.8	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	556579	13C4-PFHpA	486906	2500	Ln	1.128349	-29.8343			2559.11	2559.11	Yes	2500	102	102.4	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	148640	18O2-PFHxS	344122	2500	Avg	0.227833				4739.66	4739.65	Yes	5000	95	94.8	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	619122	13C2-6:2FTS	148640	5000	Avg	1.91644				10867	10867.14	Yes	9500	114	114.4	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	551832	13C4-PFOA	137576	2500	Avg	4.051267				2475.22	2475.22	Yes	2500	99	99	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	616277	13C8-PFOA	551832	2500	Ln	1.165767	-28.2708			2419.21	2419.21	Yes	2500	97	96.8	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	369903	18O2-PFHxS	344122	2500	Avg	1.06234				2529.6	2529.6	Yes	2500	101	101.2	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	401873	13C3-PFHxS	369903	2500	Ln	1.101826	-34.5562			2496.43	2496.43	Yes	2353	106	106.1	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	312862	13C3-PFHxS	369903	2500	Avg	0.960514				2201.41	2201.41	Yes	2285	96	96.3	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	193862	13C5-PFNA	263320	1250	Avg	0.659954				1394.46	1394.46	Yes	1250	112	111.6	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	448011	13C9-PFNA	193862	1250	Avg	1.161623				2486.8	2486.8	Yes	2500	99	99.5	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	135526	18O2-PFHxS	344122	2500	Avg	0.220738				4460.39	4460.39	Yes	5000	89	89.2	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	449489	13C2-8:2FTS	135526	5000	Avg	1.466136				11311	11310.77	Yes	9600	118	117.8	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	343540	13C4-PFOS	513454	2500	Avg	0.32346				5171.24	5171.25	Yes	5000	103	103.4	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	132664	D3-NMeFOSAA	343540	5000	Avg	0.708746				2724.3	2724.3	Yes	2500	109	109	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	188409	13C2-PFDA	211760	1250	Avg	0.956495				1162.75	1162.75	Yes	1250	93	93	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	434237	13C6-PFDA	188409	1250	Ln	1.02029	-46.5375			2869.27	2869.27	Yes	2500	115	114.8	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	302513	13C4-PFOS	513454	2500	Avg	0.319265				4613.5	4613.51	Yes	5000	92	92.3	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	137740	D5-NEtFOSAA	302513	5000	Ln	0.903902	-27.6568			2549.23	2549.23	Yes	2500	102	102	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	511185	13C4-PFOS	513454	2500	Avg	0.983323				2531.16	2531.16	Yes	2500	101	101.2	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	388876	13C8-PFOS	511185	2500	Avg	0.766112				2482.45	2482.45	Yes	2383	104	104.2	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	444516	13C8-PFOS	511185	2500	Avg	0.891307				2439.06	2439.06	Yes	2320	105	105.1	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	460701	13C8-PFOS	511185	2500	Avg	0.83787				2689.08	2689.08	Yes	2405	112	111.8	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	210650	13C2-PFDA	211760	1250	Avg	0.950697				1307.93	1307.93	Yes	1250	105	104.6	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	409887	13C7-PFUnA	210650	1250	Avg	0.921833				2638.52	2638.52	Yes	2500	106	105.5	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	170523	13C2-PFDA	211760	1250	Avg	0.795811				1264.85	1264.85	Yes	1250	101	101.2	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	230930	13C2-PFDoA	170523	1250	Avg	0.597037				2835.35	2835.35	Yes	2500	113	113.4	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	137127	13C2-PFDA	211760	1250	Avg	0.593931				1362.87	1362.87	Yes	1250	109	109	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	986597	13C4-PFOS	513454	2500	Avg	1.890633				2540.8	2540.8	Yes	2500	102	101.6	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1046622	13C8-PFOSA	986597	2500	Ln	1.03613	-30.6114			2589.17	2589.17	Yes	2500	104	103.6	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3659094	13C4-PFOS	513454	2500	Avg	0.699585				25467	25466.63	Yes	25000	102	101.9	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	220949	13C4-PFOS	513454	2500	Avg	0.446776				2407.91	2407.91	Yes	2500	96	96.3	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4687739	13C4-PFOS	513454	2500	Avg	0.887621				25714	25714.28	Yes	25000	103	102.9	Yes
092124B136.d	CCV L5H_SVLC-4085	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	266945	13C4-PFOS	513454	2500	Avg	0.512381				2536.69	2536.69	Yes	2500	101	101.5	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3046455	13C3-PFBA	1217482	5000	Avg	1.161292				10774	10773.6	Yes	10000	108	107.7	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2537016	13C4-PFBA	3046455	10000	Avg	0.790145				10540	10539.54	Yes	10000	105	105.4	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1347936	13C2-PFHxA	741418	2500	Avg	0.828627				5485.14	5485.13	Yes	5000	110	109.7	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1201967	13C5-PFPeA	1347936	5000	Avg	0.845037				5276.16	5276.16	Yes	5000	106	105.5	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	225417	18O2-PFHxS	443428	2500	Avg	0.219423				5791.9	5791.9	Yes	5000	116	115.8	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	814524	13C2-4:2FTS	225417	5000	Avg	1.781468				10142	10141.66	Yes	9375	108	108.2	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	884744	13C2-PFHxA	741418	2500	Avg	1.121098				2661.04	2661.04	Yes	2500	106	106.4	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	794929	13C5-PFHxA	884744	2500	Avg	0.809879				2773.52	2773.52	Yes	2500	111	110.9	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	640925	18O2-PFHxS	443428	2500	Avg	1.313089				2751.88	2751.88	Yes	2500	110	110.1	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	666190	13C3-PFBS	640925	2500	Avg	1.143965				2271.53	2271.53	Yes	2218	102	102.4	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	634649	13C2-PFHxA	741418	2500	Avg	0.19845				10783	10783.49	Yes	10000	108	107.8	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	954608	13C2-PFHxA	741418	2500	Avg	1.194702				2694.28	2694.28	Yes	2500	108	107.8	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1019575	13C4-PFHpA	954608	2500	Avg	0.995725				2681.6	2681.6	Yes	2500	107	107.3	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	242850	18O2-PFHxS	443428	2500	Avg	0.237162				5773.11	5773.11	Yes	5000	115	115.5	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	878265	13C2-6:2FTS	242850	5000	Avg	1.761997				10262	10262.48	Yes	9500	108	108	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1238660	13C4-PFOA	139514	2500	Avg	7.142863				3107.43	3107.43	Yes	2500	124	124.3	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1029075	13C8-PFOA	1238660	2500	Avg	0.838198				2477.93	2477.93	Yes	2500	99	99.1	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	551598	18O2-PFHxS	443428	2500	Avg	1.219515				2550.07	2550.07	Yes	2500	102	102	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	600720	13C3-PFHxS	551598	2500	Avg	1.0639				2559.11	2559.11	Yes	2353	109	108.8	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	611318	13C3-PFHxS	551598	2500	Avg	1.030748				2688.02	2688.02	Yes	2285	118	117.6	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	610170	13C5-PFNA	633068	1250	Avg	0.86335				1395.48	1395.48	Yes	1250	112	111.6	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	979035	13C9-PFNA	610170	1250	Avg	0.776752				2582.11	2582.11	Yes	2500	103	103.3	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	238848	18O2-PFHxS	443428	2500	Avg	0.213504				6307.14	6307.14	Yes	5000	126	126.1	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	691198	13C2-8:2FTS	238848	5000	Avg	1.619153				8936.41	8936.41	Yes	9600	93	93.1	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	650496	13C4-PFOS	558281	2500	Avg	0.522181				5578.41	5578.41	Yes	5000	112	111.6	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	256446	D3-NMeFOSAA	650496	5000	Avg	0.711099				2771.99	2771.99	Yes	2500	111	110.9	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	595443	13C2-PFDA	452607	1250	Avg	1.19879				1371.78	1371.78	Yes	1250	110	109.7	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	983643	13C6-PFDA	595443	1250	Avg	0.773597				2669.27	2669.27	Yes	2500	107	106.8	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	488829	13C4-PFOS	558281	2500	Avg	0.396254				5524.22	5524.21	Yes	5000	110	110.5	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	267944	D5-NEtFOSAA	488829	5000	Avg	1.043077				2627.49	2627.49	Yes	2500	105	105.1	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	611365	13C4-PFOS	558281	2500	Avg	1.036214				2642.03	2642.03	Yes	2500	106	105.7	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	542117	13C8-PFOS	611365	2500	Avg	0.886401				2500.93	2500.93	Yes	2383	105	104.9	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	541143	13C8-PFOS	611365	2500	Avg	0.934293				2368.47	2368.47	Yes	2320	102	102.1	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	705221	13C8-PFOS	611365	2500	Avg	1.12962				2552.89	2552.89	Yes	2405	106	106.1	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	495453	13C2-PFDA	452607	1250	Avg	1.090348				1254.95	1254.95	Yes	1250	100	100.4	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	872662	13C7-PFUnA	495453	1250	Avg	0.852827				2581.62	2581.62	Yes	2500	103	103.3	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	540189	13C2-PFDA	452607	1250	Avg	1.058364				1409.61	1409.61	Yes	1250	113	112.8	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	784008	13C2-PFDoA	540189	1250	Avg	0.691664				2622.95	2622.95	Yes	2500	105	104.9	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	1024930	13C4-PFOS	558281	2500	Avg	1.770989				2591.59	2591.59	Yes	2500	104	103.7	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1000169	13C8-PFOSA	1024930	2500	Avg	0.902242				2703.93	2703.93	Yes	2500	108	108.2	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	489886	13C2-PFDA	452607	1250	Avg	0.976439				1385.6	1385.6	Yes	1250	111	110.8	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4174259	13C4-PFOS	558281	2500	Avg	0.714673				26155	26155.27	Yes	25000	105	104.6	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	251257	13C4-PFOS	558281	2500	Avg	0.435575				2583.11	2583.11	Yes	2500	103	103.3	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4823427	13C4-PFOS	558281	2500	Avg	0.798258				27058	27058.24	Yes	25000	108	108.2	Yes
092224C029.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	273808	13C4-PFOS	558281	2500	Avg	0.461946				2654.25	2654.25	Yes	2500	106	106.2	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3099080	13C3-PFBA	1223984	5000	Avg	1.161292				10901	10901.48	Yes	10000	109	109	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2654499	13C4-PFBA	3099080	10000	Avg	0.790145				10840	10840.34	Yes	10000	108	108.4	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1379576	13C2-PFHxA	750108	2500	Avg	0.828627				5548.85	5548.85	Yes	5000	111	111	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1236232	13C5-PFPeA	1379576	5000	Avg	0.845037				5302.11	5302.11	Yes	5000	106	106	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	218502	18O2-PFHxS	444409	2500	Avg	0.219423				5601.83	5601.84	Yes	5000	112	112	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	799454	13C2-4:2FTS	218502	5000	Avg	1.781468				10269	10269.04	Yes	9375	110	109.5	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	876019	13C2-PFHxA	750108	2500	Avg	1.121098				2604.27	2604.27	Yes	2500	104	104.2	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	775533	13C5-PFHxA	876019	2500	Avg	0.809879				2732.79	2732.79	Yes	2500	109	109.3	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	628802	18O2-PFHxS	444409	2500	Avg	1.313089				2693.87	2693.87	Yes	2500	108	107.8	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	670821	13C3-PFBS	628802	2500	Avg	1.143965				2331.42	2331.42	Yes	2218	105	105.1	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	671842	13C2-PFHxA	750108	2500	Avg	0.19845				11283	11283.2	Yes	10000	113	112.8	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	990417	13C2-PFHxA	750108	2500	Avg	1.194702				2762.96	2762.96	Yes	2500	111	110.5	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1049155	13C4-PFHpA	990417	2500	Avg	0.995725				2659.64	2659.64	Yes	2500	106	106.4	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	239522	18O2-PFHxS	444409	2500	Avg	0.237162				5681.43	5681.43	Yes	5000	114	113.6	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	901341	13C2-6:2FTS	239522	5000	Avg	1.761997				10678	10678.46	Yes	9500	112	112.4	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1148023	13C4-PFOA	144401	2500	Avg	7.142863				2782.58	2782.58	Yes	2500	111	111.3	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1058469	13C8-PFOA	1148023	2500	Avg	0.838198				2749.93	2749.93	Yes	2500	110	110	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	604969	18O2-PFHxS	444409	2500	Avg	1.219515				2790.63	2790.64	Yes	2500	112	111.6	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	665935	13C3-PFHxS	604969	2500	Avg	1.0639				2586.65	2586.65	Yes	2353	110	109.9	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	554938	13C3-PFHxS	604969	2500	Avg	1.030748				2224.84	2224.84	Yes	2285	97	97.4	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	586623	13C5-PFNA	669746	1250	Avg	0.86335				1268.15	1268.15	Yes	1250	101	101.5	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	973195	13C9-PFNA	586623	1250	Avg	0.776752				2669.74	2669.74	Yes	2500	107	106.8	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	197874	18O2-PFHxS	444409	2500	Avg	0.213504				5213.63	5213.63	Yes	5000	104	104.3	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	783596	13C2-8:2FTS	197874	5000	Avg	1.619153				12229	12228.85	Yes	9600	127	127.4	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	693326	13C4-PFOS	561986	2500	Avg	0.522181				5906.51	5906.51	Yes	5000	118	118.1	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	264373	D3-NMeFOSAA	693326	5000	Avg	0.711099				2681.14	2681.14	Yes	2500	107	107.2	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	557234	13C2-PFDA	466852	1250	Avg	1.19879				1244.59	1244.59	Yes	1250	100	99.6	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	956103	13C6-PFDA	557234	1250	Avg	0.773597				2772.44	2772.44	Yes	2500	111	110.9	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	488847	13C4-PFOS	561986	2500	Avg	0.396254				5488	5488	Yes	5000	110	109.8	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	298871	D5-NEtFOSAA	488847	5000	Avg	1.043077				2930.65	2930.65	Yes	2500	117	117.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	616529	13C4-PFOS	561986	2500	Avg	1.036214				2646.79	2646.78	Yes	2500	106	105.9	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	547357	13C8-PFOS	616529	2500	Avg	0.886401				2503.96	2503.96	Yes	2383	105	105.1	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	564574	13C8-PFOS	616529	2500	Avg	0.934293				2450.33	2450.33	Yes	2320	106	105.6	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	745072	13C8-PFOS	616529	2500	Avg	1.12962				2674.56	2674.56	Yes	2405	111	111.2	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	543819	13C2-PFDA	466852	1250	Avg	1.090348				1335.43	1335.43	Yes	1250	107	106.8	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	946873	13C7-PFUnA	543819	1250	Avg	0.852827				2552.04	2552.03	Yes	2500	102	102.1	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	506948	13C2-PFDA	466852	1250	Avg	1.058364				1282.51	1282.51	Yes	1250	103	102.6	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	778485	13C2-PFDoA	506948	1250	Avg	0.691664				2775.25	2775.25	Yes	2500	111	111	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	1062949	13C4-PFOS	561986	2500	Avg	1.770989				2670	2670	Yes	2500	107	106.8	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1050868	13C8-PFOSA	1062949	2500	Avg	0.902242				2739.38	2739.38	Yes	2500	110	109.6	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	491984	13C2-PFDA	466852	1250	Avg	0.976439				1349.08	1349.08	Yes	1250	108	107.9	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4263747	13C4-PFOS	561986	2500	Avg	0.714673				26540	26539.86	Yes	25000	106	106.2	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	257427	13C4-PFOS	561986	2500	Avg	0.435575				2629.09	2629.09	Yes	2500	105	105.2	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4679402	13C4-PFOS	561986	2500	Avg	0.798258				26077	26077.24	Yes	25000	104	104.3	Yes
092224C068.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	281129	13C4-PFOS	561986	2500	Avg	0.461946				2707.25	2707.25	Yes	2500	108	108.3	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3090579	13C3-PFBA	1276256	5000	Avg	1.161292				10426	10426.31	Yes	10000	104	104.3	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2656596	13C4-PFBA	3090579	10000	Avg	0.790145				10879	10878.75	Yes	10000	109	108.8	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1380686	13C2-PFHxA	800717	2500	Avg	0.828627				5202.32	5202.32	Yes	5000	104	104	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1249667	13C5-PFPeA	1380686	5000	Avg	0.845037				5355.42	5355.42	Yes	5000	107	107.1	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	218993	18O2-PFHxS	492155	2500	Avg	0.219423				5069.74	5069.75	Yes	5000	101	101.4	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	813301	13C2-4:2FTS	218993	5000	Avg	1.781468				10423	10423.49	Yes	9375	111	111.2	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	910397	13C2-PFHxA	800717	2500	Avg	1.121098				2535.41	2535.41	Yes	2500	101	101.4	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	805584	13C5-PFHxA	910397	2500	Avg	0.809879				2731.49	2731.49	Yes	2500	109	109.3	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	630688	18O2-PFHxS	492155	2500	Avg	1.313089				2439.82	2439.82	Yes	2500	98	97.6	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	701330	13C3-PFBS	630688	2500	Avg	1.143965				2430.16	2430.16	Yes	2218	110	109.6	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	674210	13C2-PFHxA	800717	2500	Avg	0.19845				10607	10607.3	Yes	10000	106	106.1	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	1003250	13C2-PFHxA	800717	2500	Avg	1.194702				2621.87	2621.87	Yes	2500	105	104.9	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1052148	13C4-PFHpA	1003250	2500	Avg	0.995725				2633.11	2633.11	Yes	2500	105	105.3	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	231089	18O2-PFHxS	492155	2500	Avg	0.237162				4949.63	4949.62	Yes	5000	99	99	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	918769	13C2-6:2FTS	231089	5000	Avg	1.761997				11282	11282.15	Yes	9500	119	118.8	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1209149	13C4-PFOA	163744	2500	Avg	7.142863				2584.53	2584.53	Yes	2500	103	103.4	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1073934	13C8-PFOA	1209149	2500	Avg	0.838198				2649.06	2649.06	Yes	2500	106	106	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	601656	18O2-PFHxS	492155	2500	Avg	1.219515				2506.1	2506.1	Yes	2500	100	100.2	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	669397	13C3-PFHxS	601656	2500	Avg	1.0639				2614.42	2614.42	Yes	2353	111	111.1	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	590277	13C3-PFHxS	601656	2500	Avg	1.030748				2379.55	2379.55	Yes	2285	104	104.1	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	629101	13C5-PFNA	682370	1250	Avg	0.86335				1334.82	1334.82	Yes	1250	107	106.8	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	1010636	13C9-PFNA	629101	1250	Avg	0.776752				2585.25	2585.25	Yes	2500	103	103.4	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	221712	18O2-PFHxS	492155	2500	Avg	0.213504				5274.99	5274.99	Yes	5000	105	105.5	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	730062	13C2-8:2FTS	221712	5000	Avg	1.619153				10168	10168.4	Yes	9600	106	105.9	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	651850	13C4-PFOS	603115	2500	Avg	0.522181				5174.47	5174.48	Yes	5000	103	103.5	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	262761	D3-NMeFOSAA	651850	5000	Avg	0.711099				2834.35	2834.35	Yes	2500	113	113.4	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	584859	13C2-PFDA	475944	1250	Avg	1.19879				1281.33	1281.33	Yes	1250	103	102.5	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	983571	13C6-PFDA	584859	1250	Avg	0.773597				2717.38	2717.38	Yes	2500	109	108.7	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	513757	13C4-PFOS	603115	2500	Avg	0.396254				5374.33	5374.33	Yes	5000	107	107.5	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	268211	D5-NEtFOSAA	513757	5000	Avg	1.043077				2502.49	2502.49	Yes	2500	100	100.1	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	612243	13C4-PFOS	603115	2500	Avg	1.036214				2449.14	2449.14	Yes	2500	98	98	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	559717	13C8-PFOS	612243	2500	Avg	0.886401				2578.43	2578.42	Yes	2383	108	108.2	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	568752	13C8-PFOS	612243	2500	Avg	0.934293				2485.74	2485.74	Yes	2320	107	107.1	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	772307	13C8-PFOS	612243	2500	Avg	1.12962				2791.73	2791.73	Yes	2405	116	116.1	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	531582	13C2-PFDA	475944	1250	Avg	1.090348				1280.44	1280.44	Yes	1250	102	102.4	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	926619	13C7-PFUnA	531582	1250	Avg	0.852827				2554.94	2554.94	Yes	2500	102	102.2	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	502285	13C2-PFDA	475944	1250	Avg	1.058364				1246.43	1246.43	Yes	1250	100	99.7	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	757955	13C2-PFDoA	502285	1250	Avg	0.691664				2727.14	2727.14	Yes	2500	109	109.1	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	1076249	13C4-PFOS	603115	2500	Avg	1.770989				2519.05	2519.05	Yes	2500	101	100.8	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1020031	13C8-PFOSA	1076249	2500	Avg	0.902242				2626.14	2626.14	Yes	2500	105	105	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	473150	13C2-PFDA	475944	1250	Avg	0.976439				1272.65	1272.65	Yes	1250	102	101.8	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4339636	13C4-PFOS	603115	2500	Avg	0.714673				25170	25170.15	Yes	25000	101	100.7	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	260663	13C4-PFOS	603115	2500	Avg	0.435575				2480.6	2480.6	Yes	2500	99	99.2	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4719135	13C4-PFOS	603115	2500	Avg	0.798258				24505	24505.24	Yes	25000	98	98	Yes
092224C085.d	CCV L5E_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	275334	13C4-PFOS	603115	2500	Avg	0.461946				2470.63	2470.63	Yes	2500	99	98.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3252584	13C3-PFBA	1288322	5000	Avg	1.161292				10870	10870.08	Yes	10000	109	108.7	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2707464	13C4-PFBA	3252584	10000	Avg	0.790145				10535	10534.83	Yes	10000	105	105.3	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1407558	13C2-PFHxA	784813	2500	Avg	0.828627				5411.05	5411.04	Yes	5000	108	108.2	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1263237	13C5-PFPeA	1407558	5000	Avg	0.845037				5310.23	5310.22	Yes	5000	106	106.2	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	225667	18O2-PFHxS	479654	2500	Avg	0.219423				5360.4	5360.41	Yes	5000	107	107.2	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	854859	13C2-4:2FTS	225667	5000	Avg	1.781468				10632	10632.08	Yes	9375	113	113.4	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	973643	13C2-PFHxA	784813	2500	Avg	1.121098				2766.5	2766.5	Yes	2500	111	110.7	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	845222	13C5-PFHxA	973643	2500	Avg	0.809879				2679.73	2679.73	Yes	2500	107	107.2	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	632883	18O2-PFHxS	479654	2500	Avg	1.313089				2512.12	2512.12	Yes	2500	100	100.5	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	699802	13C3-PFBS	632883	2500	Avg	1.143965				2416.46	2416.46	Yes	2218	109	108.9	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	702618	13C2-PFHxA	784813	2500	Avg	0.19845				11278	11278.26	Yes	10000	113	112.8	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	1050694	13C2-PFHxA	784813	2500	Avg	1.194702				2801.5	2801.5	Yes	2500	112	112.1	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1117836	13C4-PFHpA	1050694	2500	Avg	0.995725				2671.18	2671.18	Yes	2500	107	106.8	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	243729	18O2-PFHxS	479654	2500	Avg	0.237162				5356.42	5356.41	Yes	5000	107	107.1	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	949268	13C2-6:2FTS	243729	5000	Avg	1.761997				11052	11052.14	Yes	9500	116	116.3	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1246404	13C4-PFOA	164301	2500	Avg	7.142863				2655.13	2655.13	Yes	2500	106	106.2	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1052824	13C8-PFOA	1246404	2500	Avg	0.838198				2519.36	2519.36	Yes	2500	101	100.8	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	605430	18O2-PFHxS	479654	2500	Avg	1.219515				2587.55	2587.55	Yes	2500	104	103.5	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	660540	13C3-PFHxS	605430	2500	Avg	1.0639				2563.74	2563.74	Yes	2353	109	109	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	595700	13C3-PFHxS	605430	2500	Avg	1.030748				2386.44	2386.44	Yes	2285	104	104.4	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	643343	13C5-PFNA	654117	1250	Avg	0.86335				1424	1424	Yes	1250	114	113.9	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	1069569	13C9-PFNA	643343	1250	Avg	0.776752				2675.43	2675.43	Yes	2500	107	107	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	229315	18O2-PFHxS	479654	2500	Avg	0.213504				5598.07	5598.07	Yes	5000	112	112	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	767897	13C2-8:2FTS	229315	5000	Avg	1.619153				10341	10340.76	Yes	9600	108	107.7	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	683481	13C4-PFOS	517474	2500	Avg	0.522181				6323.49	6323.49	Yes	5000	126	126.5	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	252212	D3-NMeFOSAA	683481	5000	Avg	0.711099				2594.65	2594.65	Yes	2500	104	103.8	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	606458	13C2-PFDA	460500	1250	Avg	1.19879				1373.21	1373.21	Yes	1250	110	109.9	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	1053845	13C6-PFDA	606458	1250	Avg	0.773597				2807.83	2807.83	Yes	2500	112	112.3	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	536058	13C4-PFOS	517474	2500	Avg	0.396254				6535.67	6535.66	Yes	5000	131	130.7	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	279682	D5-NEtFOSAA	536058	5000	Avg	1.043077				2500.96	2500.96	Yes	2500	100	100	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	649023	13C4-PFOS	517474	2500	Avg	1.036214				3025.95	3025.95	Yes	2500	121	121	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	564365	13C8-PFOS	649023	2500	Avg	0.886401				2452.51	2452.5	Yes	2383	103	102.9	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	567983	13C8-PFOS	649023	2500	Avg	0.934293				2341.71	2341.7	Yes	2320	101	100.9	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	751947	13C8-PFOS	649023	2500	Avg	1.12962				2564.1	2564.1	Yes	2405	107	106.6	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	583194	13C2-PFDA	460500	1250	Avg	1.090348				1451.87	1451.87	Yes	1250	116	116.1	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	1009856	13C7-PFUnA	583194	1250	Avg	0.852827				2538.02	2538.02	Yes	2500	102	101.5	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	506141	13C2-PFDA	460500	1250	Avg	1.058364				1298.13	1298.13	Yes	1250	104	103.9	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	815467	13C2-PFDoA	506141	1250	Avg	0.691664				2911.72	2911.72	Yes	2500	116	116.5	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	1104232	13C4-PFOS	517474	2500	Avg	1.770989				3012.28	3012.28	Yes	2500	120	120.5	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1066307	13C8-PFOSA	1104232	2500	Avg	0.902242				2675.71	2675.71	Yes	2500	107	107	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	496618	13C2-PFDA	460500	1250	Avg	0.976439				1380.57	1380.57	Yes	1250	110	110.4	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4482631	13C4-PFOS	517474	2500	Avg	0.714673				30302	30302.4	Yes	25000	121	121.2	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	275229	13C4-PFOS	517474	2500	Avg	0.435575				3052.69	3052.69	Yes	2500	122	122.1	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4949659	13C4-PFOS	517474	2500	Avg	0.798258				29956	29955.98	Yes	25000	120	119.8	Yes
092224C133.d	CCV L5H_SCLV-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	288146	13C4-PFOS	517474	2500	Avg	0.461946				3013.51	3013.51	Yes	2500	121	120.5	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2119214	13C3-PFBA	840245	5000	Avg	1.14978				10968	10967.92	Yes	10000	110	109.7	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1955894	13C4-PFBA	2119214	10000	Avg	0.799533				11543	11543.41	Yes	10000	115	115.4	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	849600	13C2-PFHxA	425899	2500	Avg	0.912806				5463.48	5463.48	Yes	5000	109	109.3	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	931071	13C5-PFPeA	849600	5000	Avg	1.00198				5468.64	5468.64	Yes	5000	109	109.4	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	106341	18O2-PFHxS	289339	2500	Avg	0.174396				5268.63	5268.62	Yes	5000	105	105.4	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	329968	13C2-4:2FTS	106341	5000	Avg	1.561581				9935.2	9935.2	Yes	9375	106	106	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	496200	13C2-PFHxA	425899	2500	Avg	1.004407				2899.88	2899.88	Yes	2500	116	116	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	583517	13C5-PFHxA	496200	2500	Avg	1.138995				2581.16	2581.16	Yes	2500	103	103.2	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	465103	18O2-PFHxS	289339	2500	Avg	1.514202				2653.98	2653.98	Yes	2500	106	106.2	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	725871	13C3-PFBS	465103	2500	Avg	1.653717				2359.33	2359.33	Yes	2218	106	106.4	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	470832	13C2-PFHxA	425899	2500	Avg	0.258101				10708	10708.03	Yes	10000	107	107.1	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	435546	13C2-PFHxA	425899	2500	Avg	0.971591				2631.38	2631.38	Yes	2500	105	105.3	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	551767	13C4-PFHpA	435546	2500	Avg	1.086825				2914.08	2914.08	Yes	2500	117	116.6	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	135861	18O2-PFHxS	289339	2500	Avg	0.237573				4941.19	4941.18	Yes	5000	99	98.8	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	617764	13C2-6:2FTS	135861	5000	Ln	1.924681	-117			11873	11873.21	Yes	9500	125	125	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	520845	13C4-PFOA	108094	2500	Avg	4.183914				2879.15	2879.15	Yes	2500	115	115.2	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	660768	13C8-PFOA	520845	2500	Avg	1.102996				2875.46	2875.45	Yes	2500	115	115	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	339437	18O2-PFHxS	289339	2500	Avg	1.112944				2635.23	2635.23	Yes	2500	105	105.4	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	385804	13C3-PFHxS	339437	2500	Avg	1.02469				2773.03	2773.03	Yes	2353	118	117.9	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	333454	13C3-PFHxS	339437	2500	Avg	0.961146				2555.22	2555.21	Yes	2285	112	111.8	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	169229	13C5-PFNA	259226	1250	Avg	0.672232				1213.91	1213.91	Yes	1250	97	97.1	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	418593	13C9-PFNA	169229	1250	Avg	1.184726				2609.81	2609.81	Yes	2500	104	104.4	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	130284	18O2-PFHxS	289339	2500	Avg	0.217572				5173.93	5173.94	Yes	5000	103	103.5	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	453319	13C2-8:2FTS	130284	5000	Ln	1.582433	-143			11085	11084.41	Yes	9600	115	115.5	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	326315	13C4-PFOS	483545	2500	Avg	0.325783				5178.59	5178.59	Yes	5000	104	103.6	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	129430	D3-NMeFOSAA	326315	5000	Avg	0.714909				2774.07	2774.07	Yes	2500	111	111	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	213327	13C2-PFDA	192394	1250	Avg	0.940314				1473.98	1473.98	Yes	1250	118	117.9	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	427195	13C6-PFDA	213327	1250	Avg	0.958302				2612.09	2612.09	Yes	2500	104	104.5	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	316012	13C4-PFOS	483545	2500	Avg	0.345606				4727.44	4727.43	Yes	5000	95	94.5	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	159109	D5-NEtFOSAA	316012	5000	Avg	0.841671				2991.02	2991.02	Yes	2500	120	119.6	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	499326	13C4-PFOS	483545	2500	Avg	0.993393				2598.76	2598.76	Yes	2500	104	104	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	391511	13C8-PFOS	499326	2500	Avg	0.750488				2611.9	2611.9	Yes	2383	110	109.6	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	432605	13C8-PFOS	499326	2500	Avg	0.872096				2483.61	2483.61	Yes	2320	107	107.1	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	437853	13C8-PFOS	499326	2500	Avg	0.836875				2619.53	2619.53	Yes	2405	109	108.9	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	218050	13C2-PFDA	192394	1250	Avg	0.934831				1515.45	1515.45	Yes	1250	121	121.2	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	404839	13C7-PFUnA	218050	1250	Avg	0.930416				2494.36	2494.36	Yes	2500	100	99.8	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	172608	13C2-PFDA	192394	1250	Avg	0.793171				1413.88	1413.88	Yes	1250	113	113.1	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	224319	13C2-PFDoA	172608	1250	Avg	0.592818				2740.27	2740.27	Yes	2500	110	109.6	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	119553	13C2-PFDA	192394	1250	Avg	0.578567				1342.53	1342.53	Yes	1250	107	107.4	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	953977	13C4-PFOS	483545	2500	Avg	1.917495				2572.21	2572.21	Yes	2500	103	102.9	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1053536	13C8-PFOSA	953977	2500	Avg	0.98714				2796.87	2796.87	Yes	2500	112	111.9	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3445256	13C4-PFOS	483545	2500	Avg	0.709879				25092	25092.29	Yes	25000	100	100.4	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	220082	13C4-PFOS	483545	2500	Avg	0.446899				2546.11	2546.12	Yes	2500	102	101.8	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4337656	13C4-PFOS	483545	2500	Avg	0.877222				25565	25565.17	Yes	25000	102	102.3	Yes
092324B035.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	257651	13C4-PFOS	483545	2500	Avg	0.510919				2607.25	2607.25	Yes	2500	104	104.3	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2164448	13C3-PFBA	863075	5000	Avg	1.14978				10906	10905.71	Yes	10000	109	109.1	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1989107	13C4-PFBA	2164448	10000	Avg	0.799533				11494	11494.09	Yes	10000	115	114.9	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	844341	13C2-PFHxA	428679	2500	Avg	0.912806				5394.45	5394.45	Yes	5000	108	107.9	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	930356	13C5-PFPeA	844341	5000	Avg	1.00198				5498.47	5498.47	Yes	5000	110	110	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	104329	18O2-PFHxS	293917	2500	Avg	0.174396				5088.43	5088.43	Yes	5000	102	101.8	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	346409	13C2-4:2FTS	104329	5000	Avg	1.561581				10631	10631.38	Yes	9375	113	113.4	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	471110	13C2-PFHxA	428679	2500	Avg	1.004407				2735.4	2735.4	Yes	2500	109	109.4	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	578125	13C5-PFHxA	471110	2500	Avg	1.138995				2693.5	2693.5	Yes	2500	108	107.7	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	485952	18O2-PFHxS	293917	2500	Avg	1.514202				2729.76	2729.76	Yes	2500	109	109.2	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	738149	13C3-PFBS	485952	2500	Avg	1.653717				2296.3	2296.3	Yes	2218	104	103.5	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	499701	13C2-PFHxA	428679	2500	Avg	0.258101				11291	11290.89	Yes	10000	113	112.9	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	470874	13C2-PFHxA	428679	2500	Avg	0.971591				2826.37	2826.37	Yes	2500	113	113.1	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	520450	13C4-PFHpA	470874	2500	Avg	1.086825				2542.46	2542.46	Yes	2500	102	101.7	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	133562	18O2-PFHxS	293917	2500	Avg	0.237573				4781.91	4781.91	Yes	5000	96	95.6	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	586901	13C2-6:2FTS	133562	5000	Ln	1.924681	-117			11476	11476.24	Yes	9500	121	120.8	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	502103	13C4-PFOA	113678	2500	Avg	4.183914				2639.21	2639.21	Yes	2500	106	105.6	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	582775	13C8-PFOA	502103	2500	Avg	1.102996				2630.72	2630.72	Yes	2500	105	105.2	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	337387	18O2-PFHxS	293917	2500	Avg	1.112944				2578.52	2578.52	Yes	2500	103	103.1	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	362575	13C3-PFHxS	337387	2500	Avg	1.02469				2621.91	2621.91	Yes	2353	111	111.4	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	314285	13C3-PFHxS	337387	2500	Avg	0.961146				2422.96	2422.96	Yes	2285	106	106	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	177002	13C5-PFNA	247555	1250	Avg	0.672232				1329.53	1329.53	Yes	1250	106	106.4	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	461022	13C9-PFNA	177002	1250	Avg	1.184726				2748.12	2748.12	Yes	2500	110	109.9	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	130344	18O2-PFHxS	293917	2500	Avg	0.217572				5095.69	5095.69	Yes	5000	102	101.9	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	453409	13C2-8:2FTS	130344	5000	Ln	1.582433	-143			11082	11081.53	Yes	9600	115	115.4	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	353802	13C4-PFOS	444371	2500	Avg	0.325783				6109.79	6109.79	Yes	5000	122	122.2	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	127391	D3-NMeFOSAA	353802	5000	Avg	0.714909				2518.24	2518.24	Yes	2500	101	100.7	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	206117	13C2-PFDA	203852	1250	Avg	0.940314				1344.11	1344.11	Yes	1250	108	107.5	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	435339	13C6-PFDA	206117	1250	Avg	0.958302				2755	2755	Yes	2500	110	110.2	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	322458	13C4-PFOS	444371	2500	Avg	0.345606				5249.12	5249.12	Yes	5000	105	105	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	145390	D5-NEtFOSAA	322458	5000	Avg	0.841671				2678.49	2678.48	Yes	2500	107	107.1	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	498788	13C4-PFOS	444371	2500	Avg	0.993393				2824.81	2824.81	Yes	2500	113	113	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	380313	13C8-PFOS	498788	2500	Avg	0.750488				2539.93	2539.93	Yes	2383	107	106.6	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	421122	13C8-PFOS	498788	2500	Avg	0.872096				2420.29	2420.29	Yes	2320	104	104.3	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	429157	13C8-PFOS	498788	2500	Avg	0.836875				2570.28	2570.28	Yes	2405	107	106.9	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	198714	13C2-PFDA	203852	1250	Avg	0.934831				1303.44	1303.44	Yes	1250	104	104.3	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	409608	13C7-PFUnA	198714	1250	Avg	0.930416				2769.32	2769.32	Yes	2500	111	110.8	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	164182	13C2-PFDA	203852	1250	Avg	0.793171				1269.27	1269.27	Yes	1250	102	101.5	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	224047	13C2-PFDoA	164182	1250	Avg	0.592818				2877.42	2877.41	Yes	2500	115	115.1	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	131202	13C2-PFDA	203852	1250	Avg	0.578567				1390.54	1390.53	Yes	1250	111	111.2	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	954489	13C4-PFOS	444371	2500	Avg	1.917495				2800.47	2800.47	Yes	2500	112	112	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1016873	13C8-PFOSA	954489	2500	Avg	0.98714				2698.09	2698.09	Yes	2500	108	107.9	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3498191	13C4-PFOS	444371	2500	Avg	0.709879				27724	27723.85	Yes	25000	111	110.9	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	220674	13C4-PFOS	444371	2500	Avg	0.446899				2778.02	2778.02	Yes	2500	111	111.1	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4469569	13C4-PFOS	444371	2500	Avg	0.877222				28665	28664.9	Yes	25000	115	114.7	Yes
092324B050.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	258336	13C4-PFOS	444371	2500	Avg	0.510919				2844.64	2844.64	Yes	2500	114	113.8	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2108166	13C3-PFBA	839216	5000	Avg	1.14978				10924	10924.12	Yes	10000	109	109.2	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1929108	13C4-PFBA	2108166	10000	Avg	0.799533				11445	11444.99	Yes	10000	114	114.4	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	840999	13C2-PFHxA	441925	2500	Avg	0.912806				5212.05	5212.05	Yes	5000	104	104.2	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	956531	13C5-PFPeA	840999	5000	Avg	1.00198				5675.64	5675.64	Yes	5000	114	113.5	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	104945	18O2-PFHxS	282684	2500	Avg	0.174396				5321.87	5321.87	Yes	5000	106	106.4	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	325185	13C2-4:2FTS	104945	5000	Avg	1.561581				9921.43	9921.43	Yes	9375	106	105.8	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	483520	13C2-PFHxA	441925	2500	Avg	1.004407				2723.31	2723.3	Yes	2500	109	108.9	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	565130	13C5-PFHxA	483520	2500	Avg	1.138995				2565.38	2565.38	Yes	2500	103	102.6	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	448030	18O2-PFHxS	282684	2500	Avg	1.514202				2616.75	2616.75	Yes	2500	105	104.7	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	710160	13C3-PFBS	448030	2500	Avg	1.653717				2396.23	2396.23	Yes	2218	108	108	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	469277	13C2-PFHxA	441925	2500	Avg	0.258101				10286	10285.63	Yes	10000	103	102.9	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	451907	13C2-PFHxA	441925	2500	Avg	0.971591				2631.22	2631.22	Yes	2500	105	105.2	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	526107	13C4-PFHpA	451907	2500	Avg	1.086825				2677.97	2677.97	Yes	2500	107	107.1	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	136638	18O2-PFHxS	282684	2500	Avg	0.237573				5086.44	5086.43	Yes	5000	102	101.7	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	603556	13C2-6:2FTS	136638	5000	Ln	1.924681	-117			11536	11535.91	Yes	9500	121	121.4	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	512830	13C4-PFOA	113291	2500	Avg	4.183914				2704.8	2704.8	Yes	2500	108	108.2	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	590450	13C8-PFOA	512830	2500	Avg	1.102996				2609.61	2609.61	Yes	2500	104	104.4	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	322793	18O2-PFHxS	282684	2500	Avg	1.112944				2565.01	2565.01	Yes	2500	103	102.6	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	354195	13C3-PFHxS	322793	2500	Avg	1.02469				2677.11	2677.11	Yes	2353	114	113.8	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	315042	13C3-PFHxS	322793	2500	Avg	0.961146				2538.61	2538.6	Yes	2285	111	111.1	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	174282	13C5-PFNA	217795	1250	Avg	0.672232				1487.97	1487.97	Yes	1250	119	119	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	417285	13C9-PFNA	174282	1250	Avg	1.184726				2526.23	2526.23	Yes	2500	101	101	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	136206	18O2-PFHxS	282684	2500	Avg	0.217572				5536.45	5536.46	Yes	5000	111	110.7	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	395770	13C2-8:2FTS	136206	5000	Ln	1.582433	-143			9271.8	9271.4	Yes	9600	97	96.6	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	335017	13C4-PFOS	434220	2500	Avg	0.325783				5920.64	5920.64	Yes	5000	118	118.4	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	121929	D3-NMeFOSAA	335017	5000	Avg	0.714909				2545.42	2545.42	Yes	2500	102	101.8	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	192446	13C2-PFDA	190225	1250	Avg	0.940314				1344.86	1344.86	Yes	1250	108	107.6	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	393074	13C6-PFDA	192446	1250	Avg	0.958302				2664.24	2664.24	Yes	2500	107	106.6	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	302150	13C4-PFOS	434220	2500	Avg	0.345606				5033.52	5033.52	Yes	5000	101	100.7	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	134251	D5-NEtFOSAA	302150	5000	Avg	0.841671				2639.51	2639.51	Yes	2500	106	105.6	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	484142	13C4-PFOS	434220	2500	Avg	0.993393				2805.96	2805.96	Yes	2500	112	112.2	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	379179	13C8-PFOS	484142	2500	Avg	0.750488				2608.96	2608.96	Yes	2383	109	109.5	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	403756	13C8-PFOS	484142	2500	Avg	0.872096				2390.68	2390.68	Yes	2320	103	103	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	431774	13C8-PFOS	484142	2500	Avg	0.836875				2664.18	2664.18	Yes	2405	111	110.8	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	205550	13C2-PFDA	190225	1250	Avg	0.934831				1444.86	1444.86	Yes	1250	116	115.6	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	398439	13C7-PFUnA	205550	1250	Avg	0.930416				2604.22	2604.22	Yes	2500	104	104.2	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	162410	13C2-PFDA	190225	1250	Avg	0.793171				1345.52	1345.51	Yes	1250	108	107.6	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	220409	13C2-PFDoA	162410	1250	Avg	0.592818				2861.58	2861.58	Yes	2500	114	114.5	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	127958	13C2-PFDA	190225	1250	Avg	0.578567				1453.3	1453.3	Yes	1250	116	116.3	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	944166	13C4-PFOS	434220	2500	Avg	1.917495				2834.94	2834.94	Yes	2500	113	113.4	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	979615	13C8-PFOSA	944166	2500	Avg	0.98714				2627.66	2627.65	Yes	2500	105	105.1	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3527039	13C4-PFOS	434220	2500	Avg	0.709879				28606	28605.93	Yes	25000	114	114.4	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	208832	13C4-PFOS	434220	2500	Avg	0.446899				2690.4	2690.41	Yes	2500	108	107.6	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4380562	13C4-PFOS	434220	2500	Avg	0.877222				28751	28750.84	Yes	25000	115	115	Yes
092324B064.d	CCV L5C_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	254471	13C4-PFOS	434220	2500	Avg	0.510919				2867.59	2867.59	Yes	2500	115	114.7	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2115564	13C3-PFBA	841760	5000	Avg	1.14978				10929	10929.32	Yes	10000	109	109.3	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1943794	13C4-PFBA	2115564	10000	Avg	0.799533				11492	11491.79	Yes	10000	115	114.9	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	841292	13C2-PFHxA	423009	2500	Avg	0.912806				5447.01	5447.02	Yes	5000	109	108.9	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	923537	13C5-PFPeA	841292	5000	Avg	1.00198				5477.96	5477.96	Yes	5000	110	109.6	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	103969	18O2-PFHxS	319303	2500	Avg	0.174396				4667.72	4667.72	Yes	5000	93	93.4	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	356323	13C2-4:2FTS	103969	5000	Avg	1.561581				10974	10973.51	Yes	9375	117	117.1	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	454174	13C2-PFHxA	423009	2500	Avg	1.004407				2672.41	2672.41	Yes	2500	107	106.9	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	589805	13C5-PFHxA	454174	2500	Avg	1.138995				2850.39	2850.39	Yes	2500	114	114	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	462981	18O2-PFHxS	319303	2500	Avg	1.514202				2393.96	2393.96	Yes	2500	96	95.8	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	748292	13C3-PFBS	462981	2500	Avg	1.653717				2443.36	2443.36	Yes	2218	110	110.2	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	502854	13C2-PFHxA	423009	2500	Avg	0.258101				11514	11514.43	Yes	10000	115	115.1	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	455219	13C2-PFHxA	423009	2500	Avg	0.971591				2769.03	2769.03	Yes	2500	111	110.8	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	543677	13C4-PFHpA	455219	2500	Avg	1.086825				2747.27	2747.27	Yes	2500	110	109.9	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	142644	18O2-PFHxS	319303	2500	Avg	0.237573				4701.04	4701.03	Yes	5000	94	94	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	570385	13C2-6:2FTS	142644	5000	Ln	1.924681	-117			10449	10448.64	Yes	9500	110	110	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	528219	13C4-PFOA	108387	2500	Avg	4.183914				2912.02	2912.02	Yes	2500	116	116.5	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	601128	13C8-PFOA	528219	2500	Avg	1.102996				2579.4	2579.4	Yes	2500	103	103.2	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	349052	18O2-PFHxS	319303	2500	Avg	1.112944				2455.58	2455.58	Yes	2500	98	98.2	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	386405	13C3-PFHxS	349052	2500	Avg	1.02469				2700.85	2700.85	Yes	2353	115	114.8	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	323196	13C3-PFHxS	349052	2500	Avg	0.961146				2408.39	2408.39	Yes	2285	105	105.4	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	173406	13C5-PFNA	239448	1250	Avg	0.672232				1346.62	1346.62	Yes	1250	108	107.7	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	452480	13C9-PFNA	173406	1250	Avg	1.184726				2753.13	2753.13	Yes	2500	110	110.1	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	122393	18O2-PFHxS	319303	2500	Avg	0.217572				4404.43	4404.44	Yes	5000	88	88.1	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	442932	13C2-8:2FTS	122393	5000	Ln	1.582433	-143			11525	11525.08	Yes	9600	120	120.1	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	332492	13C4-PFOS	467113	2500	Avg	0.325783				5462.24	5462.24	Yes	5000	109	109.2	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	135981	D3-NMeFOSAA	332492	5000	Avg	0.714909				2860.33	2860.33	Yes	2500	114	114.4	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	209181	13C2-PFDA	201746	1250	Avg	0.940314				1378.33	1378.33	Yes	1250	110	110.3	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	405312	13C6-PFDA	209181	1250	Avg	0.958302				2527.4	2527.41	Yes	2500	101	101.1	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	317853	13C4-PFOS	467113	2500	Avg	0.345606				4922.25	4922.24	Yes	5000	98	98.4	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	156759	D5-NEtFOSAA	317853	5000	Avg	0.841671				2929.77	2929.77	Yes	2500	117	117.2	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	501335	13C4-PFOS	467113	2500	Avg	0.993393				2701	2701	Yes	2500	108	108	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	383756	13C8-PFOS	501335	2500	Avg	0.750488				2549.9	2549.9	Yes	2383	107	107	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	404492	13C8-PFOS	501335	2500	Avg	0.872096				2312.9	2312.9	Yes	2320	100	99.7	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	444433	13C8-PFOS	501335	2500	Avg	0.836875				2648.24	2648.24	Yes	2405	110	110.1	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	222585	13C2-PFDA	201746	1250	Avg	0.934831				1475.26	1475.26	Yes	1250	118	118	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	411020	13C7-PFUnA	222585	1250	Avg	0.930416				2480.85	2480.85	Yes	2500	99	99.2	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	194476	13C2-PFDA	201746	1250	Avg	0.793171				1519.16	1519.16	Yes	1250	122	121.5	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	234860	13C2-PFDoA	194476	1250	Avg	0.592818				2546.43	2546.43	Yes	2500	102	101.9	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	154484	13C2-PFDA	201746	1250	Avg	0.578567				1654.38	1654.38	Yes	1250	132	132.4	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	1079310	13C4-PFOS	467113	2500	Avg	1.917495				3012.52	3012.52	Yes	2500	121	120.5	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1195515	13C8-PFOSA	1079310	2500	Avg	0.98714				2805.24	2805.24	Yes	2500	112	112.2	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3902235	13C4-PFOS	467113	2500	Avg	0.709879				29420	29420.3	Yes	25000	118	117.7	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	234317	13C4-PFOS	467113	2500	Avg	0.446899				2806.16	2806.16	Yes	2500	112	112.2	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	6293797	13C4-PFOS	467113	2500	Avg	0.877222				38399	38399.12	Yes	25000	154	153.6	Yes
092324B084.d	CCV L5D_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	283039	13C4-PFOS	467113	2500	Avg	0.510919				2964.91	2964.92	Yes	2500	119	118.6	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2136286	13C3-PFBA	847008	5000	Avg	1.14978				10968	10967.99	Yes	10000	110	109.7	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1953664	13C4-PFBA	2136286	10000	Avg	0.799533				11438	11438.11	Yes	10000	114	114.4	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	837709	13C2-PFHxA	403932	2500	Avg	0.912806				5679.97	5679.98	Yes	5000	114	113.6	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	930356	13C5-PFPeA	837709	5000	Avg	1.00198				5542	5542.01	Yes	5000	111	110.8	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	102530	18O2-PFHxS	287498	2500	Avg	0.174396				5112.34	5112.34	Yes	5000	102	102.2	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	328463	13C2-4:2FTS	102530	5000	Avg	1.561581				10257	10257.49	Yes	9375	109	109.4	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	487376	13C2-PFHxA	403932	2500	Avg	1.004407				3003.21	3003.21	Yes	2500	120	120.1	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	545511	13C5-PFHxA	487376	2500	Avg	1.138995				2456.73	2456.73	Yes	2500	98	98.3	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	469589	18O2-PFHxS	287498	2500	Avg	1.514202				2696.74	2696.74	Yes	2500	108	107.9	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	704270	13C3-PFBS	469589	2500	Avg	1.653717				2267.25	2267.25	Yes	2218	102	102.2	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	483275	13C2-PFHxA	403932	2500	Avg	0.258101				11589	11588.74	Yes	10000	116	115.9	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	464058	13C2-PFHxA	403932	2500	Avg	0.971591				2956.11	2956.11	Yes	2500	118	118.2	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	540427	13C4-PFHpA	464058	2500	Avg	1.086825				2678.83	2678.83	Yes	2500	107	107.2	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	142950	18O2-PFHxS	287498	2500	Avg	0.237573				5232.3	5232.3	Yes	5000	105	104.6	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	558387	13C2-6:2FTS	142950	5000	Ln	1.924681	-117			10209	10208.37	Yes	9500	107	107.5	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	553110	13C4-PFOA	100408	2500	Avg	4.183914				3291.55	3291.55	Yes	2500	132	131.7	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	564574	13C8-PFOA	553110	2500	Avg	1.102996				2313.53	2313.53	Yes	2500	93	92.5	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	337392	18O2-PFHxS	287498	2500	Avg	1.112944				2636.13	2636.13	Yes	2500	105	105.4	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	371669	13C3-PFHxS	337392	2500	Avg	1.02469				2687.63	2687.63	Yes	2353	114	114.2	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	329880	13C3-PFHxS	337392	2500	Avg	0.961146				2543.15	2543.15	Yes	2285	111	111.3	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	179431	13C5-PFNA	245664	1250	Avg	0.672232				1358.15	1358.15	Yes	1250	109	108.7	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	417530	13C9-PFNA	179431	1250	Avg	1.184726				2455.17	2455.17	Yes	2500	98	98.2	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	146344	18O2-PFHxS	287498	2500	Avg	0.217572				5848.93	5848.94	Yes	5000	117	117	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	435414	13C2-8:2FTS	146344	5000	Ln	1.582433	-143			9491.73	9491.33	Yes	9600	99	98.9	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	339902	13C4-PFOS	447122	2500	Avg	0.325783				5833.63	5833.64	Yes	5000	117	116.7	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	125081	D3-NMeFOSAA	339902	5000	Avg	0.714909				2573.69	2573.69	Yes	2500	103	102.9	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	201477	13C2-PFDA	196261	1250	Avg	0.940314				1364.67	1364.67	Yes	1250	109	109.2	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	417717	13C6-PFDA	201477	1250	Avg	0.958302				2704.36	2704.36	Yes	2500	108	108.2	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	299863	13C4-PFOS	447122	2500	Avg	0.345606				4851.28	4851.27	Yes	5000	97	97	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	149343	D5-NEtFOSAA	299863	5000	Avg	0.841671				2958.62	2958.62	Yes	2500	118	118.3	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	482151	13C4-PFOS	447122	2500	Avg	0.993393				2713.79	2713.79	Yes	2500	109	108.6	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	373571	13C8-PFOS	482151	2500	Avg	0.750488				2580.99	2580.99	Yes	2383	108	108.3	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	399497	13C8-PFOS	482151	2500	Avg	0.872096				2375.23	2375.23	Yes	2320	102	102.4	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	420344	13C8-PFOS	482151	2500	Avg	0.836875				2604.36	2604.36	Yes	2405	108	108.3	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	204719	13C2-PFDA	196261	1250	Avg	0.934831				1394.77	1394.77	Yes	1250	112	111.6	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	393927	13C7-PFUnA	204719	1250	Avg	0.930416				2585.18	2585.18	Yes	2500	103	103.4	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	163721	13C2-PFDA	196261	1250	Avg	0.793171				1314.66	1314.66	Yes	1250	105	105.2	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	223305	13C2-PFDoA	163721	1250	Avg	0.592818				2875.96	2875.96	Yes	2500	115	115	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	124912	13C2-PFDA	196261	1250	Avg	0.578567				1375.08	1375.08	Yes	1250	110	110	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	942369	13C4-PFOS	447122	2500	Avg	1.917495				2747.9	2747.9	Yes	2500	110	109.9	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1002959	13C8-PFOSA	942369	2500	Avg	0.98714				2695.4	2695.4	Yes	2500	108	107.8	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3394817	13C4-PFOS	447122	2500	Avg	0.709879				26739	26739.05	Yes	25000	107	107	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	217127	13C4-PFOS	447122	2500	Avg	0.446899				2716.55	2716.55	Yes	2500	109	108.7	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4350244	13C4-PFOS	447122	2500	Avg	0.877222				27728	27727.97	Yes	25000	111	110.9	Yes
092324B111.d	CCV L5F_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	256830	13C4-PFOS	447122	2500	Avg	0.510919				2810.66	2810.66	Yes	2500	112	112.4	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2048519	13C3-PFBA	815692	5000	Avg	1.14978				10921	10921.17	Yes	10000	109	109.2	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1891171	13C4-PFBA	2048519	10000	Avg	0.799533				11547	11546.61	Yes	10000	115	115.5	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	831950	13C2-PFHxA	410838	2500	Avg	0.912806				5546.1	5546.11	Yes	5000	111	110.9	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	892604	13C5-PFPeA	831950	5000	Avg	1.00198				5353.93	5353.93	Yes	5000	107	107.1	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	95580	18O2-PFHxS	282639	2500	Avg	0.174396				4847.73	4847.73	Yes	5000	97	97	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	323032	13C2-4:2FTS	95580	5000	Avg	1.561581				10821	10821.41	Yes	9375	115	115.4	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	437575	13C2-PFHxA	410838	2500	Avg	1.004407				2651.02	2651.01	Yes	2500	106	106	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	537490	13C5-PFHxA	437575	2500	Avg	1.138995				2696.1	2696.1	Yes	2500	108	107.8	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	424845	18O2-PFHxS	282639	2500	Avg	1.514202				2481.73	2481.73	Yes	2500	99	99.3	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	692740	13C3-PFBS	424845	2500	Avg	1.653717				2465.01	2465.01	Yes	2218	111	111.1	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	463149	13C2-PFHxA	410838	2500	Avg	0.258101				10919	10919.44	Yes	10000	109	109.2	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	451125	13C2-PFHxA	410838	2500	Avg	0.971591				2825.42	2825.42	Yes	2500	113	113	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	538439	13C4-PFHpA	451125	2500	Avg	1.086825				2745.49	2745.49	Yes	2500	110	109.8	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	128417	18O2-PFHxS	282639	2500	Avg	0.237573				4781.17	4781.16	Yes	5000	96	95.6	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	542137	13C2-6:2FTS	128417	5000	Ln	1.924681	-117			11028	11028.04	Yes	9500	116	116.1	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	497817	13C4-PFOA	100966	2500	Avg	4.183914				2946.13	2946.13	Yes	2500	118	117.8	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	547343	13C8-PFOA	497817	2500	Avg	1.102996				2492.05	2492.05	Yes	2500	100	99.7	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	324376	18O2-PFHxS	282639	2500	Avg	1.112944				2578	2578	Yes	2500	103	103.1	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	365483	13C3-PFHxS	324376	2500	Avg	1.02469				2748.95	2748.94	Yes	2353	117	116.8	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	305304	13C3-PFHxS	324376	2500	Avg	0.961146				2448.13	2448.13	Yes	2285	107	107.1	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	161819	13C5-PFNA	233465	1250	Avg	0.672232				1288.84	1288.84	Yes	1250	103	103.1	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	412953	13C9-PFNA	161819	1250	Avg	1.184726				2692.55	2692.55	Yes	2500	108	107.7	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	128050	18O2-PFHxS	282639	2500	Avg	0.217572				5205.76	5205.76	Yes	5000	104	104.1	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	439204	13C2-8:2FTS	128050	5000	Ln	1.582433	-143			10928	10927.92	Yes	9600	114	113.8	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	323428	13C4-PFOS	437702	2500	Avg	0.325783				5670.36	5670.36	Yes	5000	113	113.4	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	120329	D3-NMeFOSAA	323428	5000	Avg	0.714909				2602.03	2602.03	Yes	2500	104	104.1	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	201915	13C2-PFDA	179928	1250	Avg	0.940314				1491.79	1491.79	Yes	1250	119	119.3	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	370314	13C6-PFDA	201915	1250	Avg	0.958302				2392.26	2392.26	Yes	2500	96	95.7	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	295109	13C4-PFOS	437702	2500	Avg	0.345606				4877.12	4877.11	Yes	5000	98	97.5	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	133099	D5-NEtFOSAA	295109	5000	Avg	0.841671				2679.29	2679.29	Yes	2500	107	107.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	471378	13C4-PFOS	437702	2500	Avg	0.993393				2710.25	2710.25	Yes	2500	108	108.4	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	389398	13C8-PFOS	471378	2500	Avg	0.750488				2751.83	2751.82	Yes	2383	115	115.5	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	405530	13C8-PFOS	471378	2500	Avg	0.872096				2466.2	2466.21	Yes	2320	106	106.3	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	418703	13C8-PFOS	471378	2500	Avg	0.836875				2653.48	2653.48	Yes	2405	110	110.3	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	199880	13C2-PFDA	179928	1250	Avg	0.934831				1485.41	1485.41	Yes	1250	119	118.8	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	381632	13C7-PFUnA	199880	1250	Avg	0.930416				2565.12	2565.12	Yes	2500	103	102.6	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	161293	13C2-PFDA	179928	1250	Avg	0.793171				1412.73	1412.73	Yes	1250	113	113	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	222909	13C2-PFDoA	161293	1250	Avg	0.592818				2914.08	2914.07	Yes	2500	117	116.6	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	116238	13C2-PFDA	179928	1250	Avg	0.578567				1395.74	1395.74	Yes	1250	112	111.7	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	900209	13C4-PFOS	437702	2500	Avg	1.917495				2681.46	2681.46	Yes	2500	107	107.3	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	931441	13C8-PFOSA	900209	2500	Avg	0.98714				2620.43	2620.43	Yes	2500	105	104.8	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3283124	13C4-PFOS	437702	2500	Avg	0.709879				26416	26415.84	Yes	25000	106	105.7	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	209591	13C4-PFOS	437702	2500	Avg	0.446899				2678.7	2678.7	Yes	2500	107	107.1	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4248917	13C4-PFOS	437702	2500	Avg	0.877222				27665	27664.97	Yes	25000	111	110.7	Yes
092324B118.d	CCV L5G_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	250690	13C4-PFOS	437702	2500	Avg	0.510919				2802.5	2802.51	Yes	2500	112	112.1	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2189965	13C3-PFBA	853590	5000	Avg	1.153035				11125	11125.39	Yes	10000	111	111.3	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1971285	13C4-PFBA	2189965	10000	Avg	0.798354				11275	11275	Yes	10000	113	112.8	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	853730	13C2-PFHxA	428532	2500	Avg	0.891292				5588.01	5588.01	Yes	5000	112	111.8	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	934189	13C5-PFPeA	853730	5000	Avg	1.018879				5369.84	5369.84	Yes	5000	107	107.4	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	102246	18O2-PFHxS	289806	2500	Avg	0.16784				5255.13	5255.13	Yes	5000	105	105.1	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	330525	13C2-4:2FTS	102246	5000	Avg	1.621025				9970.99	9970.99	Yes	9375	106	106.4	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	465000	13C2-PFHxA	428532	2500	Avg	0.983356				2758.66	2758.66	Yes	2500	110	110.3	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	579891	13C5-PFHxA	465000	2500	Avg	1.153986				2701.67	2701.67	Yes	2500	108	108.1	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	471134	18O2-PFHxS	289806	2500	Avg	1.4649				2774.4	2774.4	Yes	2500	111	111	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	743951	13C3-PFBS	471134	2500	Avg	1.649991				2392.54	2392.54	Yes	2218	108	107.9	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	494294	13C2-PFHxA	428532	2500	Avg	0.255296				11295	11295.31	Yes	10000	113	113	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	459205	13C2-PFHxA	428532	2500	Avg	0.972655				2754.26	2754.26	Yes	2500	110	110.2	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	536204	13C4-PFHpA	459205	2500	Avg	1.095097				2665.7	2665.7	Yes	2500	107	106.6	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	146203	18O2-PFHxS	289806	2500	Avg	0.235608				5353.02	5353.02	Yes	5000	107	107.1	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	593700	13C2-6:2FTS	146203	5000	Avg	1.87751				10814	10814.3	Yes	9500	114	113.8	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	530853	13C4-PFOA	107653	2500	Avg	4.359235				2827.99	2827.99	Yes	2500	113	113.1	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	608625	13C8-PFOA	530853	2500	Avg	1.129938				2536.65	2536.65	Yes	2500	101	101.5	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	349709	18O2-PFHxS	289806	2500	Avg	1.087071				2775.12	2775.12	Yes	2500	111	111	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	352228	13C3-PFHxS	349709	2500	Avg	1.036407				2429.55	2429.56	Yes	2353	103	103.3	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	319260	13C3-PFHxS	349709	2500	Avg	0.948151				2407.13	2407.13	Yes	2285	105	105.3	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	182241	13C5-PFNA	251625	1250	Avg	0.681638				1328.16	1328.15	Yes	1250	106	106.3	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	421027	13C9-PFNA	182241	1250	Avg	1.15809				2493.63	2493.63	Yes	2500	100	99.7	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	139591	18O2-PFHxS	289806	2500	Avg	0.22089				5451.48	5451.47	Yes	5000	109	109	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	466526	13C2-8:2FTS	139591	5000	Avg	1.486942				11238	11238.14	Yes	9600	117	117.1	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	303794	13C4-PFOS	440542	2500	Avg	0.319821				5390.44	5390.45	Yes	5000	108	107.8	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	125725	D3-NMeFOSAA	303794	5000	Avg	0.724285				2856.95	2856.95	Yes	2500	114	114.3	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	210357	13C2-PFDA	200396	1250	Avg	0.949905				1381.33	1381.33	Yes	1250	111	110.5	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	429743	13C6-PFDA	210357	1250	Avg	0.945859				2699.83	2699.82	Yes	2500	108	108	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	317511	13C4-PFOS	440542	2500	Avg	0.294766				6112.71	6112.71	Yes	5000	122	122.3	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	141473	D5-NEtFOSAA	317511	5000	Avg	0.91407				2437.28	2437.28	Yes	2500	97	97.5	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	499320	13C4-PFOS	440542	2500	Avg	0.984793				2877.31	2877.31	Yes	2500	115	115.1	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	370819	13C8-PFOS	499320	2500	Avg	0.747625				2483.36	2483.36	Yes	2383	104	104.2	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	406468	13C8-PFOS	499320	2500	Avg	0.870004				2339.19	2339.19	Yes	2320	101	100.8	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	402457	13C8-PFOS	499320	2500	Avg	0.82691				2436.81	2436.81	Yes	2405	101	101.3	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	207784	13C2-PFDA	200396	1250	Avg	0.997704				1299.07	1299.07	Yes	1250	104	103.9	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	402404	13C7-PFUnA	207784	1250	Avg	0.893971				2707.93	2707.93	Yes	2500	108	108.3	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	174060	13C2-PFDA	200396	1250	Avg	0.795406				1365	1365	Yes	1250	109	109.2	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	210859	13C2-PFDoA	174060	1250	Avg	0.599359				2526.48	2526.48	Yes	2500	101	101.1	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	130200	13C2-PFDA	200396	1250	Avg	0.588079				1381.01	1381.01	Yes	1250	110	110.5	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	968303	13C4-PFOS	440542	2500	Avg	1.895997				2898.19	2898.19	Yes	2500	116	115.9	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1011755	13C8-PFOSA	968303	2500	Avg	0.985796				2649.82	2649.82	Yes	2500	106	106	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3502485	13C4-PFOS	440542	2500	Avg	0.700486				28375	28374.58	Yes	25000	113	113.5	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	215927	13C4-PFOS	440542	2500	Avg	0.437202				2802.71	2802.71	Yes	2500	112	112.1	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4357437	13C4-PFOS	440542	2500	Avg	0.870998				28390	28390.08	Yes	25000	114	113.6	Yes
092424A028.d	CCV L5A_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	252463	13C4-PFOS	440542	2500	Avg	0.508417				2817.93	2817.93	Yes	2500	113	112.7	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2168273	13C3-PFBA	865215	5000	Avg	1.153035				10867	10867.19	Yes	10000	109	108.7	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1960707	13C4-PFBA	2168273	10000	Avg	0.798354				11327	11326.7	Yes	10000	113	113.3	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	838976	13C2-PFHxA	423530	2500	Avg	0.891292				5556.29	5556.3	Yes	5000	111	111.1	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	931574	13C5-PFPeA	838976	5000	Avg	1.018879				5448.98	5448.98	Yes	5000	109	109	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	101524	18O2-PFHxS	286027	2500	Avg	0.16784				5286.96	5286.96	Yes	5000	106	105.7	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	331079	13C2-4:2FTS	101524	5000	Avg	1.621025				10059	10058.73	Yes	9375	107	107.3	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	484494	13C2-PFHxA	423530	2500	Avg	0.983356				2908.26	2908.26	Yes	2500	116	116.3	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	579243	13C5-PFHxA	484494	2500	Avg	1.153986				2590.07	2590.07	Yes	2500	104	103.6	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	466987	18O2-PFHxS	286027	2500	Avg	1.4649				2786.31	2786.31	Yes	2500	111	111.5	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	704483	13C3-PFBS	466987	2500	Avg	1.649991				2285.73	2285.73	Yes	2218	103	103.1	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	485945	13C2-PFHxA	423530	2500	Avg	0.255296				11236	11235.67	Yes	10000	112	112.4	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	476922	13C2-PFHxA	423530	2500	Avg	0.972655				2894.31	2894.31	Yes	2500	116	115.8	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	527669	13C4-PFHpA	476922	2500	Avg	1.095097				2525.82	2525.82	Yes	2500	101	101	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	141805	18O2-PFHxS	286027	2500	Avg	0.235608				5260.59	5260.59	Yes	5000	105	105.2	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	602730	13C2-6:2FTS	141805	5000	Avg	1.87751				11319	11319.29	Yes	9500	119	119.2	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	550248	13C4-PFOA	109372	2500	Avg	4.359235				2885.24	2885.24	Yes	2500	115	115.4	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	562171	13C8-PFOA	550248	2500	Avg	1.129938				2260.45	2260.45	Yes	2500	90	90.4	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	347698	18O2-PFHxS	286027	2500	Avg	1.087071				2795.61	2795.61	Yes	2500	112	111.8	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	374338	13C3-PFHxS	347698	2500	Avg	1.036407				2597	2597	Yes	2353	110	110.4	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	318158	13C3-PFHxS	347698	2500	Avg	0.948151				2412.7	2412.7	Yes	2285	106	105.6	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	160172	13C5-PFNA	212911	1250	Avg	0.681638				1379.57	1379.57	Yes	1250	110	110.4	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	400812	13C9-PFNA	160172	1250	Avg	1.15809				2700.98	2700.98	Yes	2500	108	108	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	132963	18O2-PFHxS	286027	2500	Avg	0.22089				5261.24	5261.24	Yes	5000	105	105.2	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	407918	13C2-8:2FTS	132963	5000	Avg	1.486942				10316	10316.16	Yes	9600	107	107.5	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	310699	13C4-PFOS	461659	2500	Avg	0.319821				5260.79	5260.8	Yes	5000	105	105.2	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	122555	D3-NMeFOSAA	310699	5000	Avg	0.724285				2723.03	2723.03	Yes	2500	109	108.9	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	196982	13C2-PFDA	186642	1250	Avg	0.949905				1388.82	1388.82	Yes	1250	111	111.1	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	417316	13C6-PFDA	196982	1250	Avg	0.945859				2799.77	2799.77	Yes	2500	112	112	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	316232	13C4-PFOS	461659	2500	Avg	0.294766				5809.6	5809.61	Yes	5000	116	116.2	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	141895	D5-NEtFOSAA	316232	5000	Avg	0.91407				2454.44	2454.44	Yes	2500	98	98.2	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	485075	13C4-PFOS	461659	2500	Avg	0.984793				2667.37	2667.37	Yes	2500	107	106.7	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	362187	13C8-PFOS	485075	2500	Avg	0.747625				2496.78	2496.78	Yes	2383	105	104.8	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	410192	13C8-PFOS	485075	2500	Avg	0.870004				2429.95	2429.95	Yes	2320	105	104.7	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	433841	13C8-PFOS	485075	2500	Avg	0.82691				2703.98	2703.98	Yes	2405	112	112.4	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	211807	13C2-PFDA	186642	1250	Avg	0.997704				1421.8	1421.8	Yes	1250	114	113.7	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	391294	13C7-PFUnA	211807	1250	Avg	0.893971				2583.15	2583.15	Yes	2500	103	103.3	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	174759	13C2-PFDA	186642	1250	Avg	0.795406				1471.47	1471.47	Yes	1250	118	117.7	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	205811	13C2-PFDoA	174759	1250	Avg	0.599359				2456.13	2456.13	Yes	2500	98	98.2	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	118828	13C2-PFDA	186642	1250	Avg	0.588079				1353.27	1353.27	Yes	1250	108	108.3	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	926584	13C4-PFOS	461659	2500	Avg	1.895997				2646.46	2646.46	Yes	2500	106	105.9	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1007367	13C8-PFOSA	926584	2500	Avg	0.985796				2757.12	2757.12	Yes	2500	110	110.3	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3403189	13C4-PFOS	461659	2500	Avg	0.700486				26309	26309.06	Yes	25000	105	105.2	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	209659	13C4-PFOS	461659	2500	Avg	0.437202				2596.87	2596.87	Yes	2500	104	103.9	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4436583	13C4-PFOS	461659	2500	Avg	0.870998				27584	27583.55	Yes	25000	110	110.3	Yes
092424A037.d	CCV L5B_SVLC-4091	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	252456	13C4-PFOS	461659	2500	Avg	0.508417				2688.96	2688.96	Yes	2500	108	107.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2215170	13C3-PFBA	907847	5000	Avg	1.136894				10731	10731.1	Yes	10000	107	107.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1997210	13C4-PFBA	2215170	10000	Avg	0.895963				10063	10062.98	Yes	10000	101	100.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	858841	13C2-PFHxA	455297	2500	Avg	0.891167				5291.75	5291.74	Yes	5000	106	105.8	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	956775	13C5-PFPeA	858841	5000	Avg	1.104878				5041.42	5041.42	Yes	5000	101	100.8	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	102549	18O2-PFHxS	295388	2500	Avg	0.164935				5262.17	5262.18	Yes	5000	105	105.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	349281	13C2-4:2FTS	102549	5000	Avg	1.754213				9708.03	9708.03	Yes	9375	104	103.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	508560	13C2-PFHxA	455297	2500	Avg	0.967301				2886.86	2886.86	Yes	2500	115	115.5	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	606225	13C5-PFHxA	508560	2500	Avg	1.287042				2315.47	2315.47	Yes	2500	93	92.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	465268	18O2-PFHxS	295388	2500	Avg	1.453938				2708.35	2708.35	Yes	2500	108	108.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	787673	13C3-PFBS	465268	2500	Avg	1.820068				2325.39	2325.39	Yes	2218	105	104.8	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	539030	13C2-PFHxA	455297	2500	Avg	0.256272				11549	11549.34	Yes	10000	115	115.5	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	496411	13C2-PFHxA	455297	2500	Avg	0.991907				2747.99	2747.99	Yes	2500	110	109.9	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	565679	13C4-PFHpA	496411	2500	Avg	1.191595				2390.78	2390.78	Yes	2500	96	95.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	151504	18O2-PFHxS	295388	2500	Avg	0.219087				5852.69	5852.68	Yes	5000	117	117.1	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	594809	13C2-6:2FTS	151504	5000	Avg	2.148719				9135.74	9135.74	Yes	9500	96	96.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	572494	13C4-PFOA	109653	2500	Avg	4.175238				3126.15	3126.15	Yes	2500	125	125	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	655283	13C8-PFOA	572494	2500	Avg	1.257832				2274.97	2274.97	Yes	2500	91	91	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	340971	18O2-PFHxS	295388	2500	Avg	1.069919				2697.2	2697.2	Yes	2500	108	107.9	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	403432	13C3-PFHxS	340971	2500	Avg	1.189606				2486.51	2486.51	Yes	2353	106	105.7	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	322600	13C3-PFHxS	340971	2500	Avg	1.051753				2248.92	2248.92	Yes	2285	98	98.4	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	187744	13C5-PFNA	223669	1250	Avg	0.749868				1399.22	1399.22	Yes	1250	112	111.9	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	436819	13C9-PFNA	187744	1250	Avg	1.347846				2157.77	2157.77	Yes	2500	86	86.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	146722	18O2-PFHxS	295388	2500	Avg	0.206645				6009.21	6009.21	Yes	5000	120	120.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	453650	13C2-8:2FTS	146722	5000	Avg	1.765809				8754.92	8754.92	Yes	9600	91	91.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	328734	13C4-PFOS	456109	2500	Avg	0.360298				5000.97	5000.97	Yes	5000	100	100	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	124942	D3-NMeFOSAA	328734	5000	Ln	0.747099	13.759			2525.22	2525.22	Yes	2500	101	101	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	250520	13C2-PFDA	214487	1250	Avg	0.917163				1591.86	1591.86	Yes	1250	127	127.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	489938	13C6-PFDA	250520	1250	Avg	1.072259				2279.86	2279.86	Yes	2500	91	91.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	414625	13C4-PFOS	456109	2500	Avg	0.377269				6023.87	6023.87	Yes	5000	120	120.5	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	197173	D5-NEtFOSAA	414625	5000	Avg	0.928484				2560.87	2560.87	Yes	2500	102	102.4	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	468853	13C4-PFOS	456109	2500	Avg	0.93405				2751.3	2751.3	Yes	2500	110	110.1	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	401195	13C8-PFOS	468853	2500	Ln	0.918199	26.9149			2300.5	2300.51	Yes	2383	97	96.5	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	420351	13C8-PFOS	468853	2500	Avg	1.000521				2240.21	2240.21	Yes	2320	97	96.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	422943	13C8-PFOS	468853	2500	Avg	1.038139				2172.35	2172.35	Yes	2405	90	90.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	195737	13C2-PFDA	214487	1250	Avg	0.734493				1553.08	1553.08	Yes	1250	124	124.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	406372	13C7-PFUnA	195737	1250	Avg	0.968723				2678.93	2678.93	Yes	2500	107	107.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	178158	13C2-PFDA	214487	1250	Avg	0.66531				1560.6	1560.6	Yes	1250	125	124.8	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	240333	13C2-PFDoA	178158	1250	Avg	0.659525				2556.74	2556.74	Yes	2500	102	102.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	1004275	13C4-PFOS	456109	2500	Avg	1.926242				2857.68	2857.68	Yes	2500	114	114.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1038491	13C8-PFOSA	1004275	2500	Avg	1.101995				2345.91	2345.91	Yes	2500	94	93.8	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	133875	13C2-PFDA	214487	1250	Avg	0.514737				1515.73	1515.73	Yes	1250	121	121.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3823023	13C4-PFOS	456109	2500	Avg	0.747197				28044	28044.21	Yes	25000	112	112.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	216347	13C4-PFOS	456109	2500	Avg	0.468708				2529.99	2530	Yes	2500	101	101.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4700849	13C4-PFOS	456109	2500	Avg	0.967764				26624	26624.3	Yes	25000	106	106.5	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	268358	13C4-PFOS	456109	2500	Avg	0.548881				2679.83	2679.83	Yes	2500	107	107.2	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1881119	13C3-PFBA	786983	5000	Avg	1.136894				10512	10512.38	Yes	10000	105	105.1	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1728359	13C4-PFBA	1881119	10000	Avg	0.895963				10255	10254.81	Yes	10000	103	102.5	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	705464	13C2-PFHxA	385476	2500	Avg	0.891167				5134.03	5134.03	Yes	5000	103	102.7	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	816042	13C5-PFPeA	705464	5000	Avg	1.104878				5234.72	5234.72	Yes	5000	105	104.7	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	86087	18O2-PFHxS	237224	2500	Avg	0.164935				5500.54	5500.55	Yes	5000	110	110	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	314650	13C2-4:2FTS	86087	5000	Avg	1.754213				10418	10417.84	Yes	9375	111	111.1	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	402671	13C2-PFHxA	385476	2500	Avg	0.967301				2699.8	2699.8	Yes	2500	108	108	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	500004	13C5-PFHxA	402671	2500	Avg	1.287042				2411.96	2411.96	Yes	2500	96	96.5	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	391628	18O2-PFHxS	237224	2500	Avg	1.453938				2838.63	2838.63	Yes	2500	114	113.5	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	691741	13C3-PFBS	391628	2500	Avg	1.820068				2426.18	2426.18	Yes	2218	109	109.4	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	440861	13C2-PFHxA	385476	2500	Avg	0.256272				11157	11156.89	Yes	10000	112	111.6	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	365143	13C2-PFHxA	385476	2500	Avg	0.991907				2387.45	2387.45	Yes	2500	95	95.5	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	508205	13C4-PFHpA	365143	2500	Avg	1.191595				2920.03	2920.03	Yes	2500	117	116.8	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	115573	18O2-PFHxS	237224	2500	Avg	0.219087				5559.32	5559.31	Yes	5000	111	111.2	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	529415	13C2-6:2FTS	115573	5000	Avg	2.148719				10659	10659.34	Yes	9500	112	112.2	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	461567	13C4-PFOA	103073	2500	Avg	4.175238				2681.32	2681.32	Yes	2500	107	107.3	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	549597	13C8-PFOA	461567	2500	Avg	1.257832				2366.61	2366.61	Yes	2500	95	94.7	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	275558	18O2-PFHxS	237224	2500	Avg	1.069919				2714.21	2714.21	Yes	2500	109	108.6	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	340116	13C3-PFHxS	275558	2500	Avg	1.189606				2593.89	2593.89	Yes	2353	110	110.2	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	275688	13C3-PFHxS	275558	2500	Avg	1.051753				2378.1	2378.11	Yes	2285	104	104.1	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	150103	13C5-PFNA	186424	1250	Avg	0.749868				1342.19	1342.19	Yes	1250	107	107.4	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	382750	13C9-PFNA	150103	1250	Avg	1.347846				2364.81	2364.81	Yes	2500	95	94.6	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	108055	18O2-PFHxS	237224	2500	Avg	0.206645				5510.63	5510.63	Yes	5000	110	110.2	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	391864	13C2-8:2FTS	108055	5000	Avg	1.765809				10269	10268.73	Yes	9600	107	107	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	293308	13C4-PFOS	392528	2500	Avg	0.360298				5184.79	5184.79	Yes	5000	104	103.7	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	110877	D3-NMeFOSAA	293308	5000	Ln	0.747099	13.759			2511.52	2511.52	Yes	2500	100	100.5	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	195662	13C2-PFDA	189540	1250	Avg	0.917163				1406.92	1406.92	Yes	1250	113	112.6	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	374703	13C6-PFDA	195662	1250	Avg	1.072259				2232.5	2232.5	Yes	2500	89	89.3	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	330246	13C4-PFOS	392528	2500	Avg	0.377269				5575.14	5575.14	Yes	5000	112	111.5	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	150247	D5-NEtFOSAA	330246	5000	Avg	0.928484				2449.99	2449.99	Yes	2500	98	98	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	373853	13C4-PFOS	392528	2500	Avg	0.93405				2549.18	2549.18	Yes	2500	102	102	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	339568	13C8-PFOS	373853	2500	Ln	0.918199	26.9149			2443.72	2443.72	Yes	2383	103	102.5	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	367029	13C8-PFOS	373853	2500	Avg	1.000521				2453.09	2453.09	Yes	2320	106	105.7	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	376795	13C8-PFOS	373853	2500	Avg	1.038139				2427.11	2427.11	Yes	2405	101	100.9	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	166909	13C2-PFDA	189540	1250	Avg	0.734493				1498.65	1498.65	Yes	1250	120	119.9	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	344059	13C7-PFUnA	166909	1250	Avg	0.968723				2659.89	2659.89	Yes	2500	106	106.4	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	149492	13C2-PFDA	189540	1250	Avg	0.66531				1481.85	1481.85	Yes	1250	119	118.5	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	191838	13C2-PFDoA	149492	1250	Avg	0.659525				2432.18	2432.18	Yes	2500	97	97.3	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	784207	13C4-PFOS	392528	2500	Avg	1.926242				2592.92	2592.92	Yes	2500	104	103.7	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	867355	13C8-PFOSA	784207	2500	Avg	1.101995				2509.15	2509.15	Yes	2500	100	100.4	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	106369	13C2-PFDA	189540	1250	Avg	0.514737				1362.82	1362.82	Yes	1250	109	109	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2973414	13C4-PFOS	392528	2500	Avg	0.747197				25345	25344.84	Yes	25000	101	101.4	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	181084	13C4-PFOS	392528	2500	Avg	0.468708				2460.63	2460.63	Yes	2500	98	98.4	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3817380	13C4-PFOS	392528	2500	Avg	0.967764				25123	25122.64	Yes	25000	100	100.5	Yes
092524074.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	217540	13C4-PFOS	392528	2500	Avg	0.548881				2524.24	2524.24	Yes	2500	101	101	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2988100	13C3-PFBA	1266103	5000	Avg	1.150256				10259	10258.92	Yes	10000	103	102.6	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2666885	13C4-PFBA	2988100	10000	Avg	0.860777				10369	10368.56	Yes	10000	104	103.7	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1301755	13C2-PFHxA	749454	2500	Avg	0.795934				5455.66	5455.66	Yes	5000	109	109.1	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1201627	13C5-PFPeA	1301755	5000	Avg	0.921502				5008.57	5008.57	Yes	5000	100	100.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	167192	18O2-PFHxS	431621	2500	Avg	0.18253				5305.4	5305.41	Yes	5000	106	106.1	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	693782	13C2-4:2FTS	167192	5000	Avg	1.989363				10429	10429.5	Yes	9375	111	111.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	830461	13C2-PFHxA	749454	2500	Avg	1.087908				2546.37	2546.37	Yes	2500	102	101.9	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	770340	13C5-PFHxA	830461	2500	Avg	0.90903				2551.09	2551.09	Yes	2500	102	102	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	580049	18O2-PFHxS	431621	2500	Avg	1.317939				2549.22	2549.22	Yes	2500	102	102	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	701203	13C3-PFBS	580049	2500	Avg	1.269173				2381.21	2381.21	Yes	2218	107	107.4	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	609940	13C2-PFHxA	749454	2500	Avg	0.192552				10567	10566.57	Yes	10000	106	105.7	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	988918	13C2-PFHxA	749454	2500	Avg	1.191993				2767.46	2767.46	Yes	2500	111	110.7	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1042155	13C4-PFHpA	988918	2500	Avg	1.08709				2423.52	2423.52	Yes	2500	97	96.9	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	223936	18O2-PFHxS	431621	2500	Avg	0.205065				6325.13	6325.14	Yes	5000	127	126.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	870022	13C2-6:2FTS	223936	5000	Avg	2.126484				9263.28	9263.28	Yes	9500	98	97.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1150479	13C4-PFOA	152045	2500	Avg	6.935128				2727.67	2727.67	Yes	2500	109	109.1	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1023490	13C8-PFOA	1150479	2500	Avg	0.884977				2513.12	2513.12	Yes	2500	101	100.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	548628	18O2-PFHxS	431621	2500	Avg	1.159703				2740.11	2740.11	Yes	2500	110	109.6	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	630486	13C3-PFHxS	548628	2500	Avg	1.183053				2428.47	2428.47	Yes	2353	103	103.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	540484	13C3-PFHxS	548628	2500	Avg	1.151233				2139.35	2139.35	Yes	2285	94	93.6	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	563696	13C5-PFNA	614761	1250	Avg	0.884789				1295.42	1295.42	Yes	1250	104	103.6	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	975183	13C9-PFNA	563696	1250	Avg	0.839373				2576.3	2576.3	Yes	2500	103	103.1	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	227193	18O2-PFHxS	431621	2500	Avg	0.201772				6521.86	6521.86	Yes	5000	130	130.4	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	794922	13C2-8:2FTS	227193	5000	Avg	1.818805				9618.64	9618.63	Yes	9600	100	100.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	642636	13C4-PFOS	593456	2500	Avg	0.460729				5875.86	5875.85	Yes	5000	118	117.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	259452	D3-NMeFOSAA	642636	5000	Avg	0.822512				2454.26	2454.26	Yes	2500	98	98.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	540100	13C2-PFDA	453734	1250	Avg	1.142396				1302.46	1302.47	Yes	1250	104	104.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	930731	13C6-PFDA	540100	1250	Avg	0.862667				2496.99	2496.99	Yes	2500	100	99.9	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	518688	13C4-PFOS	593456	2500	Avg	0.363285				6014.64	6014.65	Yes	5000	120	120.3	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	310025	D5-NEtFOSAA	518688	5000	Avg	1.058985				2822.09	2822.09	Yes	2500	113	112.9	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	594079	13C4-PFOS	593456	2500	Avg	1.0092				2479.81	2479.81	Yes	2500	99	99.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	542792	13C8-PFOS	594079	2500	Avg	0.875705				2608.38	2608.38	Yes	2383	109	109.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	602123	13C8-PFOS	594079	2500	Avg	0.972082				2606.62	2606.62	Yes	2320	112	112.4	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	693551	13C8-PFOS	594079	2500	Avg	1.079883				2702.7	2702.7	Yes	2405	112	112.4	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	499182	13C2-PFDA	453734	1250	Avg	1.021306				1346.52	1346.52	Yes	1250	108	107.7	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	911923	13C7-PFUnA	499182	1250	Avg	0.941499				2425.43	2425.43	Yes	2500	97	97	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	461167	13C2-PFDA	453734	1250	Avg	0.966171				1314.96	1314.96	Yes	1250	105	105.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	711008	13C2-PFDoA	461167	1250	Avg	0.765454				2517.72	2517.72	Yes	2500	101	100.7	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	914622	13C4-PFOS	593456	2500	Avg	1.46881				2623.18	2623.18	Yes	2500	105	104.9	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	934120	13C8-PFOSA	914622	2500	Avg	1.008917				2530.73	2530.73	Yes	2500	101	101.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	414677	13C2-PFDA	453734	1250	Avg	0.890895				1282.31	1282.31	Yes	1250	103	102.6	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4157637	13C4-PFOS	593456	2500	Avg	0.602535				29068	29068.04	Yes	25000	116	116.3	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	250988	13C4-PFOS	593456	2500	Avg	0.374254				2825.13	2825.13	Yes	2500	113	113	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4544942	13C4-PFOS	593456	2500	Avg	0.664194				28826	28826.03	Yes	25000	115	115.3	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	264328	13C4-PFOS	593456	2500	Avg	0.398062				2797.33	2797.33	Yes	2500	112	111.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2954013	13C3-PFBA	1250763	5000	Avg	1.150256				10266	10266.27	Yes	10000	103	102.7	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2642901	13C4-PFBA	2954013	10000	Avg	0.860777				10394	10393.88	Yes	10000	104	103.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1275354	13C2-PFHxA	758118	2500	Avg	0.795934				5283.93	5283.93	Yes	5000	106	105.7	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1190771	13C5-PFPeA	1275354	5000	Avg	0.921502				5066.07	5066.07	Yes	5000	101	101.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	174147	18O2-PFHxS	497283	2500	Avg	0.18253				4796.42	4796.43	Yes	5000	96	95.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	681170	13C2-4:2FTS	174147	5000	Avg	1.989363				9830.95	9830.95	Yes	9375	105	104.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	841121	13C2-PFHxA	758118	2500	Avg	1.087908				2549.58	2549.59	Yes	2500	102	102	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	773461	13C5-PFHxA	841121	2500	Avg	0.90903				2528.96	2528.96	Yes	2500	101	101.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	589198	18O2-PFHxS	497283	2500	Avg	1.317939				2247.51	2247.51	Yes	2500	90	89.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	696284	13C3-PFBS	589198	2500	Avg	1.269173				2327.79	2327.79	Yes	2218	105	105	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	625555	13C2-PFHxA	758118	2500	Avg	0.192552				10713	10713.24	Yes	10000	107	107.1	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	941118	13C2-PFHxA	758118	2500	Avg	1.191993				2603.6	2603.6	Yes	2500	104	104.1	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1057720	13C4-PFHpA	941118	2500	Avg	1.08709				2584.65	2584.65	Yes	2500	103	103.4	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	209613	18O2-PFHxS	497283	2500	Avg	0.205065				5138.81	5138.82	Yes	5000	103	102.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	861344	13C2-6:2FTS	209613	5000	Avg	2.126484				9799.67	9799.67	Yes	9500	103	103.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	981871	13C4-PFOA	149042	2500	Avg	6.935128				2374.82	2374.82	Yes	2500	95	95	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	993113	13C8-PFOA	981871	2500	Avg	0.884977				2857.28	2857.28	Yes	2500	114	114.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	544973	18O2-PFHxS	497283	2500	Avg	1.159703				2362.46	2362.46	Yes	2500	94	94.5	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	607966	13C3-PFHxS	544973	2500	Avg	1.183053				2357.44	2357.44	Yes	2353	100	100.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	606357	13C3-PFHxS	544973	2500	Avg	1.151233				2416.19	2416.19	Yes	2285	106	105.7	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	546917	13C5-PFNA	666044	1250	Avg	0.884789				1160.08	1160.08	Yes	1250	93	92.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	1009459	13C9-PFNA	546917	1250	Avg	0.839373				2748.67	2748.67	Yes	2500	110	109.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	195116	18O2-PFHxS	497283	2500	Avg	0.201772				4861.48	4861.48	Yes	5000	97	97.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	764410	13C2-8:2FTS	195116	5000	Avg	1.818805				10770	10770.04	Yes	9600	112	112.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	640912	13C4-PFOS	577640	2500	Avg	0.460729				6020.54	6020.54	Yes	5000	120	120.4	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	239897	D3-NMeFOSAA	640912	5000	Avg	0.822512				2275.38	2275.38	Yes	2500	91	91	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	530848	13C2-PFDA	465353	1250	Avg	1.142396				1248.19	1248.19	Yes	1250	100	99.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	955242	13C6-PFDA	530848	1250	Avg	0.862667				2607.41	2607.41	Yes	2500	104	104.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	469829	13C4-PFOS	577640	2500	Avg	0.363285				5597.25	5597.26	Yes	5000	112	111.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	253601	D5-NEtFOSAA	469829	5000	Avg	1.058985				2548.54	2548.54	Yes	2500	102	101.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	596733	13C4-PFOS	577640	2500	Avg	1.0092				2559.09	2559.09	Yes	2500	102	102.4	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	529425	13C8-PFOS	596733	2500	Avg	0.875705				2532.83	2532.83	Yes	2383	106	106.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	542757	13C8-PFOS	596733	2500	Avg	0.972082				2339.17	2339.17	Yes	2320	101	100.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	685735	13C8-PFOS	596733	2500	Avg	1.079883				2660.36	2660.35	Yes	2405	111	110.6	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	509972	13C2-PFDA	465353	1250	Avg	1.021306				1341.28	1341.28	Yes	1250	107	107.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	905390	13C7-PFUnA	509972	1250	Avg	0.941499				2357.11	2357.11	Yes	2500	94	94.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	458614	13C2-PFDA	465353	1250	Avg	0.966171				1275.03	1275.03	Yes	1250	102	102	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	693601	13C2-PFDoA	458614	1250	Avg	0.765454				2469.75	2469.75	Yes	2500	99	98.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	939834	13C4-PFOS	577640	2500	Avg	1.46881				2769.29	2769.29	Yes	2500	111	110.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	936853	13C8-PFOSA	939834	2500	Avg	1.008917				2470.05	2470.05	Yes	2500	99	98.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	398643	13C2-PFDA	465353	1250	Avg	0.890895				1201.95	1201.95	Yes	1250	96	96.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3950541	13C4-PFOS	577640	2500	Avg	0.602535				28376	28376.38	Yes	25000	114	113.5	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	223334	13C4-PFOS	577640	2500	Avg	0.374254				2582.69	2582.68	Yes	2500	103	103.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4253561	13C4-PFOS	577640	2500	Avg	0.664194				27717	27716.63	Yes	25000	111	110.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	247006	13C4-PFOS	577640	2500	Avg	0.398062				2685.59	2685.59	Yes	2500	107	107.4	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2266921	13C3-PFBA	1026089	5000	Avg	1.132459				9754.36	9754.36	Yes	10000	98	97.54	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	872928	13C2-PFHxA	510286	2500	Avg	0.88245				4846.35	4846.35	Yes	5000	97	96.93	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	106302	18O2-PFHxS	342367	2500	Avg	0.169914				4568.36	4568.36	Yes	5000	91	91.37	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	497176	13C2-PFHxA	510286	2500	Avg	0.99614				2445.21	2445.21	Yes	2500	98	97.81	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	487575	18O2-PFHxS	342367	2500	Avg	1.445824				2462.49	2462.49	Yes	2500	98	98.5	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	528214	13C2-PFHxA	510286	2500	Avg	0.253851				10194	10194.3	Yes	10000	102	101.9	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	474301	13C2-PFHxA	510286	2500	Avg	0.963985				2410.52	2410.52	Yes	2500	96	96.42	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	161629	18O2-PFHxS	342367	2500	Avg	0.227833				5180.26	5180.25	Yes	5000	104	103.6	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	580043	13C4-PFOA	126057	2500	Avg	4.051267				2839.5	2839.5	Yes	2500	114	113.6	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	347349	18O2-PFHxS	342367	2500	Avg	1.06234				2387.54	2387.54	Yes	2500	96	95.5	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	184293	13C5-PFNA	285866	1250	Avg	0.659954				1221.08	1221.08	Yes	1250	98	97.69	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	143904	18O2-PFHxS	342367	2500	Avg	0.220738				4760.4	4760.4	Yes	5000	95	95.21	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	355749	13C4-PFOS	554944	2500	Avg	0.32346				4954.66	4954.66	Yes	5000	99	99.09	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	214883	13C2-PFDA	234663	1250	Avg	0.956495				1196.7	1196.7	Yes	1250	96	95.74	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	329241	13C4-PFOS	554944	2500	Avg	0.319265				4645.72	4645.72	Yes	5000	93	92.91	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092124B122.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	515834	13C4-PFOS	554944	2500	Avg	0.983323				2363.22	2363.22	Yes	2500	95	94.53	Yes
092124B122.d	CCB A7	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	24107	13C8-PFOS	515834	2500	Avg	0.891307		0.01	131.08	1.3108	1.3108	Yes				
092124B122.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	217776	13C2-PFDA	234663	1250	Avg	0.950697				1220.21	1220.21	Yes	1250	98	97.62	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	180426	13C2-PFDA	234663	1250	Avg	0.795811				1207.69	1207.69	Yes	1250	97	96.62	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	130559	13C2-PFDA	234663	1250	Avg	0.593931				1170.94	1170.94	Yes	1250	94	93.68	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	983733	13C4-PFOS	554944	2500	Avg	1.890633				2344.02	2344.02	Yes	2500	94	93.76	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3648781	13C4-PFOS	554944	2500	Avg	0.699585				23496	23496.23	Yes	25000	94	93.98	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	232049	13C4-PFOS	554944	2500	Avg	0.446776				2339.81	2339.81	Yes	2500	94	93.59	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4732330	13C4-PFOS	554944	2500	Avg	0.887621				24018	24018.08	Yes	25000	96	96.07	Yes
092124B122.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	272595	13C4-PFOS	554944	2500	Avg	0.512381				2396.71	2396.71	Yes	2500	96	95.87	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2260897	13C3-PFBA	1025267	5000	Avg	1.132459				9736.24	9736.24	Yes	10000	97	97.36	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	894864	13C2-PFHxA	524048	2500	Avg	0.88245				4837.67	4837.67	Yes	5000	97	96.75	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	109560	18O2-PFHxS	357872	2500	Avg	0.169914				4504.38	4504.38	Yes	5000	90	90.09	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	495222	13C2-PFHxA	524048	2500	Avg	0.99614				2371.64	2371.64	Yes	2500	95	94.87	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	498459	18O2-PFHxS	357872	2500	Avg	1.445824				2408.39	2408.39	Yes	2500	96	96.34	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	513197	13C2-PFHxA	524048	2500	Avg	0.253851				9644.38	9644.38	Yes	10000	96	96.44	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	487735	13C2-PFHxA	524048	2500	Avg	0.963985				2413.7	2413.7	Yes	2500	97	96.55	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	152478	18O2-PFHxS	357872	2500	Avg	0.227833				4675.23	4675.23	Yes	5000	94	93.5	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	556108	13C4-PFOA	124596	2500	Avg	4.051267				2754.26	2754.26	Yes	2500	110	110.2	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	342872	18O2-PFHxS	357872	2500	Avg	1.06234				2254.66	2254.66	Yes	2500	90	90.19	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	188676	13C5-PFNA	300401	1250	Avg	0.659954				1189.63	1189.63	Yes	1250	95	95.17	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	142783	18O2-PFHxS	357872	2500	Avg	0.220738				4518.67	4518.68	Yes	5000	90	90.37	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	348318	13C4-PFOS	560423	2500	Avg	0.32346				4803.74	4803.74	Yes	5000	96	96.07	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	227836	13C2-PFDA	239367	1250	Avg	0.956495				1243.9	1243.9	Yes	1250	100	99.51	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	320283	13C4-PFOS	560423	2500	Avg	0.319265				4475.14	4475.14	Yes	5000	90	89.5	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	532909	13C4-PFOS	560423	2500	Avg	0.983323				2417.58	2417.58	Yes	2500	97	96.7	Yes
092124B137.d	CCB A8	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	7578	13C8-PFOS	532909	2500	Avg	0.891307		0.01	39.885	0.39885	0.3989	Yes				
092124B137.d	CCB A8	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	223584	13C2-PFDA	239367	1250	Avg	0.950697				1228.13	1228.13	Yes	1250	98	98.25	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	182825	13C2-PFDA	239367	1250	Avg	0.795811				1199.7	1199.7	Yes	1250	96	95.98	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	138457	13C2-PFDA	239367	1250	Avg	0.593931				1217.38	1217.38	Yes	1250	97	97.39	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1019042	13C4-PFOS	560423	2500	Avg	1.890633				2404.41	2404.41	Yes	2500	96	96.18	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3717278	13C4-PFOS	560423	2500	Avg	0.699585				23703	23703.29	Yes	25000	95	94.81	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	234984	13C4-PFOS	560423	2500	Avg	0.446776				2346.24	2346.24	Yes	2500	94	93.85	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4807617	13C4-PFOS	560423	2500	Avg	0.887621				24162	24161.64	Yes	25000	97	96.65	Yes
092124B137.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	270901	13C4-PFOS	560423	2500	Avg	0.512381				2358.53	2358.53	Yes	2500	94	94.34	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3080848	13C3-PFBA	1270634	5000	Avg	1.161292				10439	10439.47	Yes	10000	104	104.4	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	12652	13C4-PFBA	3080848	10000	Avg	0.790145		0.01	51.974	0.51974	0.5197	Yes				
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1353644	13C2-PFHxA	809244	2500	Avg	0.828627				5046.68	5046.68	Yes	5000	101	100.9	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	219124	18O2-PFHxS	448586	2500	Avg	0.219423				5565.47	5565.47	Yes	5000	111	111.3	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	907811	13C2-PFHxA	809244	2500	Avg	1.121098				2501.57	2501.57	Yes	2500	100	100.1	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	635942	18O2-PFHxS	448586	2500	Avg	1.313089				2699.09	2699.09	Yes	2500	108	108	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	668954	13C2-PFHxA	809244	2500	Avg	0.19845				10414	10413.71	Yes	10000	104	104.1	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	957220	13C2-PFHxA	809244	2500	Avg	1.194702				2475.21	2475.21	Yes	2500	99	99.01	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	220889	18O2-PFHxS	448586	2500	Avg	0.237162				5190.67	5190.67	Yes	5000	104	103.8	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1219115	13C4-PFOA	161309	2500	Avg	7.142863				2645.17	2645.17	Yes	2500	106	105.8	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	549869	18O2-PFHxS	448586	2500	Avg	1.219515				2512.85	2512.85	Yes	2500	101	100.5	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	614127	13C5-PFNA	650628	1250	Avg	0.86335				1366.62	1366.62	Yes	1250	109	109.3	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	212617	18O2-PFHxS	448586	2500	Avg	0.213504				5549.91	5549.91	Yes	5000	111	111	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	641670	13C4-PFOS	561803	2500	Avg	0.522181				5468.23	5468.23	Yes	5000	109	109.4	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	621415	13C2-PFDA	457475	1250	Avg	1.19879				1416.38	1416.38	Yes	1250	113	113.3	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	479277	13C4-PFOS	561803	2500	Avg	0.396254				5382.32	5382.31	Yes	5000	108	107.6	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	622338	13C4-PFOS	561803	2500	Avg	1.036214				2672.59	2672.59	Yes	2500	107	106.9	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	510592	13C2-PFDA	457475	1250	Avg	1.090348				1279.53	1279.53	Yes	1250	102	102.4	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	526017	13C2-PFDA	457475	1250	Avg	1.058364				1358.02	1358.02	Yes	1250	109	108.6	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1063862	13C4-PFOS	561803	2500	Avg	1.770989				2673.16	2673.16	Yes	2500	107	106.9	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	2259	13C8-PFOSA	1063862	2500	Avg	0.902242		0.01	5.8837	0.05884	0.0588	Yes				
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	469331	13C2-PFDA	457475	1250	Avg	0.976439				1313.34	1313.34	Yes	1250	105	105.1	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4299138	13C4-PFOS	561803	2500	Avg	0.714673				26769	26768.87	Yes	25000	107	107.1	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	261832	13C4-PFOS	561803	2500	Avg	0.435575				2674.95	2674.95	Yes	2500	107	107	Yes
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4747719	13C4-PFOS	561803	2500	Avg	0.798258				26467	26466.57	Yes	25000	106	105.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092224C016.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	276524	13C4-PFOS	561803	2500	Avg	0.461946				2663.78	2663.78	Yes	2500	107	106.6	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3152165	13C3-PFBA	1291754	5000	Avg	1.161292				10506	10506.49	Yes	10000	105	105.1	Yes
092224C030.d	CCB A1	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	12541	13C4-PFBA	3152165	10000	Avg	0.790145		0.01	50.352	0.50352	0.5035	Yes				
092224C030.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1383096	13C2-PFHxA	775839	2500	Avg	0.828627				5378.51	5378.51	Yes	5000	108	107.6	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	223129	18O2-PFHxS	479981	2500	Avg	0.219423				5296.51	5296.51	Yes	5000	106	105.9	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	884677	13C2-PFHxA	775839	2500	Avg	1.121098				2542.78	2542.78	Yes	2500	102	101.7	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	618157	18O2-PFHxS	479981	2500	Avg	1.313089				2452	2452	Yes	2500	98	98.08	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	672574	13C2-PFHxA	775839	2500	Avg	0.19845				10921	10920.87	Yes	10000	109	109.2	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	973622	13C2-PFHxA	775839	2500	Avg	1.194702				2626.03	2626.03	Yes	2500	105	105	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	230303	18O2-PFHxS	479981	2500	Avg	0.237162				5057.91	5057.9	Yes	5000	101	101.2	Yes
092224C030.d	CCB A1	Instrument_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1255	13C2-6:2FTS	230303	5000	Avg	1.761997		0.01	15.464	0.15464	0.1546	Yes				
092224C030.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1182218	13C4-PFOA	163999	2500	Avg	7.142863				2523.04	2523.04	Yes	2500	101	100.9	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	554897	18O2-PFHxS	479981	2500	Avg	1.219515				2369.96	2369.96	Yes	2500	95	94.8	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	554296	13C5-PFNA	636343	1250	Avg	0.86335				1261.17	1261.17	Yes	1250	101	100.9	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	211206	18O2-PFHxS	479981	2500	Avg	0.213504				5152.48	5152.48	Yes	5000	103	103	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	721301	13C4-PFOS	569860	2500	Avg	0.522181				6059.92	6059.93	Yes	5000	121	121.2	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	647868	13C2-PFDA	463443	1250	Avg	1.19879				1457.66	1457.66	Yes	1250	117	116.6	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	510857	13C4-PFOS	569860	2500	Avg	0.396254				5655.85	5655.85	Yes	5000	113	113.1	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	631955	13C4-PFOS	569860	2500	Avg	1.036214				2675.52	2675.52	Yes	2500	107	107	Yes
092224C030.d	CCB A1	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	5327	13C8-PFOS	631955	2500	Avg	0.934293		0.01	22.556	0.22556	0.2256	Yes				
092224C030.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	506799	13C2-PFDA	463443	1250	Avg	1.090348				1253.67	1253.67	Yes	1250	100	100.3	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	517602	13C2-PFDA	463443	1250	Avg	1.058364				1319.09	1319.09	Yes	1250	106	105.5	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1067217	13C4-PFOS	569860	2500	Avg	1.770989				2643.68	2643.68	Yes	2500	106	105.7	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	476263	13C2-PFDA	463443	1250	Avg	0.976439				1315.57	1315.57	Yes	1250	105	105.2	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4360717	13C4-PFOS	569860	2500	Avg	0.714673				26768	26768.4	Yes	25000	107	107.1	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	254014	13C4-PFOS	569860	2500	Avg	0.435575				2558.39	2558.39	Yes	2500	102	102.3	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4887092	13C4-PFOS	569860	2500	Avg	0.798258				26858	26858.33	Yes	25000	107	107.4	Yes
092224C030.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	277168	13C4-PFOS	569860	2500	Avg	0.461946				2632.23	2632.23	Yes	2500	105	105.3	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3108374	13C3-PFBA	1289877	5000	Avg	1.161292				10376	10375.61	Yes	10000	104	103.8	Yes
092224C069.d	CCB A4	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	11144	13C4-PFBA	3108374	10000	Avg	0.790145		0.01	45.373	0.45373	0.4537	Yes				
092224C069.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1355832	13C2-PFHxA	770672	2500	Avg	0.828627				5307.84	5307.83	Yes	5000	106	106.2	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	212758	18O2-PFHxS	455992	2500	Avg	0.219423				5316.02	5316.02	Yes	5000	106	106.3	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	902407	13C2-PFHxA	770672	2500	Avg	1.121098				2611.14	2611.13	Yes	2500	104	104.4	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	616832	18O2-PFHxS	455992	2500	Avg	1.313089				2575.46	2575.46	Yes	2500	103	103	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	660547	13C2-PFHxA	770672	2500	Avg	0.19845				10797	10797.5	Yes	10000	108	108	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1002580	13C2-PFHxA	770672	2500	Avg	1.194702				2722.26	2722.26	Yes	2500	109	108.9	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	218304	18O2-PFHxS	455992	2500	Avg	0.237162				5046.61	5046.61	Yes	5000	101	100.9	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1199120	13C4-PFOA	150240	2500	Avg	7.142863				2793.47	2793.47	Yes	2500	112	111.7	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	581900	18O2-PFHxS	455992	2500	Avg	1.219515				2616.04	2616.04	Yes	2500	105	104.6	Yes
092224C069.d	CCB A4	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	4434	13C3-PFHxS	581900	2500	Avg	1.030748		0.01	18.481	0.18481	0.1848	Yes				
092224C069.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	595887	13C5-PFNA	647034	1250	Avg	0.86335				1333.4	1333.4	Yes	1250	107	106.7	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	207557	18O2-PFHxS	455992	2500	Avg	0.213504				5329.84	5329.84	Yes	5000	107	106.6	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	671220	13C4-PFOS	581560	2500	Avg	0.522181				5525.72	5525.73	Yes	5000	111	110.5	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	582631	13C2-PFDA	469517	1250	Avg	1.19879				1293.93	1293.93	Yes	1250	104	103.5	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	458709	13C4-PFOS	581560	2500	Avg	0.396254				4976.33	4976.33	Yes	5000	100	99.53	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	592357	13C4-PFOS	581560	2500	Avg	1.036214				2457.42	2457.42	Yes	2500	98	98.3	Yes
092224C069.d	CCB A4	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4427	13C8-PFOS	592357	2500	Avg	0.934293		0.01	19.998	0.19998	0.2	Yes				
092224C069.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	517815	13C2-PFDA	469517	1250	Avg	1.090348				1264.35	1264.35	Yes	1250	101	101.1	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	520478	13C2-PFDA	469517	1250	Avg	1.058364				1309.26	1309.26	Yes	1250	105	104.7	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1013205	13C4-PFOS	581560	2500	Avg	1.770989				2459.39	2459.39	Yes	2500	98	98.38	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	462589	13C2-PFDA	469517	1250	Avg	0.976439				1261.27	1261.27	Yes	1250	101	100.9	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4243645	13C4-PFOS	581560	2500	Avg	0.714673				25526	25525.67	Yes	25000	102	102.1	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	260184	13C4-PFOS	581560	2500	Avg	0.435575				2567.81	2567.81	Yes	2500	103	102.7	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4749957	13C4-PFOS	581560	2500	Avg	0.798258				25579	25579.49	Yes	25000	102	102.3	Yes
092224C069.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	277088	13C4-PFOS	581560	2500	Avg	0.461946				2578.53	2578.53	Yes	2500	103	103.1	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3130374	13C3-PFBA	1265075	5000	Avg	1.161292				10654	10653.9	Yes	10000	107	106.5	Yes
092224C086.d	CCB A5	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	12870	13C4-PFBA	3130374	10000	Avg	0.790145		0.01	52.033	0.52033	0.5203	Yes				
092224C086.d	CCB A5	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1382369	13C2-PFHxA	785042	2500	Avg	0.828627				5312.66	5312.66	Yes	5000	106	106.3	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	221695	18O2-PFHxS	470720	2500	Avg	0.219423				5366	5366.01	Yes	5000	107	107.3	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	882314	13C2-PFHxA	785042	2500	Avg	1.121098				2506.26	2506.26	Yes	2500	100	100.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092224C086.d	CCB A5	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	625704	18O2-PFHxS	470720	2500	Avg	1.313089				2530.77	2530.77	Yes	2500	101	101.2	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	645830	13C2-PFHxA	785042	2500	Avg	0.19845				10364	10363.69	Yes	10000	104	103.6	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	959340	13C2-PFHxA	785042	2500	Avg	1.194702				2557.17	2557.17	Yes	2500	102	102.3	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	231231	18O2-PFHxS	470720	2500	Avg	0.237162				5178.2	5178.19	Yes	5000	104	103.6	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1113462	13C4-PFOA	145592	2500	Avg	7.142863				2676.74	2676.74	Yes	2500	107	107.1	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	560227	18O2-PFHxS	470720	2500	Avg	1.219515				2439.8	2439.8	Yes	2500	98	97.59	Yes
092224C086.d	CCB A5	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2570	13C3-PFHxS	560227	2500	Avg	1.030748		0.01	11.126	0.11126	0.1113	Yes				
092224C086.d	CCB A5	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	632014	13C5-PFNA	658617	1250	Avg	0.86335				1389.37	1389.37	Yes	1250	111	111.1	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	204572	18O2-PFHxS	470720	2500	Avg	0.213504				5088.83	5088.83	Yes	5000	102	101.8	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	667123	13C4-PFOS	554907	2500	Avg	0.522181				5755.78	5755.79	Yes	5000	115	115.1	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	565793	13C2-PFDA	443933	1250	Avg	1.19879				1328.95	1328.95	Yes	1250	106	106.3	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	509052	13C4-PFOS	554907	2500	Avg	0.396254				5787.74	5787.73	Yes	5000	116	115.8	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	624412	13C4-PFOS	554907	2500	Avg	1.036214				2714.82	2714.82	Yes	2500	109	108.6	Yes
092224C086.d	CCB A5	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3539	13C8-PFOS	624412	2500	Avg	0.934293		0.01	15.166	0.15166	0.1517	Yes				
092224C086.d	CCB A5	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	479075	13C2-PFDA	443933	1250	Avg	1.090348				1237.17	1237.17	Yes	1250	99	98.97	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	507635	13C2-PFDA	443933	1250	Avg	1.058364				1350.54	1350.55	Yes	1250	108	108	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1035261	13C4-PFOS	554907	2500	Avg	1.770989				2633.62	2633.62	Yes	2500	105	105.3	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	469944	13C2-PFDA	443933	1250	Avg	0.976439				1355.17	1355.17	Yes	1250	108	108.4	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4278967	13C4-PFOS	554907	2500	Avg	0.714673				26974	26974.37	Yes	25000	108	107.9	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	245134	13C4-PFOS	554907	2500	Avg	0.435575				2535.48	2535.48	Yes	2500	101	101.4	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4690731	13C4-PFOS	554907	2500	Avg	0.798258				26474	26473.85	Yes	25000	106	105.9	Yes
092224C086.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	277827	13C4-PFOS	554907	2500	Avg	0.461946				2709.59	2709.59	Yes	2500	108	108.4	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3222663	13C3-PFBA	1361133	5000	Avg	1.161292				10194	10193.96	Yes	10000	102	101.9	Yes
092224C134.d	CCB A8	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	10471	13C4-PFBA	3222663	10000	Avg	0.790145		0.01	41.121	0.41121	0.4112	Yes				
092224C134.d	CCB A8	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1430734	13C2-PFHxA	801973	2500	Avg	0.828627				5382.45	5382.45	Yes	5000	108	107.6	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	233803	18O2-PFHxS	485386	2500	Avg	0.219423				5488.08	5488.08	Yes	5000	110	109.8	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	930986	13C2-PFHxA	801973	2500	Avg	1.121098				2588.69	2588.69	Yes	2500	104	103.5	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	674616	18O2-PFHxS	485386	2500	Avg	1.313089				2646.15	2646.15	Yes	2500	106	105.8	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	705562	13C2-PFHxA	801973	2500	Avg	0.19845				11083	11083.18	Yes	10000	111	110.8	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1028573	13C2-PFHxA	801973	2500	Avg	1.194702				2683.83	2683.83	Yes	2500	107	107.4	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	245455	18O2-PFHxS	485386	2500	Avg	0.237162				5330.65	5330.64	Yes	5000	107	106.6	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1244633	13C4-PFOA	158347	2500	Avg	7.142863				2751.05	2751.05	Yes	2500	110	110	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	600893	18O2-PFHxS	485386	2500	Avg	1.219515				2537.83	2537.83	Yes	2500	102	101.5	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	607147	13C5-PFNA	692670	1250	Avg	0.86335				1269.08	1269.08	Yes	1250	102	101.5	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	225987	18O2-PFHxS	485386	2500	Avg	0.213504				5451.68	5451.68	Yes	5000	109	109	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	661899	13C4-PFOS	626396	2500	Avg	0.522181				5058.96	5058.97	Yes	5000	101	101.2	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	608418	13C2-PFDA	473871	1250	Avg	1.19879				1338.78	1338.78	Yes	1250	107	107.1	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	537005	13C4-PFOS	626396	2500	Avg	0.396254				5408.74	5408.73	Yes	5000	108	108.2	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	608715	13C4-PFOS	626396	2500	Avg	1.036214				2344.53	2344.53	Yes	2500	94	93.78	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	558353	13C2-PFDA	473871	1250	Avg	1.090348				1350.81	1350.81	Yes	1250	108	108.1	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	545528	13C2-PFDA	473871	1250	Avg	1.058364				1359.66	1359.66	Yes	1250	109	108.8	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1117106	13C4-PFOS	626396	2500	Avg	1.770989				2517.5	2517.5	Yes	2500	101	100.7	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	482314	13C2-PFDA	473871	1250	Avg	0.976439				1302.97	1302.97	Yes	1250	104	104.2	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4349213	13C4-PFOS	626396	2500	Avg	0.714673				24288	24288.14	Yes	25000	97	97.15	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	259657	13C4-PFOS	626396	2500	Avg	0.435575				2379.19	2379.18	Yes	2500	95	95.17	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4891116	13C4-PFOS	626396	2500	Avg	0.798258				24454	24454.33	Yes	25000	98	97.82	Yes
092224C134.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	279223	13C4-PFOS	626396	2500	Avg	0.461946				2412.41	2412.41	Yes	2500	96	96.5	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2091954	13C3-PFBA	919083	5000	Avg	1.14978				9898.12	9898.12	Yes	10000	99	98.98	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	805990	13C2-PFHxA	464965	2500	Avg	0.912806				4747.56	4747.56	Yes	5000	95	94.95	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	97672	18O2-PFHxS	307329	2500	Avg	0.174396				4555.86	4555.86	Yes	5000	91	91.12	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	474238	13C2-PFHxA	464965	2500	Avg	1.004407				2538.67	2538.67	Yes	2500	102	101.5	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	433643	18O2-PFHxS	307329	2500	Avg	1.514202				2329.62	2329.62	Yes	2500	93	93.18	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	465272	13C2-PFHxA	464965	2500	Avg	0.258101				9692.51	9692.53	Yes	10000	97	96.93	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	423466	13C2-PFHxA	464965	2500	Avg	0.971591				2343.44	2343.45	Yes	2500	94	93.74	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	136678	18O2-PFHxS	307329	2500	Avg	0.237573				4679.92	4679.92	Yes	5000	94	93.6	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	506269	13C4-PFOA	117306	2500	Avg	4.183914				2578.8	2578.8	Yes	2500	103	103.2	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	317176	18O2-PFHxS	307329	2500	Avg	1.112944				2318.27	2318.27	Yes	2500	93	92.73	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	161255	13C5-PFNA	265792	1250	Avg	0.672232				1128.14	1128.14	Yes	1250	90	90.25	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	114001	18O2-PFHxS	307329	2500	Avg	0.217572				4262.28	4262.28	Yes	5000	85	85.25	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	322292	13C4-PFOS	488454	2500	Avg	0.325783				5063.34	5063.34	Yes	5000	101	101.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	197091	13C2-PFDA	216089	1250	Avg	0.940314				1212.47	1212.47	Yes	1250	97	97	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	332464	13C4-PFOS	488454	2500	Avg	0.345606				4923.57	4923.57	Yes	5000	98	98.47	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	477738	13C4-PFOS	488454	2500	Avg	0.993393				2461.42	2461.42	Yes	2500	98	98.46	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	209060	13C2-PFDA	216089	1250	Avg	0.934831				1293.65	1293.65	Yes	1250	103	103.5	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	167048	13C2-PFDA	216089	1250	Avg	0.793171				1218.29	1218.29	Yes	1250	97	97.46	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	133449	13C2-PFDA	216089	1250	Avg	0.578567				1334.26	1334.26	Yes	1250	107	106.7	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1067390	13C4-PFOS	488454	2500	Avg	1.917495				2849.08	2849.08	Yes	2500	114	114	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3322478	13C4-PFOS	488454	2500	Avg	0.709879				23955	23954.89	Yes	25000	96	95.82	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	209565	13C4-PFOS	488454	2500	Avg	0.446899				2400.08	2400.08	Yes	2500	96	96	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4251692	13C4-PFOS	488454	2500	Avg	0.877222				24807	24806.68	Yes	25000	99	99.23	Yes
092324B018.d	IBLK A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	242659	13C4-PFOS	488454	2500	Avg	0.510919				2430.86	2430.86	Yes	2500	97	97.23	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2169257	13C3-PFBA	959286	5000	Avg	1.14978				9833.73	9833.73	Yes	10000	98	98.34	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	851398	13C2-PFHxA	483757	2500	Avg	0.912806				4820.22	4820.22	Yes	5000	96	96.4	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	101874	18O2-PFHxS	304501	2500	Avg	0.174396				4795.99	4795.99	Yes	5000	96	95.92	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	465428	13C2-PFHxA	483757	2500	Avg	1.004407				2394.73	2394.72	Yes	2500	96	95.79	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	481392	18O2-PFHxS	304501	2500	Avg	1.514202				2610.15	2610.16	Yes	2500	104	104.4	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	468711	13C2-PFHxA	483757	2500	Avg	0.258101				9384.86	9384.87	Yes	10000	94	93.85	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	448049	13C2-PFHxA	483757	2500	Avg	0.971591				2383.17	2383.17	Yes	2500	95	95.33	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	135552	18O2-PFHxS	304501	2500	Avg	0.237573				4684.47	4684.47	Yes	5000	94	93.69	Yes
092324B036.d	CCB A1	Instrument_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	732	13C2-6:2FTS	135552	5000	Ln	1.924681	-117	0.01	75.017	0.75017	0.7482	Yes				
092324B036.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	487043	13C4-PFOA	129744	2500	Avg	4.183914				2243.04	2243.04	Yes	2500	90	89.72	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	360084	18O2-PFHxS	304501	2500	Avg	1.112944				2656.33	2656.33	Yes	2500	106	106.3	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	179775	13C5-PFNA	256629	1250	Avg	0.672232				1302.61	1302.61	Yes	1250	104	104.2	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	131663	18O2-PFHxS	304501	2500	Avg	0.217572				4968.34	4968.35	Yes	5000	99	99.37	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	327208	13C4-PFOS	493259	2500	Avg	0.325783				5090.5	5090.5	Yes	5000	102	101.8	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	201675	13C2-PFDA	205590	1250	Avg	0.940314				1304.03	1304.03	Yes	1250	104	104.3	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	367018	13C4-PFOS	493259	2500	Avg	0.345606				5382.35	5382.34	Yes	5000	108	107.6	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	481646	13C4-PFOS	493259	2500	Avg	0.993393				2457.38	2457.38	Yes	2500	98	98.3	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	204509	13C2-PFDA	205590	1250	Avg	0.934831				1330.11	1330.11	Yes	1250	106	106.4	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	163584	13C2-PFDA	205590	1250	Avg	0.793171				1253.96	1253.96	Yes	1250	100	100.3	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	121977	13C2-PFDA	205590	1250	Avg	0.578567				1281.84	1281.84	Yes	1250	103	102.5	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	917704	13C4-PFOS	493259	2500	Avg	1.917495				2425.68	2425.68	Yes	2500	97	97.03	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3470485	13C4-PFOS	493259	2500	Avg	0.709879				24778	24778.26	Yes	25000	99	99.11	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	214872	13C4-PFOS	493259	2500	Avg	0.446899				2436.89	2436.89	Yes	2500	97	97.48	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4329275	13C4-PFOS	493259	2500	Avg	0.877222				25013	25013.28	Yes	25000	100	100.1	Yes
092324B036.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	250854	13C4-PFOS	493259	2500	Avg	0.510919				2488.48	2488.48	Yes	2500	100	99.54	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2180566	13C3-PFBA	954675	5000	Avg	1.14978				9932.74	9932.74	Yes	10000	99	99.33	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	840186	13C2-PFHxA	474683	2500	Avg	0.912806				4847.67	4847.67	Yes	5000	97	96.95	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	95244	18O2-PFHxS	322370	2500	Avg	0.174396				4235.33	4235.32	Yes	5000	85	84.71	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	476038	13C2-PFHxA	474683	2500	Avg	1.004407				2496.14	2496.14	Yes	2500	100	99.85	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	460515	18O2-PFHxS	322370	2500	Avg	1.514202				2358.55	2358.55	Yes	2500	94	94.34	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	491761	13C2-PFHxA	474683	2500	Avg	0.258101				10035	10034.62	Yes	10000	100	100.4	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	435537	13C2-PFHxA	474683	2500	Avg	0.971591				2360.9	2360.9	Yes	2500	94	94.44	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	128623	18O2-PFHxS	322370	2500	Avg	0.237573				4198.63	4198.62	Yes	5000	84	83.97	Yes
092324B051.d	CCB A2	Instrument_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	607	13C2-6:2FTS	128623	5000	Ln	1.924681	-117	0.01	73.248	0.73248	0.7305	Yes				
092324B051.d	CCB A2	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	494028	13C4-PFOA	120373	2500	Avg	4.183914				2452.33	2452.33	Yes	2500	98	98.09	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	321802	18O2-PFHxS	322370	2500	Avg	1.112944				2242.34	2242.34	Yes	2500	90	89.69	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	158835	13C5-PFNA	241783	1250	Avg	0.672232				1221.55	1221.55	Yes	1250	98	97.72	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	121415	18O2-PFHxS	322370	2500	Avg	0.217572				4327.67	4327.68	Yes	5000	87	86.55	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	308432	13C4-PFOS	530831	2500	Avg	0.325783				4458.77	4458.77	Yes	5000	89	89.18	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	197097	13C2-PFDA	228212	1250	Avg	0.940314				1148.1	1148.1	Yes	1250	92	91.85	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	331985	13C4-PFOS	530831	2500	Avg	0.345606				4523.99	4523.98	Yes	5000	90	90.48	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	459548	13C4-PFOS	530831	2500	Avg	0.993393				2178.68	2178.68	Yes	2500	87	87.15	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	218318	13C2-PFDA	228212	1250	Avg	0.934831				1279.17	1279.17	Yes	1250	102	102.3	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	170004	13C2-PFDA	228212	1250	Avg	0.793171				1173.99	1173.99	Yes	1250	94	93.92	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	125897	13C2-PFDA	228212	1250	Avg	0.578567				1191.88	1191.88	Yes	1250	95	95.35	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	897107	13C4-PFOS	530831	2500	Avg	1.917495				2203.4	2203.4	Yes	2500	88	88.14	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3386378	13C4-PFOS	530831	2500	Avg	0.709879				22466	22466.47	Yes	25000	90	89.86	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	209406	13C4-PFOS	530831	2500	Avg	0.446899				2206.8	2206.8	Yes	2500	88	88.27	Yes
092324B051.d	CCB A2	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4267022	13C4-PFOS	530831	2500	Avg	0.877222				22909	22908.63	Yes	25000	92	91.64	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092324B051.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	252810	13C4-PFOS	530831	2500	Avg	0.510919				2330.38	2330.38	Yes	2500	93	93.22	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2179949	13C3-PFBA	951826	5000	Avg	1.14978				9959.65	9959.65	Yes	10000	100	99.6	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	843307	13C2-PFHxA	471208	2500	Avg	0.912806				4901.56	4901.56	Yes	5000	98	98.03	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	95616	18O2-PFHxS	331558	2500	Avg	0.174396				4134.04	4134.04	Yes	5000	83	82.68	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	473047	13C2-PFHxA	471208	2500	Avg	1.004407				2498.75	2498.74	Yes	2500	100	99.95	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	448325	18O2-PFHxS	331558	2500	Avg	1.514202				2232.49	2232.49	Yes	2500	89	89.3	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	471131	13C2-PFHxA	471208	2500	Avg	0.258101				9684.54	9684.55	Yes	10000	97	96.85	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	438336	13C2-PFHxA	471208	2500	Avg	0.971591				2393.6	2393.6	Yes	2500	96	95.74	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	136485	18O2-PFHxS	331558	2500	Avg	0.237573				4331.81	4331.8	Yes	5000	87	86.64	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	519751	13C4-PFOA	129907	2500	Avg	4.183914				2390.67	2390.67	Yes	2500	96	95.63	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	333770	18O2-PFHxS	331558	2500	Avg	1.112944				2261.28	2261.28	Yes	2500	90	90.45	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	175675	13C5-PFNA	257309	1250	Avg	0.672232				1269.54	1269.54	Yes	1250	102	101.6	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	137231	18O2-PFHxS	331558	2500	Avg	0.217572				4755.86	4755.87	Yes	5000	95	95.12	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	347212	13C4-PFOS	522661	2500	Avg	0.325783				5097.84	5097.84	Yes	5000	102	102	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	197647	13C2-PFDA	216871	1250	Avg	0.940314				1211.51	1211.51	Yes	1250	97	96.92	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	326887	13C4-PFOS	522661	2500	Avg	0.345606				4524.15	4524.14	Yes	5000	90	90.48	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	484188	13C4-PFOS	522661	2500	Avg	0.993393				2331.38	2331.38	Yes	2500	93	93.26	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	188636	13C2-PFDA	216871	1250	Avg	0.934831				1163.05	1163.05	Yes	1250	93	93.04	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	167101	13C2-PFDA	216871	1250	Avg	0.793171				1214.29	1214.29	Yes	1250	97	97.14	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	125339	13C2-PFDA	216871	1250	Avg	0.578567				1248.65	1248.65	Yes	1250	100	99.89	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	920089	13C4-PFOS	522661	2500	Avg	1.917495				2295.17	2295.17	Yes	2500	92	91.81	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3410025	13C4-PFOS	522661	2500	Avg	0.709879				22977	22976.99	Yes	25000	92	91.91	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	208633	13C4-PFOS	522661	2500	Avg	0.446899				2233.02	2233.02	Yes	2500	89	89.32	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4411823	13C4-PFOS	522661	2500	Avg	0.877222				24056	24056.28	Yes	25000	96	96.22	Yes
092324B065.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	254050	13C4-PFOS	522661	2500	Avg	0.510919				2378.41	2378.41	Yes	2500	95	95.14	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2103388	13C3-PFBA	924447	5000	Avg	1.14978				9894.47	9894.47	Yes	10000	99	98.94	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	824004	13C2-PFHxA	462263	2500	Avg	0.912806				4882.04	4882.04	Yes	5000	98	97.64	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	95757	18O2-PFHxS	310572	2500	Avg	0.174396				4419.9	4419.89	Yes	5000	88	88.4	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	467171	13C2-PFHxA	462263	2500	Avg	1.004407				2515.46	2515.46	Yes	2500	101	100.6	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	450318	18O2-PFHxS	310572	2500	Avg	1.514202				2393.94	2393.94	Yes	2500	96	95.76	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	450143	13C2-PFHxA	462263	2500	Avg	0.258101				9432.16	9432.17	Yes	10000	94	94.32	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	453435	13C2-PFHxA	462263	2500	Avg	0.971591				2523.96	2523.96	Yes	2500	101	101	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	131428	18O2-PFHxS	310572	2500	Avg	0.237573				4453.17	4453.16	Yes	5000	89	89.06	Yes
092324B085.d	CCB A4	Instrument_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	968	13C2-6:2FTS	131428	5000	Ln	1.924681	-117	0.01	80.122	0.80122	0.7992	Yes				
092324B085.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	507470	13C4-PFOA	110762	2500	Avg	4.183914				2737.64	2737.64	Yes	2500	110	109.5	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	322655	18O2-PFHxS	310572	2500	Avg	1.112944				2333.69	2333.69	Yes	2500	93	93.35	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	162374	13C5-PFNA	262966	1250	Avg	0.672232				1148.17	1148.17	Yes	1250	92	91.85	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	124440	18O2-PFHxS	310572	2500	Avg	0.217572				4603.99	4603.99	Yes	5000	92	92.08	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	297795	13C4-PFOS	511313	2500	Avg	0.325783				4469.33	4469.33	Yes	5000	89	89.39	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	204469	13C2-PFDA	208412	1250	Avg	0.940314				1304.19	1304.19	Yes	1250	104	104.3	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	314122	13C4-PFOS	511313	2500	Avg	0.345606				4443.97	4443.96	Yes	5000	89	88.88	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	480140	13C4-PFOS	511313	2500	Avg	0.993393				2363.2	2363.2	Yes	2500	95	94.53	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	203888	13C2-PFDA	208412	1250	Avg	0.934831				1308.12	1308.11	Yes	1250	105	104.6	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	178566	13C2-PFDA	208412	1250	Avg	0.793171				1350.27	1350.27	Yes	1250	108	108	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	136766	13C2-PFDA	208412	1250	Avg	0.578567				1417.79	1417.79	Yes	1250	113	113.4	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	945737	13C4-PFOS	511313	2500	Avg	1.917495				2411.51	2411.51	Yes	2500	96	96.46	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3417502	13C4-PFOS	511313	2500	Avg	0.709879				23538	23538.44	Yes	25000	94	94.15	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	222685	13C4-PFOS	511313	2500	Avg	0.446899				2436.32	2436.32	Yes	2500	97	97.45	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4426869	13C4-PFOS	511313	2500	Avg	0.877222				24674	24674.04	Yes	25000	99	98.7	Yes
092324B085.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	251723	13C4-PFOS	511313	2500	Avg	0.510919				2408.93	2408.93	Yes	2500	96	96.36	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2184988	13C3-PFBA	971309	5000	Avg	1.14978				9782.43	9782.43	Yes	10000	98	97.82	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	861483	13C2-PFHxA	476770	2500	Avg	0.912806				4948.79	4948.79	Yes	5000	99	98.98	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	101239	18O2-PFHxS	313510	2500	Avg	0.174396				4629.14	4629.14	Yes	5000	93	92.58	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	481910	13C2-PFHxA	476770	2500	Avg	1.004407				2515.87	2515.86	Yes	2500	101	100.6	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	485478	18O2-PFHxS	313510	2500	Avg	1.514202				2556.67	2556.67	Yes	2500	102	102.3	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	505958	13C2-PFHxA	476770	2500	Avg	0.258101				10279	10279.12	Yes	10000	103	102.8	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	443409	13C2-PFHxA	476770	2500	Avg	0.971591				2393.05	2393.05	Yes	2500	96	95.7	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	140749	18O2-PFHxS	313510	2500	Avg	0.237573				4724.3	4724.29	Yes	5000	94	94.5	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	520075	13C4-PFOA	130156	2500	Avg	4.183914				2387.59	2387.59	Yes	2500	96	95.5	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	345618	18O2-PFHxS	313510	2500	Avg	1.112944				2476.35	2476.35	Yes	2500	99	99.1	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092324B112.d	CCB A6	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	167095	13C5-PFNA	273961	1250	Avg	0.672232				1134.14	1134.14	Yes	1250	91	90.7	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	114015	18O2-PFHxS	313510	2500	Avg	0.217572				4178.76	4178.76	Yes	5000	84	83.6	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	330793	13C4-PFOS	501170	2500	Avg	0.325783				5065.04	5065.04	Yes	5000	101	101.3	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	207091	13C2-PFDA	221747	1250	Avg	0.940314				1241.48	1241.48	Yes	1250	99	99.3	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	313473	13C4-PFOS	501170	2500	Avg	0.345606				4524.54	4524.53	Yes	5000	90	90.5	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	499460	13C4-PFOS	501170	2500	Avg	0.993393				2508.04	2508.04	Yes	2500	100	100.3	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	217159	13C2-PFDA	221747	1250	Avg	0.934831				1309.47	1309.47	Yes	1250	105	104.8	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	174619	13C2-PFDA	221747	1250	Avg	0.793171				1241.02	1241.01	Yes	1250	99	99.3	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	128208	13C2-PFDA	221747	1250	Avg	0.578567				1249.15	1249.15	Yes	1250	100	99.9	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	953594	13C4-PFOS	501170	2500	Avg	1.917495				2480.76	2480.76	Yes	2500	99	99.2	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3413018	13C4-PFOS	501170	2500	Avg	0.709879				23983	23983.31	Yes	25000	96	95.9	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	215739	13C4-PFOS	501170	2500	Avg	0.446899				2408.1	2408.1	Yes	2500	96	96.3	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4434304	13C4-PFOS	501170	2500	Avg	0.877222				25216	25215.69	Yes	25000	101	100.9	Yes
092324B112.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	255098	13C4-PFOS	501170	2500	Avg	0.510919				2490.63	2490.63	Yes	2500	100	99.6	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2142358	13C3-PFBA	956757	5000	Avg	1.14978				9737.46	9737.46	Yes	10000	97	97.4	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	837464	13C2-PFHxA	468890	2500	Avg	0.912806				4891.66	4891.66	Yes	5000	98	97.8	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	95136	18O2-PFHxS	341303	2500	Avg	0.174396				3995.84	3995.84	Yes	5000	80	79.9	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	467900	13C2-PFHxA	468890	2500	Avg	1.004407				2483.78	2483.78	Yes	2500	99	99.4	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	455319	18O2-PFHxS	341303	2500	Avg	1.514202				2202.58	2202.58	Yes	2500	88	88.1	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	471491	13C2-PFHxA	468890	2500	Avg	0.258101				9739.85	9739.86	Yes	10000	97	97.4	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	446021	13C2-PFHxA	468890	2500	Avg	0.971591				2447.6	2447.6	Yes	2500	98	97.9	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	142890	18O2-PFHxS	341303	2500	Avg	0.237573				4405.6	4405.6	Yes	5000	88	88.1	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	537415	13C4-PFOA	117507	2500	Avg	4.183914				2732.77	2732.77	Yes	2500	109	109.3	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	342914	18O2-PFHxS	341303	2500	Avg	1.112944				2256.9	2256.9	Yes	2500	90	90.3	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	164924	13C5-PFNA	272315	1250	Avg	0.672232				1126.17	1126.17	Yes	1250	90	90.1	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	123255	18O2-PFHxS	341303	2500	Avg	0.217572				4149.55	4149.55	Yes	5000	83	83.0	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	307212	13C4-PFOS	500003	2500	Avg	0.325783				4714.95	4714.95	Yes	5000	94	94.3	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	198121	13C2-PFDA	210091	1250	Avg	0.940314				1253.6	1253.6	Yes	1250	100	100.3	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	327235	13C4-PFOS	500003	2500	Avg	0.345606				4734.2	4734.19	Yes	5000	95	94.7	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	496582	13C4-PFOS	500003	2500	Avg	0.993393				2499.41	2499.41	Yes	2500	100	100.0	Yes
092324B119.d	CCB A7	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3889	13C8-PFOS	496582	2500	Avg	0.872096		0.01	22.45	0.2245	0.2245	Yes				
092324B119.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	201672	13C2-PFDA	210091	1250	Avg	0.934831				1283.56	1283.56	Yes	1250	103	102.7	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	169038	13C2-PFDA	210091	1250	Avg	0.793171				1268	1268	Yes	1250	101	101.4	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	118868	13C2-PFDA	210091	1250	Avg	0.578567				1222.4	1222.4	Yes	1250	98	97.8	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	911253	13C4-PFOS	500003	2500	Avg	1.917495				2376.14	2376.14	Yes	2500	95	95.0	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3360607	13C4-PFOS	500003	2500	Avg	0.709879				23670	23670.14	Yes	25000	95	94.7	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	218464	13C4-PFOS	500003	2500	Avg	0.446899				2444.21	2444.21	Yes	2500	98	97.8	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4322146	13C4-PFOS	500003	2500	Avg	0.877222				24635	24635.27	Yes	25000	99	98.5	Yes
092324B119.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	251935	13C4-PFOS	500003	2500	Avg	0.510919				2465.49	2465.49	Yes	2500	99	98.6	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1993774	13C3-PFBA	901244	5000	Avg	1.153035				9593.15	9593.15	Yes	10000	96	95.9	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	802487	13C2-PFHxA	434178	2500	Avg	0.891292				5184.3	5184.3	Yes	5000	104	103.7	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	87377	18O2-PFHxS	274957	2500	Avg	0.16784				4733.44	4733.44	Yes	5000	95	94.7	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	412333	13C2-PFHxA	434178	2500	Avg	0.983356				2414.4	2414.4	Yes	2500	97	96.6	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	391294	18O2-PFHxS	274957	2500	Avg	1.4649				2428.68	2428.68	Yes	2500	97	97.1	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	437690	13C2-PFHxA	434178	2500	Avg	0.255296				9871.77	9871.77	Yes	10000	99	98.7	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	409635	13C2-PFHxA	434178	2500	Avg	0.972655				2424.99	2424.99	Yes	2500	97	97.0	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	123846	18O2-PFHxS	274957	2500	Avg	0.235608				4779.33	4779.33	Yes	5000	96	95.6	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	452129	13C4-PFOA	100544	2500	Avg	4.359235				2578.91	2578.91	Yes	2500	103	103.2	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	281054	18O2-PFHxS	274957	2500	Avg	1.087071				2350.75	2350.75	Yes	2500	94	94.0	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	141463	13C5-PFNA	238861	1250	Avg	0.681638				1086.06	1086.06	Yes	1250	87	86.9	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	114083	18O2-PFHxS	274957	2500	Avg	0.22089				4695.92	4695.91	Yes	5000	94	93.9	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	270106	13C4-PFOS	447555	2500	Avg	0.319821				4717.59	4717.6	Yes	5000	94	94.4	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	166359	13C2-PFDA	193955	1250	Avg	0.949905				1128.69	1128.69	Yes	1250	90	90.3	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	273874	13C4-PFOS	447555	2500	Avg	0.294766				5189.99	5190	Yes	5000	104	103.8	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	434964	13C4-PFOS	447555	2500	Avg	0.984793				2467.19	2467.19	Yes	2500	99	98.7	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	195450	13C2-PFDA	193955	1250	Avg	0.997704				1262.53	1262.53	Yes	1250	101	101.0	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	148872	13C2-PFDA	193955	1250	Avg	0.795406				1206.24	1206.24	Yes	1250	96	96.5	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	100245	13C2-PFDA	193955	1250	Avg	0.588079				1098.59	1098.59	Yes	1250	88	87.9	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	835669	13C4-PFOS	447555	2500	Avg	1.895997				2462.01	2462.01	Yes	2500	98	98.5	Yes
092424A019.d	BLK TEST_SVLC-4094	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3122549	13C4-PFOS	447555	2500	Avg	0.700486				24900	24900.23	Yes	25000	100	99.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092424A019.d	BLK_TEST_SVLC-4094	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	188007	13C4-PFOS	447555	2500	Avg	0.437202				2402.07	2402.07	Yes	2500	96	96.1	Yes
092424A019.d	BLK_TEST_SVLC-4094	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3930133	13C4-PFOS	447555	2500	Avg	0.870998				25205	25204.82	Yes	25000	101	100.8	Yes
092424A019.d	BLK_TEST_SVLC-4094	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	221200	13C4-PFOS	447555	2500	Avg	0.508417				2430.29	2430.29	Yes	2500	97	97.2	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2234538	13C3-PFBA	1058753	5000	Avg	1.153035				9152.1	9152.1	Yes	10000	92	91.5	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	883172	13C2-PFHxA	515587	2500	Avg	0.891292				4804.67	4804.67	Yes	5000	96	96.1	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	102873	18O2-PFHxS	320046	2500	Avg	0.16784				4787.77	4787.77	Yes	5000	96	95.8	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	475438	13C2-PFHxA	515587	2500	Avg	0.983356				2344.34	2344.34	Yes	2500	94	93.8	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	472532	18O2-PFHxS	320046	2500	Avg	1.4649				2519.71	2519.71	Yes	2500	101	100.8	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	508660	13C2-PFHxA	515587	2500	Avg	0.255296				9660.99	9660.99	Yes	10000	97	96.6	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	467897	13C2-PFHxA	515587	2500	Avg	0.972655				2332.54	2332.54	Yes	2500	93	93.3	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	121034	18O2-PFHxS	320046	2500	Avg	0.235608				4012.78	4012.78	Yes	5000	80	80.3	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	557575	13C4-PFOA	152289	2500	Avg	4.359235				2099.73	2099.73	Yes	2500	84	84.0	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	329733	18O2-PFHxS	320046	2500	Avg	1.087071				2369.37	2369.37	Yes	2500	95	94.8	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	187228	13C5-PFNA	278460	1250	Avg	0.681638				1233	1233	Yes	1250	99	98.6	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	127708	18O2-PFHxS	320046	2500	Avg	0.22089				4516.17	4516.16	Yes	5000	90	90.3	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	316033	13C4-PFOS	524370	2500	Avg	0.319821				4711.15	4711.16	Yes	5000	94	94.2	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	200238	13C2-PFDA	228759	1250	Avg	0.949905				1151.86	1151.86	Yes	1250	92	92.1	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	285976	13C4-PFOS	524370	2500	Avg	0.294766				4625.45	4625.45	Yes	5000	93	92.5	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	481217	13C4-PFOS	524370	2500	Avg	0.984793				2329.69	2329.69	Yes	2500	93	93.2	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	207175	13C2-PFDA	228759	1250	Avg	0.997704				1134.66	1134.66	Yes	1250	91	90.8	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	162852	13C2-PFDA	228759	1250	Avg	0.795406				1118.76	1118.76	Yes	1250	90	89.5	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	117123	13C2-PFDA	228759	1250	Avg	0.588079				1088.27	1088.27	Yes	1250	87	87.1	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	924219	13C4-PFOS	524370	2500	Avg	1.895997				2324.02	2324.02	Yes	2500	93	93.0	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3473604	13C4-PFOS	524370	2500	Avg	0.700486				23642	23641.93	Yes	25000	95	94.6	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	219718	13C4-PFOS	524370	2500	Avg	0.437202				2396	2395.99	Yes	2500	96	95.8	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4283802	13C4-PFOS	524370	2500	Avg	0.870998				23448	23448.46	Yes	25000	94	93.8	Yes
092424A029.d	CCB 1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	248228	13C4-PFOS	524370	2500	Avg	0.508417				2327.73	2327.73	Yes	2500	93	93.1	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2216912	13C3-PFBA	1035623	5000	Avg	1.153035				9282.7	9282.7	Yes	10000	93	92.8	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	859301	13C2-PFHxA	513205	2500	Avg	0.891292				4696.5	4696.5	Yes	5000	94	93.9	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	96941	18O2-PFHxS	373609	2500	Avg	0.16784				3864.87	3864.87	Yes	5000	77	77.3	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	465817	13C2-PFHxA	513205	2500	Avg	0.983356				2307.56	2307.56	Yes	2500	92	92.3	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	454997	18O2-PFHxS	373609	2500	Avg	1.4649				2078.37	2078.37	Yes	2500	83	83.1	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	482714	13C2-PFHxA	513205	2500	Avg	0.255296				9210.76	9210.75	Yes	10000	92	92.1	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	454537	13C2-PFHxA	513205	2500	Avg	0.972655				2276.46	2276.46	Yes	2500	91	91.1	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	146880	18O2-PFHxS	373609	2500	Avg	0.235608				4171.53	4171.53	Yes	5000	83	83.4	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	522874	13C4-PFOA	126839	2500	Avg	4.359235				2364.14	2364.14	Yes	2500	95	94.6	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	309675	18O2-PFHxS	373609	2500	Avg	1.087071				1906.21	1906.21	Yes	2500	76	76.2	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	175128	13C5-PFNA	281712	1250	Avg	0.681638				1140	1140	Yes	1250	91	91.2	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	135808	18O2-PFHxS	373609	2500	Avg	0.22089				4114.08	4114.07	Yes	5000	82	82.3	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	300312	13C4-PFOS	521914	2500	Avg	0.319821				4497.86	4497.87	Yes	5000	90	90.0	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	199832	13C2-PFDA	233172	1250	Avg	0.949905				1127.76	1127.76	Yes	1250	90	90.2	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	276313	13C4-PFOS	521914	2500	Avg	0.294766				4490.19	4490.19	Yes	5000	90	89.8	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	473494	13C4-PFOS	521914	2500	Avg	0.984793				2303.09	2303.09	Yes	2500	92	92.1	Yes
092424A038.d	CCB A2	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3451	13C8-PFOS	473494	2500	Avg	0.870004		0.01	20.943	0.20943	0.2094	Yes				
092424A038.d	CCB A2	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	224338	13C2-PFDA	233172	1250	Avg	0.997704				1205.41	1205.41	Yes	1250	96	96.4	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	162209	13C2-PFDA	233172	1250	Avg	0.795406				1093.25	1093.25	Yes	1250	87	87.5	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	116329	13C2-PFDA	233172	1250	Avg	0.588079				1060.44	1060.44	Yes	1250	85	84.8	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	910415	13C4-PFOS	521914	2500	Avg	1.895997				2300.08	2300.08	Yes	2500	92	92.0	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3548870	13C4-PFOS	521914	2500	Avg	0.700486				24268	24267.87	Yes	25000	97	97.1	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	207960	13C4-PFOS	521914	2500	Avg	0.437202				2278.45	2278.45	Yes	2500	91	91.1	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4347619	13C4-PFOS	521914	2500	Avg	0.870998				23910	23909.77	Yes	25000	96	95.6	Yes
092424A038.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	247350	13C4-PFOS	521914	2500	Avg	0.508417				2330.41	2330.41	Yes	2500	93	93.2	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2003857	13C3-PFBA	873355	5000	Avg	1.136894				10091	10090.81	Yes	10000	101	100.9	Yes
092524060.d	CCB A3	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1495	13C4-PFBA	2003857	10000	Avg	0.895963		0.01	8.3269	0.08327	0.0833	Yes				
092524060.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	750953	13C2-PFHxA	450276	2500	Avg	0.891167				4678.59	4678.59	Yes	5000	94	93.6	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	90140	18O2-PFHxS	285983	2500	Avg	0.164935				4777.53	4777.54	Yes	5000	96	95.6	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	468979	13C2-PFHxA	450276	2500	Avg	0.967301				2691.86	2691.86	Yes	2500	108	107.7	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	413593	18O2-PFHxS	285983	2500	Avg	1.453938				2486.72	2486.72	Yes	2500	99	99.5	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	441046	13C2-PFHxA	450276	2500	Avg	0.256272				9555.28	9555.29	Yes	10000	96	95.6	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	420511	13C2-PFHxA	450276	2500	Avg	0.991907				2353.79	2353.79	Yes	2500	94	94.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524060.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	134308	18O2-PFHxS	285983	2500	Avg	0.219087				5359.02	5359.02	Yes	5000	107	107.2	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	495244	13C4-PFOA	108125	2500	Avg	4.175238				2742.53	2742.53	Yes	2500	110	109.7	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	299435	18O2-PFHxS	285983	2500	Avg	1.069919				2446.54	2446.54	Yes	2500	98	97.9	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	152959	13C5-PFNA	207839	1250	Avg	0.749868				1226.8	1226.8	Yes	1250	98	98.1	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	115811	18O2-PFHxS	285983	2500	Avg	0.206645				4899.19	4899.19	Yes	5000	98	98.0	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	272487	13C4-PFOS	418143	2500	Avg	0.360298				4521.67	4521.67	Yes	5000	90	90.4	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	196524	13C2-PFDA	219097	1250	Avg	0.917163				1222.48	1222.48	Yes	1250	98	97.8	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	367308	13C4-PFOS	418143	2500	Avg	0.377269				5820.95	5820.96	Yes	5000	116	116.4	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	414644	13C4-PFOS	418143	2500	Avg	0.93405				2654.12	2654.12	Yes	2500	106	106.2	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	167191	13C2-PFDA	219097	1250	Avg	0.734493				1298.67	1298.67	Yes	1250	104	103.9	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	149992	13C2-PFDA	219097	1250	Avg	0.66531				1286.23	1286.23	Yes	1250	103	102.9	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	815106	13C4-PFOS	418143	2500	Avg	1.926242				2529.99	2529.99	Yes	2500	101	101.2	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	122765	13C2-PFDA	219097	1250	Avg	0.514737				1360.7	1360.7	Yes	1250	109	108.9	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3211101	13C4-PFOS	418143	2500	Avg	0.747197				25694	25694.14	Yes	25000	103	102.8	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	195398	13C4-PFOS	418143	2500	Avg	0.468708				2492.48	2492.49	Yes	2500	100	99.7	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4102314	13C4-PFOS	418143	2500	Avg	0.967764				25344	25343.97	Yes	25000	101	101.4	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	229509	13C4-PFOS	418143	2500	Avg	0.548881				2499.98	2499.98	Yes	2500	100	100.0	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2045906	13C3-PFBA	881087	5000	Avg	1.136894				10212	10212.14	Yes	10000	102	102.1	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	744081	13C2-PFHxA	401613	2500	Avg	0.891167				5197.49	5197.49	Yes	5000	104	103.9	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	88703	18O2-PFHxS	277640	2500	Avg	0.164935				4842.64	4842.65	Yes	5000	97	96.9	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	419546	13C2-PFHxA	401613	2500	Avg	0.967301				2699.92	2699.92	Yes	2500	108	108.0	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	429438	18O2-PFHxS	277640	2500	Avg	1.453938				2659.58	2659.58	Yes	2500	106	106.4	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	469097	13C2-PFHxA	401613	2500	Avg	0.256272				11394	11394.46	Yes	10000	114	113.9	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	421176	13C2-PFHxA	401613	2500	Avg	0.991907				2643.17	2643.17	Yes	2500	106	105.7	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	131170	18O2-PFHxS	277640	2500	Avg	0.219087				5391.09	5391.08	Yes	5000	108	107.8	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	498899	13C4-PFOA	115200	2500	Avg	4.175238				2593.1	2593.1	Yes	2500	104	103.7	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	300262	18O2-PFHxS	277640	2500	Avg	1.069919				2527.01	2527.01	Yes	2500	101	101.1	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	157384	13C5-PFNA	210142	1250	Avg	0.749868				1248.46	1248.46	Yes	1250	100	99.9	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	115103	18O2-PFHxS	277640	2500	Avg	0.206645				5015.56	5015.56	Yes	5000	100	100.3	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	306447	13C4-PFOS	408807	2500	Avg	0.360298				5201.34	5201.34	Yes	5000	104	104.0	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	221428	13C2-PFDA	203949	1250	Avg	0.917163				1479.7	1479.7	Yes	1250	118	118.4	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	388687	13C4-PFOS	408807	2500	Avg	0.377269				6300.43	6300.44	Yes	5000	126	126.0	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	434396	13C4-PFOS	408807	2500	Avg	0.93405				2844.05	2844.05	Yes	2500	114	113.8	Yes
092524075.d	CCB A4	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2957	13C8-PFOS	434396	2500	Avg	1.000521		0.01	17.009	0.17009	0.1701	Yes				
092524075.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	185802	13C2-PFDA	203949	1250	Avg	0.734493				1550.43	1550.43	Yes	1250	124	124.0	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	150574	13C2-PFDA	203949	1250	Avg	0.66531				1387.12	1387.12	Yes	1250	111	111.0	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	826281	13C4-PFOS	408807	2500	Avg	1.926242				2623.24	2623.24	Yes	2500	105	104.9	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	124080	13C2-PFDA	203949	1250	Avg	0.514737				1477.42	1477.42	Yes	1250	118	118.2	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3200874	13C4-PFOS	408807	2500	Avg	0.747197				26197	26197.22	Yes	25000	105	104.8	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	197729	13C4-PFOS	408807	2500	Avg	0.468708				2579.82	2579.82	Yes	2500	103	103.2	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4100637	13C4-PFOS	408807	2500	Avg	0.967764				25912	25912.16	Yes	25000	104	103.6	Yes
092524075.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	236847	13C4-PFOS	408807	2500	Avg	0.548881				2638.83	2638.83	Yes	2500	106	105.6	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3285596	13C3-PFBA	1448936	5000	Avg	1.150256				9856.9	9856.9	Yes	10000	99	98.6	Yes
092624008.d	CCB A1	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1742	13C4-PFBA	3285596	10000	Avg	0.860777		0.01	6.1595	0.06159	0.0616	Yes				
092624008.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1399589	13C2-PFHxA	888516	2500	Avg	0.795934				4947.64	4947.64	Yes	5000	99	99.0	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	192083	18O2-PFHxS	530802	2500	Avg	0.18253				4956.34	4956.35	Yes	5000	99	99.1	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	976411	13C2-PFHxA	888516	2500	Avg	1.087908				2525.31	2525.31	Yes	2500	101	101.0	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	657925	18O2-PFHxS	530802	2500	Avg	1.317939				2351.19	2351.19	Yes	2500	94	94.0	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	687725	13C2-PFHxA	888516	2500	Avg	0.192552				10049	10049.43	Yes	10000	100	100.5	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1062488	13C2-PFHxA	888516	2500	Avg	1.191993				2507.99	2507.99	Yes	2500	100	100.3	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	233267	18O2-PFHxS	530802	2500	Avg	0.205065				5357.58	5357.59	Yes	5000	107	107.2	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1246820	13C4-PFOA	163895	2500	Avg	6.935128				2742.35	2742.35	Yes	2500	110	109.7	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	597635	18O2-PFHxS	530802	2500	Avg	1.159703				2427.15	2427.15	Yes	2500	97	97.1	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	639379	13C5-PFNA	758994	1250	Avg	0.884789				1190.12	1190.12	Yes	1250	95	95.2	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	224454	18O2-PFHxS	530802	2500	Avg	0.201772				5239.31	5239.31	Yes	5000	105	104.8	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	674505	13C4-PFOS	709580	2500	Avg	0.460729				5157.97	5157.96	Yes	5000	103	103.2	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	594854	13C2-PFDA	491351	1250	Avg	1.142396				1324.68	1324.68	Yes	1250	106	106.0	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	553278	13C4-PFOS	709580	2500	Avg	0.363285				5365.8	5365.8	Yes	5000	107	107.3	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	692256	13C4-PFOS	709580	2500	Avg	1.0092				2416.73	2416.73	Yes	2500	97	96.7	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	540088	13C2-PFDA	491351	1250	Avg	1.021306				1345.32	1345.32	Yes	1250	108	107.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092624008.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	491484	13C2-PFDA	491351	1250	Avg	0.966171				1294.12	1294.12	Yes	1250	104	103.5	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1039781	13C4-PFOS	709580	2500	Avg	1.46881				2494.11	2494.11	Yes	2500	100	99.8	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	453870	13C2-PFDA	491351	1250	Avg	0.890895				1296.05	1296.05	Yes	1250	104	103.7	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4369318	13C4-PFOS	709580	2500	Avg	0.602535				25549	25548.77	Yes	25000	102	102.2	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	250741	13C4-PFOS	709580	2500	Avg	0.374254				2360.47	2360.46	Yes	2500	94	94.4	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4796103	13C4-PFOS	709580	2500	Avg	0.664194				25441	25440.88	Yes	25000	102	101.8	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	272420	13C4-PFOS	709580	2500	Avg	0.398062				2411.16	2411.16	Yes	2500	96	96.4	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3285339	13C3-PFBA	1447816	5000	Avg	1.150256				9863.76	9863.76	Yes	10000	99	98.6	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1427590	13C2-PFHxA	860326	2500	Avg	0.795934				5211.99	5211.99	Yes	5000	104	104.2	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	197134	18O2-PFHxS	504638	2500	Avg	0.18253				5350.4	5350.41	Yes	5000	107	107.0	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	953797	13C2-PFHxA	860326	2500	Avg	1.087908				2547.65	2547.66	Yes	2500	102	101.9	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	642550	18O2-PFHxS	504638	2500	Avg	1.317939				2415.3	2415.3	Yes	2500	97	96.6	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	654078	13C2-PFHxA	860326	2500	Avg	0.192552				9870.94	9870.94	Yes	10000	99	98.7	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1112503	13C2-PFHxA	860326	2500	Avg	1.191993				2712.09	2712.09	Yes	2500	108	108.5	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	241337	18O2-PFHxS	504638	2500	Avg	0.205065				5830.31	5830.32	Yes	5000	117	116.6	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1088529	13C4-PFOA	182731	2500	Avg	6.935128				2147.4	2147.4	Yes	2500	86	85.9	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	589033	18O2-PFHxS	504638	2500	Avg	1.159703				2516.24	2516.24	Yes	2500	101	100.6	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	615075	13C5-PFNA	750353	1250	Avg	0.884789				1158.06	1158.06	Yes	1250	93	92.6	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	209724	18O2-PFHxS	504638	2500	Avg	0.201772				5149.29	5149.29	Yes	5000	103	103.0	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	688051	13C4-PFOS	664441	2500	Avg	0.460729				5619	5619	Yes	5000	112	112.4	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	586483	13C2-PFDA	502059	1250	Avg	1.142396				1278.19	1278.19	Yes	1250	102	102.3	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	511029	13C4-PFOS	664441	2500	Avg	0.363285				5292.75	5292.75	Yes	5000	106	105.9	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	695062	13C4-PFOS	664441	2500	Avg	1.0092				2591.37	2591.37	Yes	2500	104	103.7	Yes
092624023.d	CCB A2	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	6129	13C8-PFOS	695062	2500	Avg	0.972082		0.01	22.678	0.22678	0.2268	Yes				
092624023.d	CCB A2	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	560168	13C2-PFDA	502059	1250	Avg	1.021306				1365.58	1365.58	Yes	1250	109	109.2	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	534731	13C2-PFDA	502059	1250	Avg	0.966171				1377.96	1377.96	Yes	1250	110	110.2	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	996307	13C4-PFOS	664441	2500	Avg	1.46881				2552.18	2552.18	Yes	2500	102	102.1	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	423545	13C2-PFDA	502059	1250	Avg	0.890895				1183.66	1183.66	Yes	1250	95	94.7	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4336918	13C4-PFOS	664441	2500	Avg	0.602535				27082	27082.11	Yes	25000	108	108.3	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	254571	13C4-PFOS	664441	2500	Avg	0.374254				2559.33	2559.33	Yes	2500	102	102.4	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4628861	13C4-PFOS	664441	2500	Avg	0.664194				26222	26221.82	Yes	25000	105	104.9	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	272693	13C4-PFOS	664441	2500	Avg	0.398062				2577.55	2577.55	Yes	2500	103	103.1	Yes

Key

	from quantitation report
	from reported calibration
	from lab report/EDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
ND	not detected
ng/L	nanograms per liter
RF	response factor

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524014.d	BLK L8	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1987762	13C3-PFBA	868783	5000	Avg	1.136894				10062	10062.44	Yes	10000	101	100.6	Yes
092524014.d	BLK L8	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3539	13C4-PFBA	1987762	10000	Avg	0.895963		0.01	19.871	0.19871	0.1987	Yes				
092524014.d	BLK L8	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	795279	13C2-PFHxA	441729	2500	Avg	0.891167				5050.62	5050.62	Yes	5000	101	101	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	85560	18O2-PFHxS	294777	2500	Avg	0.164935				4399.5	4399.51	Yes	5000	88	88	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	464690	13C2-PFHxA	441729	2500	Avg	0.967301				2718.85	2718.85	Yes	2500	109	108.8	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	428153	18O2-PFHxS	294777	2500	Avg	1.453938				2497.47	2497.47	Yes	2500	100	99.9	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	475299	13C2-PFHxA	441729	2500	Avg	0.256272				10497	10496.63	Yes	10000	105	105	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	424177	13C2-PFHxA	441729	2500	Avg	0.991907				2420.25	2420.25	Yes	2500	97	96.8	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	127029	18O2-PFHxS	294777	2500	Avg	0.219087				4917.38	4917.37	Yes	5000	98	98.3	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	480371	13C4-PFOA	119837	2500	Avg	4.175238				2400.18	2400.18	Yes	2500	96	96	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	317758	18O2-PFHxS	294777	2500	Avg	1.069919				2518.79	2518.79	Yes	2500	101	100.8	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	172625	13C5-PFNA	232817	1250	Avg	0.749868				1235.99	1235.99	Yes	1250	99	98.9	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	116564	18O2-PFHxS	294777	2500	Avg	0.206645				4783.94	4783.94	Yes	5000	96	95.7	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	301883	13C4-PFOS	445429	2500	Avg	0.360298				4702.6	4702.6	Yes	5000	94	94.1	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	218587	13C2-PFDA	207265	1250	Avg	0.917163				1437.35	1437.35	Yes	1250	115	115	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	327712	13C4-PFOS	445429	2500	Avg	0.377269				4875.31	4875.32	Yes	5000	98	97.5	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	412173	13C4-PFOS	445429	2500	Avg	0.93405				2476.69	2476.69	Yes	2500	99	99.1	Yes
092524014.d	BLK L8	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1974	13C8-PFOS	412173	2500	Avg	1.000521		0.01	11.967	0.11967	0.1197	Yes				
092524014.d	BLK L8	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	177691	13C2-PFDA	207265	1250	Avg	0.734493				1459.02	1459.02	Yes	1250	117	116.7	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	160738	13C2-PFDA	207265	1250	Avg	0.66531				1457.06	1457.06	Yes	1250	117	116.6	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	853062	13C4-PFOS	445429	2500	Avg	1.926242				2485.6	2485.6	Yes	2500	99	99.4	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	122086	13C2-PFDA	207265	1250	Avg	0.514737				1430.42	1430.42	Yes	1250	114	114.4	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3298214	13C4-PFOS	445429	2500	Avg	0.747197				24775	24774.52	Yes	25000	99	99.1	Yes
092524014.d	BLK L8	Instrument_Blank	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	14401	D7-NMeFOSE	3298214	25000	Avg	1.187485		0.01	91.923	0.91923	0.9192	Yes				
092524014.d	BLK L8	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	197424	13C4-PFOS	445429	2500	Avg	0.468708				2364.06	2364.06	Yes	2500	95	94.6	Yes
092524014.d	BLK L8	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4248337	13C4-PFOS	445429	2500	Avg	0.967764				24638	24638.32	Yes	25000	99	98.6	Yes
092524014.d	BLK L8	Instrument_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	22594	D9-NEtFOSE	4248337	25000	Avg	1.044104		0.01	127.34	1.2734	1.2734	Yes				
092524014.d	BLK L8	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	237268	13C4-PFOS	445429	2500	Avg	0.548881				2426.18	2426.18	Yes	2500	97	97	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1981130	13C3-PFBA	891990	5000	Avg	1.136894				9767.94	9767.94	Yes	10000	98	97.7	Yes
092524016.d	BLK L9	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1895	13C4-PFBA	1981130	10000	Avg	0.895963		0.01	10.676	0.10676	0.1068	Yes				
092524016.d	BLK L9	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	801252	13C2-PFHxA	432904	2500	Avg	0.891167				5192.28	5192.28	Yes	5000	104	103.8	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	101623	18O2-PFHxS	282903	2500	Avg	0.164935				5444.78	5444.8	Yes	5000	109	108.9	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	421408	13C2-PFHxA	432904	2500	Avg	0.967301				2515.88	2515.88	Yes	2500	101	100.6	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	416199	18O2-PFHxS	282903	2500	Avg	1.453938				2529.63	2529.63	Yes	2500	101	101.2	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	465586	13C2-PFHxA	432904	2500	Avg	0.256272				10492	10491.73	Yes	10000	105	104.9	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	434325	13C2-PFHxA	432904	2500	Avg	0.991907				2528.67	2528.67	Yes	2500	101	101.1	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	122475	18O2-PFHxS	282903	2500	Avg	0.219087				4940.08	4940.07	Yes	5000	99	98.8	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	482377	13C4-PFOA	105108	2500	Avg	4.175238				2747.96	2747.95	Yes	2500	110	109.9	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	312065	18O2-PFHxS	282903	2500	Avg	1.069919				2577.49	2577.49	Yes	2500	103	103.1	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	165949	13C5-PFNA	230112	1250	Avg	0.749868				1202.16	1202.16	Yes	1250	96	96.2	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	113261	18O2-PFHxS	282903	2500	Avg	0.206645				4843.48	4843.48	Yes	5000	97	96.9	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	290522	13C4-PFOS	435546	2500	Avg	0.360298				4628.32	4628.32	Yes	5000	93	92.6	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	187725	13C2-PFDA	219947	1250	Avg	0.917163				1163.24	1163.24	Yes	1250	93	93.1	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	328887	13C4-PFOS	435546	2500	Avg	0.377269				5003.82	5003.82	Yes	5000	100	100.1	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	421436	13C4-PFOS	435546	2500	Avg	0.93405				2589.81	2589.81	Yes	2500	104	103.6	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	166829	13C2-PFDA	219947	1250	Avg	0.734493				1290.85	1290.85	Yes	1250	103	103.3	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	165663	13C2-PFDA	219947	1250	Avg	0.66531				1415.12	1415.12	Yes	1250	113	113.2	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	854065	13C4-PFOS	435546	2500	Avg	1.926242				2544.99	2544.99	Yes	2500	102	101.8	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	117517	13C2-PFDA	219947	1250	Avg	0.514737				1297.5	1297.5	Yes	1250	104	103.8	Yes
092524016.d	BLK L9	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3218499	13C4-PFOS	435546	2500	Avg	0.747197				24724	24724.31	Yes	25000	99	98.9	Yes
092524016.d	BLK L9	Instrument_Blank	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	23433	D7-NMeFOSE	3218499	25000	Avg	1.187485		0.01	153.28	1.5328	1.5328	Yes				
092524016.d	BLK L9	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	202263	13C4-PFOS	435546	2500	Avg	0.468708				2476.96	2476.97	Yes	2500	99	99.1	Yes
092524016.d	BLK L9	Instrument_Blank	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1420	D3-NMeFOSA	202263	2500	Avg	1.228879		0.01	14.282	0.14282	0.1428	Yes				
092524016.d	BLK L9	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4196926	13C4-PFOS	435546	2500	Avg	0.967764				24892	24892.46	Yes	25000	100	99.6	Yes
092524016.d	BLK L9	Instrument_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	42129	D9-NEtFOSE	4196926	25000	Avg	1.044104		0.01	240.35	2.4035	2.4035	Yes				
092524016.d	BLK L9	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	239657	13C4-PFOS	435546	2500	Avg	0.548881				2506.21	2506.21	Yes	2500	100	100.2	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1993358	13C3-PFBA	882989	5000	Avg	1.136894				9928.42	9928.42	Yes	10000	99	99.3	Yes
092524018.d	BLK L10	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2007	13C4-PFBA	1993358	10000	Avg	0.895963		0.01	11.238	0.11238	0.1124	Yes				
092524018.d	BLK L10	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	798833	13C2-PFHxA	443752	2500	Avg	0.891167				5050.06	5050.06	Yes	5000	101	101	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	96347	18O2-PFHxS	281038	2500	Avg	0.164935				5196.36	5196.37	Yes	5000	104	103.9	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	453378	13C2-PFHxA	443752	2500	Avg	0.967301				2640.58	2640.57	Yes	2500	106	105.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524018.d	BLK L10	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	433096	18O2-PFHxS	281038	2500	Avg	1.453938				2649.8	2649.8	Yes	2500	106	106	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	459410	13C2-PFHxA	443752	2500	Avg	0.256272				10099	10099.48	Yes	10000	101	101	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	446665	13C2-PFHxA	443752	2500	Avg	0.991907				2536.94	2536.94	Yes	2500	101	101.5	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	143177	18O2-PFHxS	281038	2500	Avg	0.219087				5813.43	5813.42	Yes	5000	116	116.3	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	504338	13C4-PFOA	113108	2500	Avg	4.175238				2669.85	2669.85	Yes	2500	107	106.8	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	314532	18O2-PFHxS	281038	2500	Avg	1.069919				2615.1	2615.1	Yes	2500	105	104.6	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	162089	13C5-PFNA	219478	1250	Avg	0.749868				1231.08	1231.08	Yes	1250	98	98.5	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	126427	18O2-PFHxS	281038	2500	Avg	0.206645				5442.39	5442.39	Yes	5000	109	108.8	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	322608	13C4-PFOS	451989	2500	Avg	0.360298				4952.51	4952.51	Yes	5000	99	99.1	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	226447	13C2-PFDA	230455	1250	Avg	0.917163				1339.2	1339.2	Yes	1250	107	107.1	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	330310	13C4-PFOS	451989	2500	Avg	0.377269				4842.64	4842.65	Yes	5000	97	96.9	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	442529	13C4-PFOS	451989	2500	Avg	0.93405				2620.5	2620.5	Yes	2500	105	104.8	Yes
092524018.d	BLK L10	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1574	13C8-PFOS	442529	2500	Avg	1.000521		0.01	8.8874	0.08887	0.0889	Yes				
092524018.d	BLK L10	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	176206	13C2-PFDA	230455	1250	Avg	0.734493				1301.24	1301.24	Yes	1250	104	104.1	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	156138	13C2-PFDA	230455	1250	Avg	0.66531				1272.94	1272.94	Yes	1250	102	101.8	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	847459	13C4-PFOS	451989	2500	Avg	1.926242				2433.44	2433.44	Yes	2500	97	97.3	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	122908	13C2-PFDA	230455	1250	Avg	0.514737				1295.15	1295.15	Yes	1250	104	103.6	Yes
092524018.d	BLK L10	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3377160	13C4-PFOS	451989	2500	Avg	0.747197				24999	24999.35	Yes	25000	100	100	Yes
092524018.d	BLK L10	Instrument_Blank	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	34435	D7-NMeFOSE	3377160	25000	Avg	1.187485		0.01	214.66	2.1466	2.1466	Yes				
092524018.d	BLK L10	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	203535	13C4-PFOS	451989	2500	Avg	0.468708				2401.86	2401.87	Yes	2500	96	96.1	Yes
092524018.d	BLK L10	Instrument_Blank	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	2408	D3-NMeFOSA	203535	2500	Avg	1.228879		0.01	24.068	0.24068	0.2407	Yes				
092524018.d	BLK L10	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4181235	13C4-PFOS	451989	2500	Avg	0.967764				23897	23897.21	Yes	25000	96	95.6	Yes
092524018.d	BLK L10	Instrument_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	57279	D9-NEtFOSE	4181235	25000	Avg	1.044104		0.01	328.01	3.2801	3.2801	Yes				
092524018.d	BLK L10	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	246511	13C4-PFOS	451989	2500	Avg	0.548881				2484.11	2484.11	Yes	2500	99	99.4	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1998822	13C3-PFBA	887046	5000	Avg	1.136894				9910.1	9910.1	Yes	10000	99	99.1	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	167826	13C4-PFBA	1998822	10000	Avg	0.895963				937.12	937.12	Yes	1000	94	93.7	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	791533	13C2-PFHxA	446163	2500	Avg	0.891167				4976.87	4976.87	Yes	5000	100	99.5	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	149866	13C5-PFPeA	791533	5000	Avg	1.104878				856.82	856.82	Yes	1000	86	85.7	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	97687	18O2-PFHxS	294614	2500	Avg	0.164935				5025.85	5025.86	Yes	5000	101	100.5	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	32205	13C2-4:2FTS	97687	5000	Avg	1.754213				939.67	939.67	Yes	937.5	100	100.2	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	443553	13C2-PFHxA	446163	2500	Avg	0.967301				2569.39	2569.39	Yes	2500	103	102.8	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	173688	13C5-PFHxA	443553	2500	Avg	1.287042				760.63	760.63	Yes	1000	76	76.1	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	31387	13C5-PFHxA	443553	2500	Avg	0.175826				1006.15	1006.15	Yes	1000	101	100.6	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	422135	18O2-PFHxS	294614	2500	Avg	1.453938				2463.72	2463.72	Yes	2500	99	98.5	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	283513	13C3-PFBS	422135	2500	Avg	1.820068				922.52	922.52	Yes	887	104	104	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	452694	13C2-PFHxA	446163	2500	Avg	0.256272				9898.05	9898.06	Yes	10000	99	99	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	416596	13C2-PFHxA	446163	2500	Avg	0.991907				2353.37	2353.37	Yes	2500	94	94.1	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	167042	13C4-PFHpA	416596	2500	Avg	1.191595				841.24	841.24	Yes	1000	84	84.1	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	118791	18O2-PFHxS	294614	2500	Avg	0.219087				4601.02	4601.01	Yes	5000	92	92	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	49004	13C2-6:2FTS	118791	5000	Avg	2.148719				959.93	959.93	Yes	950	101	101	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	478014	13C4-PFOA	121734	2500	Avg	4.175238				2351.19	2351.19	Yes	2500	94	94	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	175994	13C8-PFOA	478014	2500	Avg	1.257832				731.77	731.77	Yes	1000	73	73.2	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	310744	18O2-PFHxS	294614	2500	Avg	1.069919				2464.55	2464.55	Yes	2500	99	98.6	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	143670	13C3-PFHxS	310744	2500	Avg	1.189606				971.63	971.63	Yes	941	103	103.3	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	123242	13C3-PFHxS	310744	2500	Avg	1.051753				942.72	942.72	Yes	914	103	103.1	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	166945	13C5-PFNA	222042	1250	Avg	0.749868				1253.32	1253.32	Yes	1250	100	100.3	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	152243	13C9-PFNA	166945	1250	Avg	1.347846				845.73	845.73	Yes	1000	85	84.6	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	122163	18O2-PFHxS	294614	2500	Avg	0.206645				5016.51	5016.51	Yes	5000	100	100.3	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	38267	13C2-8:2FTS	122163	5000	Avg	1.765809				886.97	886.97	Yes	960	92	92.4	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	290550	13C4-PFOS	410507	2500	Avg	0.360298				4911.1	4911.1	Yes	5000	98	98.2	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	44005	D3-NMeFOSAA	290550	5000	Ln	0.747099	13.759			995.2	995.2	Yes	1000	100	99.5	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	215356	13C2-PFDA	225091	1250	Avg	0.917163				1303.95	1303.95	Yes	1250	104	104.3	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	150619	13C6-PFDA	215356	1250	Avg	1.072259				815.33	815.33	Yes	1000	82	81.5	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	343207	13C4-PFOS	410507	2500	Avg	0.377269				5540.18	5540.19	Yes	5000	111	110.8	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	58656	D5-NEtFOSAA	343207	5000	Avg	0.928484				920.35	920.35	Yes	1000	92	92	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	417951	13C4-PFOS	410507	2500	Avg	0.93405				2725.05	2725.05	Yes	2500	109	109	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	128829	13C8-PFOS	417951	2500	Ln	0.918199	26.9149			809.94	809.94	Yes	953	85	85	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	138446	13C8-PFOS	417951	2500	Avg	1.000521				827.69	827.69	Yes	928	89	89.2	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	144895	13C8-PFOS	417951	2500	Avg	1.038139				834.86	834.86	Yes	962	87	86.8	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	134128	13C8-PFOS	417951	2500	Avg	0.928176				864.38	864.38	Yes	965	90	89.6	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	187367	13C2-PFDA	225091	1250	Avg	0.734493				1416.63	1416.63	Yes	1250	113	113.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	117490	13C7-PFUnA	187367	1250	Avg	0.968723				809.13	809.13	Yes	1000	81	80.9	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	158856	13C2-PFDA	225091	1250	Avg	0.66531				1325.96	1325.96	Yes	1250	106	106.1	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	125736	13C2-PFDoA	158856	1250	Avg	1.238225				799.04	799.04	Yes	1000	80	79.9	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	65751	13C2-PFDoA	158856	1250	Avg	0.659525				784.47	784.47	Yes	1000	78	78.4	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	819334	13C4-PFOS	410507	2500	Avg	1.926242				2590.42	2590.42	Yes	2500	104	103.6	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	298603	13C8-PFOSA	819334	2500	Avg	1.101995				826.79	826.79	Yes	1000	83	82.7	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	120267	13C2-PFDA	225091	1250	Avg	0.514737				1297.52	1297.52	Yes	1250	104	103.8	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	81288	13C2-PFTeDA	120267	1250	Avg	0.948648				890.6	890.6	Yes	1000	89	89.1	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3263287	13C4-PFOS	410507	2500	Avg	0.747197				26597	26597.42	Yes	25000	106	106.4	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	140757	D7-NMeFOSE	3263287	25000	Avg	1.187485				908.08	908.09	Yes	1000	91	90.8	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	195082	13C4-PFOS	410507	2500	Avg	0.468708				2534.74	2534.74	Yes	2500	101	101.4	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	87737	D3-NMeFOSA	195082	2500	Avg	1.228879				914.95	914.95	Yes	1000	91	91.5	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4109519	13C4-PFOS	410507	2500	Avg	0.967764				25861	25860.74	Yes	25000	103	103.4	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	171507	D9-NEtFOSE	4109519	25000	Avg	1.044104				999.28	999.28	Yes	1000	100	99.9	Yes
092524019.d	ICV_SVLC-4110	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	232647	13C4-PFOS	410507	2500	Avg	0.548881				2581.3	2581.3	Yes	2500	103	103.3	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1763168	13C3-PFBA	761327	5000	Avg	1.136894				10185	10185.27	Yes	10000	102	101.9	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1698277	13C4-PFBA	1763168	10000	Avg	0.895963				10750	10750.4	Yes	10000	108	107.5	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	691392	13C2-PFHxA	376608	2500	Avg	0.891167				5150.1	5150.1	Yes	5000	103	103	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	796879	13C5-PFPeA	691392	5000	Avg	1.104878				5215.84	5215.83	Yes	5000	104	104.3	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	86434	18O2-PFHxS	249697	2500	Avg	0.164935				5246.83	5246.85	Yes	5000	105	104.9	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	312023	13C2-4:2FTS	86434	5000	Avg	1.754213				10289	10289.39	Yes	9375	110	109.8	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	402057	13C2-PFHxA	376608	2500	Avg	0.967301				2759.16	2759.16	Yes	2500	110	110.4	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	503548	13C5-PFHxA	402057	2500	Avg	1.287042				2432.77	2432.77	Yes	2500	97	97.3	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1853394	13C5-PFHxA	402057	2500	Avg	0.175826				65545	65544.62	Yes	62500	105	104.9	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	369377	18O2-PFHxS	249697	2500	Avg	1.453938				2543.61	2543.61	Yes	2500	102	101.7	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	657397	13C3-PFBS	369377	2500	Avg	1.820068				2444.61	2444.61	Yes	2218	110	110.2	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	402598	13C2-PFHxA	376608	2500	Avg	0.256272				10428	10428.48	Yes	10000	104	104.3	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	385053	13C2-PFHxA	376608	2500	Avg	0.991907				2576.92	2576.91	Yes	2500	103	103.1	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	474845	13C4-PFHpA	385053	2500	Avg	1.191595				2587.28	2587.28	Yes	2500	103	103.5	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	115226	18O2-PFHxS	249697	2500	Avg	0.219087				5265.76	5265.75	Yes	5000	105	105.3	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	481713	13C2-6:2FTS	115226	5000	Avg	2.148719				9728.1	9728.11	Yes	9500	102	102.4	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	421176	13C4-PFOA	93314	2500	Avg	4.175238				2702.56	2702.56	Yes	2500	108	108.1	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	535126	13C8-PFOA	421176	2500	Avg	1.257832				2525.28	2525.28	Yes	2500	101	101	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	279652	18O2-PFHxS	249697	2500	Avg	1.069919				2616.94	2616.94	Yes	2500	105	104.7	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	338469	13C3-PFHxS	279652	2500	Avg	1.189606				2543.53	2543.54	Yes	2353	108	108.1	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	282166	13C3-PFHxS	279652	2500	Avg	1.051753				2398.35	2398.35	Yes	2285	105	105	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	143454	13C5-PFNA	185216	1250	Avg	0.749868				1291.1	1291.1	Yes	1250	103	103.3	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	359623	13C9-PFNA	143454	1250	Avg	1.347846				2324.9	2324.9	Yes	2500	93	93	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	103698	18O2-PFHxS	249697	2500	Avg	0.206645				5024.26	5024.26	Yes	5000	100	100.5	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	384529	13C2-8:2FTS	103698	5000	Avg	1.765809				10500	10499.9	Yes	9600	109	109.4	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	278519	13C4-PFOS	347713	2500	Avg	0.360298				5557.92	5557.92	Yes	5000	111	111.2	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	102288	D3-NMeFOSAA	278519	5000	Ln	0.747099	13.759			2439.47	2439.47	Yes	2500	98	97.6	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	176487	13C2-PFDA	196916	1250	Avg	0.917163				1221.51	1221.5	Yes	1250	98	97.7	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	405668	13C6-PFDA	176487	1250	Avg	1.072259				2679.59	2679.59	Yes	2500	107	107.2	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	312045	13C4-PFOS	347713	2500	Avg	0.377269				5946.82	5946.83	Yes	5000	119	118.9	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	160325	D5-NEtFOSAA	312045	5000	Avg	0.928484				2766.81	2766.81	Yes	2500	111	110.7	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	357474	13C4-PFOS	347713	2500	Avg	0.93405				2751.65	2751.65	Yes	2500	110	110.1	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	332853	13C8-PFOS	357474	2500	Ln	0.918199	26.9149			2505.88	2505.88	Yes	2383	105	105.2	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	327823	13C8-PFOS	357474	2500	Avg	1.000521				2291.44	2291.44	Yes	2320	99	98.8	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	372414	13C8-PFOS	357474	2500	Avg	1.038139				2508.8	2508.8	Yes	2405	104	104.3	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	328854	13C8-PFOS	357474	2500	Avg	0.928176				2477.81	2477.81	Yes	2413	103	102.7	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	166089	13C2-PFDA	196916	1250	Avg	0.734493				1435.43	1435.43	Yes	1250	115	114.8	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	341592	13C7-PFUnA	166089	1250	Avg	0.968723				2653.85	2653.86	Yes	2500	106	106.2	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	136577	13C2-PFDA	196916	1250	Avg	0.66531				1303.11	1303.11	Yes	1250	104	104.2	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	354050	13C2-PFDoA	136577	1250	Avg	1.238225				2616.96	2616.96	Yes	2500	105	104.7	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	198221	13C2-PFDoA	136577	1250	Avg	0.659525				2750.75	2750.75	Yes	2500	110	110	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	754200	13C4-PFOS	347713	2500	Avg	1.926242				2815.11	2815.11	Yes	2500	113	112.6	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	830236	13C8-PFOSA	754200	2500	Avg	1.101995				2497.33	2497.33	Yes	2500	100	99.9	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	103285	13C2-PFDA	196916	1250	Avg	0.514737				1273.74	1273.74	Yes	1250	102	101.9	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	193843	13C2-PFTeDA	103285	1250	Avg	0.948648				2472.96	2472.96	Yes	2500	99	98.9	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2948897	13C4-PFOS	347713	2500	Avg	0.747197				28375	28375.5	Yes	25000	114	113.5	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3643572	D7-NMeFOSE	2948897	25000	Avg	1.187485				26012	26012.35	Yes	25000	104	104	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	173316	13C4-PFOS	347713	2500	Avg	0.468708				2658.61	2658.61	Yes	2500	106	106.3	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	215960	D3-NMeFOSA	173316	2500	Avg	1.228879				2534.93	2534.93	Yes	2500	101	101.4	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3735571	13C4-PFOS	347713	2500	Avg	0.967764				27753	27752.79	Yes	25000	111	111	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4010299	D9-NEtFOSE	3735571	25000	Avg	1.044104				25705	25704.91	Yes	25000	103	102.8	Yes
092524043.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	206653	13C4-PFOS	347713	2500	Avg	0.548881				2706.96	2706.96	Yes	2500	108	108.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2215170	13C3-PFBA	907847	5000	Avg	1.136894				10731	10731.1	Yes	10000	107	107.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1997210	13C4-PFBA	2215170	10000	Avg	0.895963				10063	10062.98	Yes	10000	101	100.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	858841	13C2-PFHxA	455297	2500	Avg	0.891167				5291.75	5291.74	Yes	5000	106	105.8	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	956775	13C5-PFPeA	858841	5000	Avg	1.104878				5041.42	5041.42	Yes	5000	101	100.8	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	102549	18O2-PFHxS	295388	2500	Avg	0.164935				5262.17	5262.18	Yes	5000	105	105.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	349281	13C2-4:2FTS	102549	5000	Avg	1.754213				9708.03	9708.03	Yes	9375	104	103.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	508560	13C2-PFHxA	455297	2500	Avg	0.967301				2886.86	2886.86	Yes	2500	115	115.5	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	606225	13C5-PFHxA	508560	2500	Avg	1.287042				2315.47	2315.47	Yes	2500	93	92.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	2168029	13C5-PFHxA	508560	2500	Avg	0.175826				60615	60614.96	Yes	62500	97	97	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	465268	18O2-PFHxS	295388	2500	Avg	1.453938				2708.35	2708.35	Yes	2500	108	108.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	787673	13C3-PFBS	465268	2500	Avg	1.820068				2325.39	2325.39	Yes	2218	105	104.8	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	539030	13C2-PFHxA	455297	2500	Avg	0.256272				11549	11549.34	Yes	10000	115	115.5	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	496411	13C2-PFHxA	455297	2500	Avg	0.991907				2747.99	2747.99	Yes	2500	110	109.9	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	565679	13C4-PFHpA	496411	2500	Avg	1.191595				2390.78	2390.78	Yes	2500	96	95.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	151504	18O2-PFHxS	295388	2500	Avg	0.219087				5852.69	5852.68	Yes	5000	117	117.1	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	594809	13C2-6:2FTS	151504	5000	Avg	2.148719				9135.74	9135.74	Yes	9500	96	96.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	572494	13C4-PFOA	109653	2500	Avg	4.175238				3126.15	3126.15	Yes	2500	125	125	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	655283	13C8-PFOA	572494	2500	Avg	1.257832				2274.97	2274.97	Yes	2500	91	91	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	340971	18O2-PFHxS	295388	2500	Avg	1.069919				2697.2	2697.2	Yes	2500	108	107.9	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	403432	13C3-PFHxS	340971	2500	Avg	1.189606				2486.51	2486.51	Yes	2353	106	105.7	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	322600	13C3-PFHxS	340971	2500	Avg	1.051753				2248.92	2248.92	Yes	2285	98	98.4	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	187744	13C5-PFNA	223669	1250	Avg	0.749868				1399.22	1399.22	Yes	1250	112	111.9	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	436819	13C9-PFNA	187744	1250	Avg	1.347846				2157.77	2157.77	Yes	2500	86	86.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	146722	18O2-PFHxS	295388	2500	Avg	0.206645				6009.21	6009.21	Yes	5000	120	120.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	453650	13C2-8:2FTS	146722	5000	Avg	1.765809				8754.92	8754.92	Yes	9600	91	91.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	328734	13C4-PFOS	456109	2500	Avg	0.360298				5000.97	5000.97	Yes	5000	100	100	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	124942	D3-NMeFOSAA	328734	5000	Ln	0.747099	13.759			2525.22	2525.22	Yes	2500	101	101	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	250520	13C2-PFDA	214487	1250	Avg	0.917163				1591.86	1591.86	Yes	1250	127	127.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	489938	13C6-PFDA	250520	1250	Avg	1.072259				2279.86	2279.86	Yes	2500	91	91.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	414625	13C4-PFOS	456109	2500	Avg	0.377269				6023.87	6023.87	Yes	5000	120	120.5	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	197173	D5-NEtFOSAA	414625	5000	Avg	0.928484				2560.87	2560.87	Yes	2500	102	102.4	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	468853	13C4-PFOS	456109	2500	Avg	0.93405				2751.3	2751.3	Yes	2500	110	110.1	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	401195	13C8-PFOS	468853	2500	Ln	0.918199	26.9149			2300.5	2300.51	Yes	2383	97	96.5	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	420351	13C8-PFOS	468853	2500	Avg	1.000521				2240.21	2240.21	Yes	2320	97	96.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	422943	13C8-PFOS	468853	2500	Avg	1.038139				2172.35	2172.35	Yes	2405	90	90.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	400884	13C8-PFOS	468853	2500	Avg	0.928176				2302.99	2302.99	Yes	2413	95	95.4	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	195737	13C2-PFDA	214487	1250	Avg	0.734493				1553.08	1553.08	Yes	1250	124	124.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	406372	13C7-PFUnA	195737	1250	Avg	0.968723				2678.93	2678.93	Yes	2500	107	107.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	178158	13C2-PFDA	214487	1250	Avg	0.66531				1560.6	1560.6	Yes	1250	125	124.8	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	447300	13C2-PFDoA	178158	1250	Avg	1.238225				2534.57	2534.57	Yes	2500	101	101.4	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	240333	13C2-PFDoA	178158	1250	Avg	0.659525				2556.74	2556.74	Yes	2500	102	102.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	1004275	13C4-PFOS	456109	2500	Avg	1.926242				2857.68	2857.68	Yes	2500	114	114.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1038491	13C8-PFOSA	1004275	2500	Avg	1.101995				2345.91	2345.91	Yes	2500	94	93.8	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	133875	13C2-PFDA	214487	1250	Avg	0.514737				1515.73	1515.73	Yes	1250	121	121.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	258095	13C2-PFTeDA	133875	1250	Avg	0.948648				2540.3	2540.3	Yes	2500	102	101.6	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3823023	13C4-PFOS	456109	2500	Avg	0.747197				28044	28044.21	Yes	25000	112	112.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4401550	D7-NMeFOSE	3823023	25000	Avg	1.187485				24239	24238.77	Yes	25000	97	97	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	216347	13C4-PFOS	456109	2500	Avg	0.468708				2529.99	2530	Yes	2500	101	101.2	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	266627	D3-NMeFOSA	216347	2500	Avg	1.228879				2507.17	2507.17	Yes	2500	100	100.3	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4700849	13C4-PFOS	456109	2500	Avg	0.967764				26624	26624.3	Yes	25000	106	106.5	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4845833	D9-NEtFOSE	4700849	25000	Avg	1.044104				24682	24682.46	Yes	25000	99	98.7	Yes
092524059.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	268358	13C4-PFOS	456109	2500	Avg	0.548881				2679.83	2679.83	Yes	2500	107	107.2	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1775706	13C3-PFBA	743541	5000	Avg	1.136894				10503	10503.07	Yes	10000	105	105	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1669951	13C4-PFBA	1775706	10000	Avg	0.895963				10496	10496.45	Yes	10000	105	105	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	661918	13C2-PFHxA	380160	2500	Avg	0.891167				4884.48	4884.48	Yes	5000	98	97.7	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	775254	13C5-PFPeA	661918	5000	Avg	1.104878				5300.24	5300.24	Yes	5000	106	106	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	84503	18O2-PFHxS	248555	2500	Avg	0.164935				5153.18	5153.2	Yes	5000	103	103.1	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	296930	13C2-4:2FTS	84503	5000	Avg	1.754213				10015	10015.43	Yes	9375	107	106.8	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	400190	13C2-PFHxA	380160	2500	Avg	0.967301				2720.68	2720.68	Yes	2500	109	108.8	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	504983	13C5-PFHxA	400190	2500	Avg	1.287042				2451.08	2451.08	Yes	2500	98	98	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1792604	13C5-PFHxA	400190	2500	Avg	0.175826				63691	63690.56	Yes	62500	102	101.9	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	387848	18O2-PFHxS	248555	2500	Avg	1.453938				2683.08	2683.08	Yes	2500	107	107.3	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	683302	13C3-PFBS	387848	2500	Avg	1.820068				2419.93	2419.93	Yes	2218	109	109.1	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	400730	13C2-PFHxA	380160	2500	Avg	0.256272				10283	10283.11	Yes	10000	103	102.8	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	395314	13C2-PFHxA	380160	2500	Avg	0.991907				2620.87	2620.87	Yes	2500	105	104.8	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	469829	13C4-PFHpA	395314	2500	Avg	1.191595				2493.5	2493.5	Yes	2500	100	99.7	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	118544	18O2-PFHxS	248555	2500	Avg	0.219087				5442.28	5442.27	Yes	5000	109	108.8	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	505886	13C2-6:2FTS	118544	5000	Avg	2.148719				9930.32	9930.33	Yes	9500	105	104.5	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	431729	13C4-PFOA	102917	2500	Avg	4.175238				2511.79	2511.79	Yes	2500	100	100.5	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	523631	13C8-PFOA	431729	2500	Avg	1.257832				2410.64	2410.64	Yes	2500	96	96.4	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	290208	18O2-PFHxS	248555	2500	Avg	1.069919				2728.2	2728.2	Yes	2500	109	109.1	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	329178	13C3-PFHxS	290208	2500	Avg	1.189606				2383.74	2383.74	Yes	2353	101	101.3	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	264484	13C3-PFHxS	290208	2500	Avg	1.051753				2166.29	2166.29	Yes	2285	95	94.8	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	127397	13C5-PFNA	170411	1250	Avg	0.749868				1246.2	1246.2	Yes	1250	100	99.7	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	362619	13C9-PFNA	127397	1250	Avg	1.347846				2639.74	2639.74	Yes	2500	106	105.6	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	106952	18O2-PFHxS	248555	2500	Avg	0.206645				5205.73	5205.73	Yes	5000	104	104.1	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	375843	13C2-8:2FTS	106952	5000	Avg	1.765809				9950.48	9950.48	Yes	9600	104	103.7	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	283411	13C4-PFOS	379899	2500	Avg	0.360298				5176.39	5176.39	Yes	5000	104	103.5	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	105228	D3-NMeFOSAA	283411	5000	Ln	0.747099	13.759			2466.47	2466.47	Yes	2500	99	98.7	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	182057	13C2-PFDA	185862	1250	Avg	0.917163				1335	1335	Yes	1250	107	106.8	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	382288	13C6-PFDA	182057	1250	Avg	1.072259				2447.9	2447.9	Yes	2500	98	97.9	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	330000	13C4-PFOS	379899	2500	Avg	0.377269				5756.18	5756.18	Yes	5000	115	115.1	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	155695	D5-NEtFOSAA	330000	5000	Avg	0.928484				2540.72	2540.72	Yes	2500	102	101.6	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	370194	13C4-PFOS	379899	2500	Avg	0.93405				2608.14	2608.14	Yes	2500	104	104.3	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	299522	13C8-PFOS	370194	2500	Ln	0.918199	26.9149			2173.63	2173.63	Yes	2383	91	91.2	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	333402	13C8-PFOS	370194	2500	Avg	1.000521				2250.36	2250.36	Yes	2320	97	97	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	383277	13C8-PFOS	370194	2500	Avg	1.038139				2493.26	2493.26	Yes	2405	104	103.7	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	361393	13C8-PFOS	370194	2500	Avg	0.928176				2629.42	2629.42	Yes	2413	109	109	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	159643	13C2-PFDA	185862	1250	Avg	0.734493				1461.78	1461.78	Yes	1250	117	116.9	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	324831	13C7-PFUnA	159643	1250	Avg	0.968723				2625.54	2625.54	Yes	2500	105	105	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	140339	13C2-PFDA	185862	1250	Avg	0.66531				1418.64	1418.65	Yes	1250	113	113.5	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	352446	13C2-PFDoA	140339	1250	Avg	1.238225				2535.27	2535.27	Yes	2500	101	101.4	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	186847	13C2-PFDoA	140339	1250	Avg	0.659525				2523.4	2523.4	Yes	2500	101	100.9	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	743060	13C4-PFOS	379899	2500	Avg	1.926242				2538.54	2538.55	Yes	2500	102	101.5	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	874209	13C8-PFOSA	743060	2500	Avg	1.101995				2669.02	2669.02	Yes	2500	107	106.8	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	108554	13C2-PFDA	185862	1250	Avg	0.514737				1418.34	1418.34	Yes	1250	113	113.5	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	202160	13C2-PFTeDA	108554	1250	Avg	0.948648				2453.89	2453.89	Yes	2500	98	98.2	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2909159	13C4-PFOS	379899	2500	Avg	0.747197				25621	25621.48	Yes	25000	102	102.5	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3552029	D7-NMeFOSE	2909159	25000	Avg	1.187485				25705	25705.2	Yes	25000	103	102.8	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	176561	13C4-PFOS	379899	2500	Avg	0.468708				2478.93	2478.93	Yes	2500	99	99.2	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	232146	D3-NMeFOSA	176561	2500	Avg	1.228879				2674.84	2674.84	Yes	2500	107	107	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3664517	13C4-PFOS	379899	2500	Avg	0.967764				24918	24918.34	Yes	25000	100	99.7	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4049575	D9-NEtFOSE	3664517	25000	Avg	1.044104				26460	26459.95	Yes	25000	106	105.8	Yes
092524091.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	208503	13C4-PFOS	379899	2500	Avg	0.548881				2499.8	2499.8	Yes	2500	100	100	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1726208	13C3-PFBA	750905	5000	Avg	1.136894				10110	10110.16	Yes	10000	101	101.1	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1644822	13C4-PFBA	1726208	10000	Avg	0.895963				10635	10634.96	Yes	10000	106	106.3	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	669822	13C2-PFHxA	376404	2500	Avg	0.891167				4992.13	4992.13	Yes	5000	100	99.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	764485	13C5-PFPeA	669822	5000	Avg	1.104878				5164.94	5164.94	Yes	5000	103	103.3	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	79349	18O2-PFHxS	243354	2500	Avg	0.164935				4942.3	4942.31	Yes	5000	99	98.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	295066	13C2-4:2FTS	79349	5000	Avg	1.754213				10599	10599.01	Yes	9375	113	113.1	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	365250	13C2-PFHxA	376404	2500	Avg	0.967301				2507.92	2507.92	Yes	2500	100	100.3	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	483294	13C5-PFHxA	365250	2500	Avg	1.287042				2570.21	2570.21	Yes	2500	103	102.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1792537	13C5-PFHxA	365250	2500	Avg	0.175826				69781	69780.62	Yes	62500	112	111.6	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	374957	18O2-PFHxS	243354	2500	Avg	1.453938				2649.34	2649.34	Yes	2500	106	106	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	663770	13C3-PFBS	374957	2500	Avg	1.820068				2431.58	2431.58	Yes	2218	110	109.6	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	392616	13C2-PFHxA	376404	2500	Avg	0.256272				10175	10175.43	Yes	10000	102	101.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	351682	13C2-PFHxA	376404	2500	Avg	0.991907				2354.86	2354.86	Yes	2500	94	94.2	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	461700	13C4-PFHpA	351682	2500	Avg	1.191595				2754.36	2754.36	Yes	2500	110	110.2	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	113990	18O2-PFHxS	243354	2500	Avg	0.219087				5345.06	5345.05	Yes	5000	107	106.9	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	498733	13C2-6:2FTS	113990	5000	Avg	2.148719				10181	10181.03	Yes	9500	107	107.2	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	420795	13C4-PFOA	89393	2500	Avg	4.175238				2818.55	2818.55	Yes	2500	113	112.7	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	516278	13C8-PFOA	420795	2500	Avg	1.257832				2438.54	2438.54	Yes	2500	98	97.5	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	268634	18O2-PFHxS	243354	2500	Avg	1.069919				2579.36	2579.36	Yes	2500	103	103.2	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	313341	13C3-PFHxS	268634	2500	Avg	1.189606				2451.28	2451.28	Yes	2353	104	104.2	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	264507	13C3-PFHxS	268634	2500	Avg	1.051753				2340.47	2340.47	Yes	2285	102	102.4	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	147060	13C5-PFNA	170863	1250	Avg	0.749868				1434.74	1434.74	Yes	1250	115	114.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	383759	13C9-PFNA	147060	1250	Avg	1.347846				2420.1	2420.1	Yes	2500	97	96.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	110157	18O2-PFHxS	243354	2500	Avg	0.206645				5476.32	5476.32	Yes	5000	110	109.5	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	354908	13C2-8:2FTS	110157	5000	Avg	1.765809				9122.84	9122.84	Yes	9600	95	95	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	276996	13C4-PFOS	363154	2500	Avg	0.360298				5292.5	5292.5	Yes	5000	106	105.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	98251	D3-NMeFOSAA	276996	5000	Ln	0.747099	13.759			2355.44	2355.44	Yes	2500	94	94.2	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	180722	13C2-PFDA	186322	1250	Avg	0.917163				1321.94	1321.94	Yes	1250	106	105.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	365522	13C6-PFDA	180722	1250	Avg	1.072259				2357.83	2357.83	Yes	2500	94	94.3	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	316031	13C4-PFOS	363154	2500	Avg	0.377269				5766.7	5766.71	Yes	5000	115	115.3	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	175736	D5-NEtFOSAA	316031	5000	Avg	0.928484				2994.52	2994.52	Yes	2500	120	119.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	346054	13C4-PFOS	363154	2500	Avg	0.93405				2550.49	2550.49	Yes	2500	102	102	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	313586	13C8-PFOS	346054	2500	Ln	0.918199	26.9149			2437.95	2437.95	Yes	2383	102	102.3	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	342752	13C8-PFOS	346054	2500	Avg	1.000521				2474.86	2474.86	Yes	2320	107	106.7	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	358174	13C8-PFOS	346054	2500	Avg	1.038139				2492.5	2492.5	Yes	2405	104	103.6	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	349000	13C8-PFOS	346054	2500	Avg	0.928176				2716.38	2716.38	Yes	2413	113	112.6	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	157173	13C2-PFDA	186322	1250	Avg	0.734493				1435.61	1435.61	Yes	1250	115	114.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	327963	13C7-PFUnA	157173	1250	Avg	0.968723				2692.51	2692.51	Yes	2500	108	107.7	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	145647	13C2-PFDA	186322	1250	Avg	0.66531				1468.67	1468.67	Yes	1250	117	117.5	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	343847	13C2-PFDoA	145647	1250	Avg	1.238225				2383.28	2383.27	Yes	2500	95	95.3	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	191530	13C2-PFDoA	145647	1250	Avg	0.659525				2492.38	2492.38	Yes	2500	100	99.7	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	742287	13C4-PFOS	363154	2500	Avg	1.926242				2652.83	2652.83	Yes	2500	106	106.1	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	863584	13C8-PFOSA	742287	2500	Avg	1.101995				2639.33	2639.33	Yes	2500	106	105.6	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	106752	13C2-PFDA	186322	1250	Avg	0.514737				1391.35	1391.35	Yes	1250	111	111.3	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	187183	13C2-PFTeDA	106752	1250	Avg	0.948648				2310.44	2310.44	Yes	2500	92	92.4	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2816126	13C4-PFOS	363154	2500	Avg	0.747197				25946	25945.74	Yes	25000	104	103.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3527650	D7-NMeFOSE	2816126	25000	Avg	1.187485				26372	26372.13	Yes	25000	105	105.5	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	172809	13C4-PFOS	363154	2500	Avg	0.468708				2538.12	2538.13	Yes	2500	102	101.5	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	222086	D3-NMeFOSA	172809	2500	Avg	1.228879				2614.48	2614.48	Yes	2500	105	104.6	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3540013	13C4-PFOS	363154	2500	Avg	0.967764				25182	25181.67	Yes	25000	101	100.7	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	3947157	D9-NEtFOSE	3540013	25000	Avg	1.044104				26698	26697.82	Yes	25000	107	106.8	Yes
092524105.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	199794	13C4-PFOS	363154	2500	Avg	0.548881				2505.84	2505.84	Yes	2500	100	100.2	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1806081	13C3-PFBA	773886	5000	Avg	1.136894				10264	10263.85	Yes	10000	103	102.6	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1725979	13C4-PFBA	1806081	10000	Avg	0.895963				10666	10666.16	Yes	10000	107	106.7	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	682624	13C2-PFHxA	388146	2500	Avg	0.891167				4933.64	4933.64	Yes	5000	99	98.7	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	789811	13C5-PFPeA	682624	5000	Avg	1.104878				5235.97	5235.97	Yes	5000	105	104.7	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	87524	18O2-PFHxS	261456	2500	Avg	0.164935				5074.05	5074.06	Yes	5000	101	101.5	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	299620	13C2-4:2FTS	87524	5000	Avg	1.754213				9757.34	9757.34	Yes	9375	104	104.1	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	397688	13C2-PFHxA	388146	2500	Avg	0.967301				2648.05	2648.05	Yes	2500	106	105.9	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	499324	13C5-PFHxA	397688	2500	Avg	1.287042				2438.86	2438.86	Yes	2500	98	97.6	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1884376	13C5-PFHxA	397688	2500	Avg	0.175826				67372	67372.4	Yes	62500	108	107.8	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	382228	18O2-PFHxS	261456	2500	Avg	1.453938				2513.73	2513.73	Yes	2500	101	100.5	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	660710	13C3-PFBS	382228	2500	Avg	1.820068				2374.33	2374.33	Yes	2218	107	107	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	409215	13C2-PFHxA	388146	2500	Avg	0.256272				10285	10284.79	Yes	10000	103	102.8	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	376703	13C2-PFHxA	388146	2500	Avg	0.991907				2446.09	2446.09	Yes	2500	98	97.8	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	481366	13C4-PFHpA	376703	2500	Avg	1.191595				2680.94	2680.94	Yes	2500	107	107.2	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	118012	18O2-PFHxS	261456	2500	Avg	0.219087				5150.53	5150.52	Yes	5000	103	103	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	531891	13C2-6:2FTS	118012	5000	Avg	2.148719				10488	10487.86	Yes	9500	110	110.4	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	436781	13C4-PFOA	103672	2500	Avg	4.175238				2522.67	2522.67	Yes	2500	101	100.9	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	519782	13C8-PFOA	436781	2500	Avg	1.257832				2365.24	2365.24	Yes	2500	95	94.6	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	284008	18O2-PFHxS	261456	2500	Avg	1.069919				2538.17	2538.17	Yes	2500	102	101.5	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	287440	13C3-PFHxS	284008	2500	Avg	1.189606				2126.93	2126.93	Yes	2353	90	90.4	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	253395	13C3-PFHxS	284008	2500	Avg	1.051753				2120.77	2120.77	Yes	2285	93	92.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	162455	13C5-PFNA	194399	1250	Avg	0.749868				1393.04	1393.04	Yes	1250	111	111.4	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	379949	13C9-PFNA	162455	1250	Avg	1.347846				2169.01	2169.01	Yes	2500	87	86.8	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	100986	18O2-PFHxS	261456	2500	Avg	0.206645				4672.8	4672.81	Yes	5000	93	93.5	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	393688	13C2-8:2FTS	100986	5000	Avg	1.765809				11039	11038.68	Yes	9600	115	115	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	249378	13C4-PFOS	380142	2500	Avg	0.360298				4551.88	4551.88	Yes	5000	91	91	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	114130	D3-NMeFOSAA	249378	5000	Ln	0.747099	13.759			3044.49	3044.49	Yes	2500	122	121.8	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	170324	13C2-PFDA	195625	1250	Avg	0.917163				1186.63	1186.63	Yes	1250	95	94.9	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	384698	13C6-PFDA	170324	1250	Avg	1.072259				2633.02	2633.02	Yes	2500	105	105.3	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	339062	13C4-PFOS	380142	2500	Avg	0.377269				5910.47	5910.47	Yes	5000	118	118.2	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	156475	D5-NEtFOSAA	339062	5000	Avg	0.928484				2485.2	2485.2	Yes	2500	99	99.4	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	384302	13C4-PFOS	380142	2500	Avg	0.93405				2705.81	2705.81	Yes	2500	108	108.2	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	334491	13C8-PFOS	384302	2500	Ln	0.918199	26.9149			2340.5	2340.51	Yes	2383	98	98.2	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	349274	13C8-PFOS	384302	2500	Avg	1.000521				2270.95	2270.95	Yes	2320	98	97.9	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	377099	13C8-PFOS	384302	2500	Avg	1.038139				2363.02	2363.02	Yes	2405	98	98.3	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	366664	13C8-PFOS	384302	2500	Avg	0.928176				2569.84	2569.84	Yes	2413	106	106.5	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	167156	13C2-PFDA	195625	1250	Avg	0.734493				1454.19	1454.19	Yes	1250	116	116.3	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	337220	13C7-PFUnA	167156	1250	Avg	0.968723				2603.16	2603.17	Yes	2500	104	104.1	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	142249	13C2-PFDA	195625	1250	Avg	0.66531				1366.19	1366.19	Yes	1250	109	109.3	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	357883	13C2-PFDoA	142249	1250	Avg	1.238225				2539.82	2539.82	Yes	2500	102	101.6	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	206801	13C2-PFDoA	142249	1250	Avg	0.659525				2755.38	2755.38	Yes	2500	110	110.2	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	757784	13C4-PFOS	380142	2500	Avg	1.926242				2587.19	2587.19	Yes	2500	103	103.5	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	889117	13C8-PFOSA	757784	2500	Avg	1.101995				2661.79	2661.79	Yes	2500	106	106.5	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	107257	13C2-PFDA	195625	1250	Avg	0.514737				1331.45	1331.45	Yes	1250	107	106.5	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	215201	13C2-PFTeDA	107257	1250	Avg	0.948648				2643.77	2643.77	Yes	2500	106	105.8	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2979881	13C4-PFOS	380142	2500	Avg	0.747197				26228	26227.56	Yes	25000	105	104.9	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3545624	D7-NMeFOSE	2979881	25000	Avg	1.187485				25050	25049.88	Yes	25000	100	100.2	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	175763	13C4-PFOS	380142	2500	Avg	0.468708				2466.15	2466.15	Yes	2500	99	98.6	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	225948	D3-NMeFOSA	175763	2500	Avg	1.228879				2615.24	2615.24	Yes	2500	105	104.6	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3791720	13C4-PFOS	380142	2500	Avg	0.967764				25767	25766.83	Yes	25000	103	103.1	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4109425	D9-NEtFOSE	3791720	25000	Avg	1.044104				25950	25950.22	Yes	25000	104	103.8	Yes
092524120.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	210058	13C4-PFOS	380142	2500	Avg	0.548881				2516.84	2516.84	Yes	2500	101	100.7	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1897775	13C3-PFBA	804406	5000	Avg	1.136894				10376	10375.75	Yes	10000	104	103.8	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1816549	13C4-PFBA	1897775	10000	Avg	0.895963				10683	10683.47	Yes	10000	107	106.8	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	729160	13C2-PFHxA	406791	2500	Avg	0.891167				5028.43	5028.43	Yes	5000	101	100.6	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	837806	13C5-PFPeA	729160	5000	Avg	1.104878				5199.68	5199.68	Yes	5000	104	104	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	94616	18O2-PFHxS	262067	2500	Avg	0.164935				5472.41	5472.42	Yes	5000	109	109.4	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	328865	13C2-4:2FTS	94616	5000	Avg	1.754213				9906.97	9906.97	Yes	9375	106	105.7	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	425286	13C2-PFHxA	406791	2500	Avg	0.967301				2702.02	2702.02	Yes	2500	108	108.1	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	538104	13C5-PFHxA	425286	2500	Avg	1.287042				2457.72	2457.72	Yes	2500	98	98.3	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1861629	13C5-PFHxA	425286	2500	Avg	0.175826				62240	62239.91	Yes	62500	100	99.6	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	412132	18O2-PFHxS	262067	2500	Avg	1.453938				2704.07	2704.07	Yes	2500	108	108.2	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	718346	13C3-PFBS	412132	2500	Avg	1.820068				2394.14	2394.14	Yes	2218	108	107.9	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	438264	13C2-PFHxA	406791	2500	Avg	0.256272				10510	10510.01	Yes	10000	105	105.1	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	412550	13C2-PFHxA	406791	2500	Avg	0.991907				2556.08	2556.08	Yes	2500	102	102.2	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	490375	13C4-PFHpA	412550	2500	Avg	1.191595				2493.81	2493.81	Yes	2500	100	99.8	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	127500	18O2-PFHxS	262067	2500	Avg	0.219087				5551.65	5551.64	Yes	5000	111	111	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	545870	13C2-6:2FTS	127500	5000	Avg	2.148719				9962.52	9962.52	Yes	9500	105	104.9	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	487258	13C4-PFOA	106202	2500	Avg	4.175238				2747.17	2747.17	Yes	2500	110	109.9	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	544949	13C8-PFOA	487258	2500	Avg	1.257832				2222.87	2222.87	Yes	2500	89	88.9	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	284374	18O2-PFHxS	262067	2500	Avg	1.069919				2535.52	2535.52	Yes	2500	101	101.4	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	340702	13C3-PFHxS	284374	2500	Avg	1.189606				2517.8	2517.8	Yes	2353	107	107	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	282311	13C3-PFHxS	284374	2500	Avg	1.051753				2359.74	2359.74	Yes	2285	103	103.3	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	153301	13C5-PFNA	212248	1250	Avg	0.749868				1204	1204	Yes	1250	96	96.3	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	409627	13C9-PFNA	153301	1250	Avg	1.347846				2478.07	2478.07	Yes	2500	99	99.1	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	110374	18O2-PFHxS	262067	2500	Avg	0.206645				5095.3	5095.3	Yes	5000	102	101.9	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	417272	13C2-8:2FTS	110374	5000	Avg	1.765809				10705	10704.8	Yes	9600	112	111.5	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	284451	13C4-PFOS	419877	2500	Avg	0.360298				4700.71	4700.71	Yes	5000	94	94	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	118573	D3-NMeFOSAA	284451	5000	Ln	0.747099	13.759			2771.36	2771.36	Yes	2500	111	110.9	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	193751	13C2-PFDA	186521	1250	Avg	0.917163				1415.73	1415.73	Yes	1250	113	113.3	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	401215	13C6-PFDA	193751	1250	Avg	1.072259				2414.03	2414.03	Yes	2500	97	96.6	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	368502	13C4-PFOS	419877	2500	Avg	0.377269				5815.76	5815.76	Yes	5000	116	116.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	165037	D5-NEtFOSAA	368502	5000	Avg	0.928484				2411.78	2411.78	Yes	2500	96	96.5	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	383908	13C4-PFOS	419877	2500	Avg	0.93405				2447.23	2447.23	Yes	2500	98	97.9	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	337755	13C8-PFOS	383908	2500	Ln	0.918199	26.9149			2366.09	2366.09	Yes	2383	99	99.3	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	373376	13C8-PFOS	383908	2500	Avg	1.000521				2430.15	2430.15	Yes	2320	105	104.7	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	413355	13C8-PFOS	383908	2500	Avg	1.038139				2592.87	2592.87	Yes	2405	108	107.8	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	384382	13C8-PFOS	383908	2500	Avg	0.928176				2696.78	2696.78	Yes	2413	112	111.8	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	166309	13C2-PFDA	186521	1250	Avg	0.734493				1517.44	1517.44	Yes	1250	121	121.4	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	344853	13C7-PFUnA	166309	1250	Avg	0.968723				2675.65	2675.65	Yes	2500	107	107	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	151321	13C2-PFDA	186521	1250	Avg	0.66531				1524.25	1524.25	Yes	1250	122	121.9	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	401166	13C2-PFDoA	151321	1250	Avg	1.238225				2676.3	2676.3	Yes	2500	107	107.1	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	201975	13C2-PFDoA	151321	1250	Avg	0.659525				2529.75	2529.75	Yes	2500	101	101.2	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	820115	13C4-PFOS	419877	2500	Avg	1.926242				2535.02	2535.02	Yes	2500	101	101.4	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	956728	13C8-PFOSA	820115	2500	Avg	1.101995				2646.51	2646.51	Yes	2500	106	105.9	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	116291	13C2-PFDA	186521	1250	Avg	0.514737				1514.06	1514.06	Yes	1250	121	121.1	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	222285	13C2-PFTeDA	116291	1250	Avg	0.948648				2518.66	2518.66	Yes	2500	101	100.7	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3071391	13C4-PFOS	419877	2500	Avg	0.747197				24475	24474.73	Yes	25000	98	97.9	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3775499	D7-NMeFOSE	3071391	25000	Avg	1.187485				25879	25879.22	Yes	25000	104	103.5	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	183449	13C4-PFOS	419877	2500	Avg	0.468708				2330.4	2330.4	Yes	2500	93	93.2	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	229855	D3-NMeFOSA	183449	2500	Avg	1.228879				2549	2549	Yes	2500	102	102	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3889265	13C4-PFOS	419877	2500	Avg	0.967764				23929	23928.53	Yes	25000	96	95.7	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4243177	D9-NEtFOSE	3889265	25000	Avg	1.044104				26123	26122.81	Yes	25000	104	104.5	Yes
092524132.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	225785	13C4-PFOS	419877	2500	Avg	0.548881				2449.26	2449.26	Yes	2500	98	98	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2849113	13C3-PFBA	1209310	5000	Avg	1.150256				10241	10241.12	Yes	10000	102	102.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2592920	13C4-PFBA	2849113	10000	Avg	0.860777				10573	10572.77	Yes	10000	106	105.7	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1266385	13C2-PFHxA	769665	2500	Avg	0.795934				5168.05	5168.05	Yes	5000	103	103.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1158979	13C5-PFPeA	1266385	5000	Avg	0.921502				4965.73	4965.73	Yes	5000	99	99.3	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	163351	18O2-PFHxS	431632	2500	Avg	0.18253				5183.38	5183.39	Yes	5000	104	103.7	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	633958	13C2-4:2FTS	163351	5000	Avg	1.989363				9754.27	9754.27	Yes	9375	104	104	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	837884	13C2-PFHxA	769665	2500	Avg	1.087908				2501.67	2501.67	Yes	2500	100	100.1	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	764290	13C5-PFHxA	837884	2500	Avg	0.90903				2508.63	2508.63	Yes	2500	100	100.3	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3566958	13C5-PFHxA	837884	2500	Avg	0.163284				65179	65179.42	Yes	62500	104	104.3	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	586161	18O2-PFHxS	431632	2500	Avg	1.317939				2576.01	2576.01	Yes	2500	103	103	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	678316	13C3-PFBS	586161	2500	Avg	1.269173				2279.47	2279.47	Yes	2218	103	102.8	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	636740	13C2-PFHxA	769665	2500	Avg	0.192552				10741	10741.19	Yes	10000	107	107.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	948111	13C2-PFHxA	769665	2500	Avg	1.191993				2583.59	2583.59	Yes	2500	103	103.3	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1063232	13C4-PFHpA	948111	2500	Avg	1.08709				2578.95	2578.95	Yes	2500	103	103.2	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	192249	18O2-PFHxS	431632	2500	Avg	0.205065				5429.98	5429.99	Yes	5000	109	108.6	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	906478	13C2-6:2FTS	192249	5000	Avg	2.126484				11087	11086.67	Yes	9500	117	116.7	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1094885	13C4-PFOA	134120	2500	Avg	6.935128				2942.8	2942.8	Yes	2500	118	117.7	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	991142	13C8-PFOA	1094885	2500	Avg	0.884977				2557.26	2557.26	Yes	2500	102	102.3	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	527623	18O2-PFHxS	431632	2500	Avg	1.159703				2635.14	2635.14	Yes	2500	105	105.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	607427	13C3-PFHxS	527623	2500	Avg	1.183053				2432.8	2432.8	Yes	2353	103	103.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	532444	13C3-PFHxS	527623	2500	Avg	1.151233				2191.43	2191.43	Yes	2285	96	95.9	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	572524	13C5-PFNA	590555	1250	Avg	0.884789				1369.63	1369.63	Yes	1250	110	109.6	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	927716	13C9-PFNA	572524	1250	Avg	0.839373				2413.1	2413.11	Yes	2500	97	96.5	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	187132	18O2-PFHxS	431632	2500	Avg	0.201772				5371.72	5371.72	Yes	5000	107	107.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	649784	13C2-8:2FTS	187132	5000	Avg	1.818805				9545.64	9545.63	Yes	9600	99	99.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	568674	13C4-PFOS	565119	2500	Avg	0.460729				5460.32	5460.32	Yes	5000	109	109.2	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	234654	D3-NMeFOSAA	568674	5000	Avg	0.822512				2508.38	2508.37	Yes	2500	100	100.3	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	488129	13C2-PFDA	421135	1250	Avg	1.142396				1268.25	1268.26	Yes	1250	101	101.5	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	881357	13C6-PFDA	488129	1250	Avg	0.862667				2616.28	2616.28	Yes	2500	105	104.7	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	447866	13C4-PFOS	565119	2500	Avg	0.363285				5453.82	5453.82	Yes	5000	109	109.1	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	268705	D5-NEtFOSAA	447866	5000	Avg	1.058985				2832.75	2832.75	Yes	2500	113	113.3	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	610380	13C4-PFOS	565119	2500	Avg	1.0092				2675.61	2675.61	Yes	2500	107	107	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	529837	13C8-PFOS	610380	2500	Avg	0.875705				2478.13	2478.13	Yes	2383	104	104	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	593923	13C8-PFOS	610380	2500	Avg	0.972082				2502.46	2502.46	Yes	2320	108	107.9	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	685022	13C8-PFOS	610380	2500	Avg	1.079883				2598.17	2598.17	Yes	2405	108	108	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	647755	13C8-PFOS	610380	2500	Avg	0.978061				2712.59	2712.59	Yes	2413	112	112.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	474653	13C2-PFDA	421135	1250	Avg	1.021306				1379.46	1379.46	Yes	1250	110	110.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	951595	13C7-PFUnA	474653	1250	Avg	0.941499				2661.74	2661.74	Yes	2500	106	106.5	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	441693	13C2-PFDA	421135	1250	Avg	0.966171				1356.92	1356.92	Yes	1250	109	108.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1100589	13C2-PFDoA	441693	1250	Avg	1.182085				2634.91	2634.91	Yes	2500	105	105.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	724577	13C2-PFDoA	441693	1250	Avg	0.765454				2678.89	2678.89	Yes	2500	107	107.2	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	937737	13C4-PFOS	565119	2500	Avg	1.46881				2824.33	2824.33	Yes	2500	113	113	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	938628	13C8-PFOSA	937737	2500	Avg	1.008917				2480.26	2480.26	Yes	2500	99	99.2	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	400381	13C2-PFDA	421135	1250	Avg	0.890895				1333.94	1333.94	Yes	1250	107	106.7	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	787838	13C2-PFTeDA	400381	1250	Avg	0.92374				2662.71	2662.71	Yes	2500	107	106.5	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3861314	13C4-PFOS	565119	2500	Avg	0.602535				28350	28349.99	Yes	25000	113	113.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4077012	D7-NMeFOSE	3861314	25000	Avg	1.021618				25838	25837.97	Yes	25000	103	103.4	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	225796	13C4-PFOS	565119	2500	Avg	0.374254				2669.01	2669.01	Yes	2500	107	106.8	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	227483	D3-NMeFOSA	225796	2500	Avg	0.961277				2620.14	2620.14	Yes	2500	105	104.8	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4207095	13C4-PFOS	565119	2500	Avg	0.664194				28021	28021.25	Yes	25000	112	112.1	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4898576	D9-NEtFOSE	4207095	25000	Avg	1.107685				26279	26279.15	Yes	25000	105	105.1	Yes
092524A047.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	242762	13C4-PFOS	565119	2500	Avg	0.398062				2697.93	2697.93	Yes	2500	108	107.9	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2862774	13C3-PFBA	1193793	5000	Avg	1.150256				10424	10423.98	Yes	10000	104	104.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2547617	13C4-PFBA	2862774	10000	Avg	0.860777				10338	10338.47	Yes	10000	103	103.4	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1233638	13C2-PFHxA	772519	2500	Avg	0.795934				5015.82	5015.82	Yes	5000	100	100.3	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1198148	13C5-PFPeA	1233638	5000	Avg	0.921502				5269.83	5269.83	Yes	5000	105	105.4	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	164927	18O2-PFHxS	452463	2500	Avg	0.18253				4992.45	4992.46	Yes	5000	100	99.8	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	669594	13C2-4:2FTS	164927	5000	Avg	1.989363				10204	10204.12	Yes	9375	109	108.8	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	846420	13C2-PFHxA	772519	2500	Avg	1.087908				2517.82	2517.82	Yes	2500	101	100.7	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	803174	13C5-PFHxA	846420	2500	Avg	0.90903				2609.67	2609.67	Yes	2500	104	104.4	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3598477	13C5-PFHxA	846420	2500	Avg	0.163284				65092	65092.24	Yes	62500	104	104.1	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	596259	18O2-PFHxS	452463	2500	Avg	1.317939				2499.75	2499.75	Yes	2500	100	100	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	700910	13C3-PFBS	596259	2500	Avg	1.269173				2315.51	2315.51	Yes	2218	104	104.4	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	599080	13C2-PFHxA	772519	2500	Avg	0.192552				10069	10068.57	Yes	10000	101	100.7	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	913539	13C2-PFHxA	772519	2500	Avg	1.191993				2480.19	2480.19	Yes	2500	99	99.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1031472	13C4-PFHpA	913539	2500	Avg	1.08709				2596.6	2596.6	Yes	2500	104	103.9	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	192538	18O2-PFHxS	452463	2500	Avg	0.205065				5187.78	5187.78	Yes	5000	104	103.8	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	825760	13C2-6:2FTS	192538	5000	Avg	2.126484				10084	10084.29	Yes	9500	106	106.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1183573	13C4-PFOA	162065	2500	Avg	6.935128				2632.64	2632.64	Yes	2500	105	105.3	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1006272	13C8-PFOA	1183573	2500	Avg	0.884977				2401.75	2401.75	Yes	2500	96	96.1	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	536232	18O2-PFHxS	452463	2500	Avg	1.159703				2554.83	2554.84	Yes	2500	102	102.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	644223	13C3-PFHxS	536232	2500	Avg	1.183053				2538.75	2538.75	Yes	2353	108	107.9	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	605051	13C3-PFHxS	536232	2500	Avg	1.151233				2450.28	2450.28	Yes	2285	107	107.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	560086	13C5-PFNA	630618	1250	Avg	0.884789				1254.75	1254.75	Yes	1250	100	100.4	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	974492	13C9-PFNA	560086	1250	Avg	0.839373				2591.07	2591.07	Yes	2500	104	103.6	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	170014	18O2-PFHxS	452463	2500	Avg	0.201772				4655.65	4655.65	Yes	5000	93	93.1	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	663943	13C2-8:2FTS	170014	5000	Avg	1.818805				10736	10735.69	Yes	9600	112	111.8	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	551529	13C4-PFOS	620358	2500	Avg	0.460729				4824.15	4824.15	Yes	5000	96	96.5	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	231890	D3-NMeFOSAA	551529	5000	Avg	0.822512				2555.89	2555.89	Yes	2500	102	102.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	546697	13C2-PFDA	450648	1250	Avg	1.142396				1327.4	1327.4	Yes	1250	106	106.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	968336	13C6-PFDA	546697	1250	Avg	0.862667				2566.53	2566.53	Yes	2500	103	102.7	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	449016	13C4-PFOS	620358	2500	Avg	0.363285				4980.94	4980.95	Yes	5000	100	99.6	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	280619	D5-NEtFOSAA	449016	5000	Avg	1.058985				2950.77	2950.77	Yes	2500	118	118	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	633364	13C4-PFOS	620358	2500	Avg	1.0092				2529.14	2529.15	Yes	2500	101	101.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	528206	13C8-PFOS	633364	2500	Avg	0.875705				2380.85	2380.85	Yes	2383	100	99.9	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	580948	13C8-PFOS	633364	2500	Avg	0.972082				2358.96	2358.96	Yes	2320	102	101.7	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	699006	13C8-PFOS	633364	2500	Avg	1.079883				2555	2555	Yes	2405	106	106.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	623443	13C8-PFOS	633364	2500	Avg	0.978061				2516.04	2516.04	Yes	2413	104	104.3	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	485583	13C2-PFDA	450648	1250	Avg	1.021306				1318.8	1318.8	Yes	1250	106	105.5	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	930974	13C7-PFUnA	485583	1250	Avg	0.941499				2545.45	2545.45	Yes	2500	102	101.8	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	481787	13C2-PFDA	450648	1250	Avg	0.966171				1383.16	1383.16	Yes	1250	111	110.7	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1175364	13C2-PFDoA	481787	1250	Avg	1.182085				2579.76	2579.76	Yes	2500	103	103.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	688015	13C2-PFDoA	481787	1250	Avg	0.765454				2332.03	2332.03	Yes	2500	93	93.3	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	933796	13C4-PFOS	620358	2500	Avg	1.46881				2562.03	2562.03	Yes	2500	102	102.5	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	930848	13C8-PFOSA	933796	2500	Avg	1.008917				2470.08	2470.08	Yes	2500	99	98.8	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	402565	13C2-PFDA	450648	1250	Avg	0.890895				1253.38	1253.38	Yes	1250	100	100.3	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	812151	13C2-PFTeDA	402565	1250	Avg	0.92374				2729.99	2729.99	Yes	2500	109	109.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3922698	13C4-PFOS	620358	2500	Avg	0.602535				26236	26236.16	Yes	25000	105	104.9	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4336038	D7-NMeFOSE	3922698	25000	Avg	1.021618				27050	27049.53	Yes	25000	108	108.2	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	233055	13C4-PFOS	620358	2500	Avg	0.374254				2509.52	2509.51	Yes	2500	100	100.4	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	228843	D3-NMeFOSA	233055	2500	Avg	0.961277				2553.7	2553.7	Yes	2500	102	102.1	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4382023	13C4-PFOS	620358	2500	Avg	0.664194				26587	26587.49	Yes	25000	106	106.3	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	5067285	D9-NEtFOSE	4382023	25000	Avg	1.107685				26099	26099.03	Yes	25000	104	104.4	Yes
092524A065.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	252577	13C4-PFOS	620358	2500	Avg	0.398062				2557.06	2557.06	Yes	2500	102	102.3	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2862431	13C3-PFBA	1193855	5000	Avg	1.150256				10422	10422.19	Yes	10000	104	104.2	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2502212	13C4-PFBA	2862431	10000	Avg	0.860777				10155	10155.43	Yes	10000	102	101.6	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1263376	13C2-PFHxA	752159	2500	Avg	0.795934				5275.77	5275.77	Yes	5000	106	105.5	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1182624	13C5-PFPeA	1263376	5000	Avg	0.921502				5079.11	5079.11	Yes	5000	102	101.6	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	168807	18O2-PFHxS	463188	2500	Avg	0.18253				4991.58	4991.59	Yes	5000	100	99.8	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	663808	13C2-4:2FTS	168807	5000	Avg	1.989363				9883.44	9883.44	Yes	9375	105	105.4	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	831758	13C2-PFHxA	752159	2500	Avg	1.087908				2541.18	2541.18	Yes	2500	102	101.6	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	756225	13C5-PFHxA	831758	2500	Avg	0.90903				2500.44	2500.44	Yes	2500	100	100	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3221421	13C5-PFHxA	831758	2500	Avg	0.163284				59299	59298.93	Yes	62500	95	94.9	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	615775	18O2-PFHxS	463188	2500	Avg	1.317939				2521.79	2521.79	Yes	2500	101	100.9	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	710552	13C3-PFBS	615775	2500	Avg	1.269173				2272.97	2272.97	Yes	2218	102	102.5	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	608808	13C2-PFHxA	752159	2500	Avg	0.192552				10509	10509.03	Yes	10000	105	105.1	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	912952	13C2-PFHxA	752159	2500	Avg	1.191993				2545.69	2545.68	Yes	2500	102	101.8	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1050473	13C4-PFHpA	912952	2500	Avg	1.08709				2646.13	2646.13	Yes	2500	106	105.8	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	196842	18O2-PFHxS	463188	2500	Avg	0.205065				5180.94	5180.94	Yes	5000	104	103.6	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	870309	13C2-6:2FTS	196842	5000	Avg	2.126484				10396	10395.94	Yes	9500	109	109.4	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1245327	13C4-PFOA	158775	2500	Avg	6.935128				2827.4	2827.4	Yes	2500	113	113.1	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	990688	13C8-PFOA	1245327	2500	Avg	0.884977				2247.3	2247.3	Yes	2500	90	89.9	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	528886	18O2-PFHxS	463188	2500	Avg	1.159703				2461.49	2461.49	Yes	2500	98	98.5	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	656354	13C3-PFHxS	528886	2500	Avg	1.183053				2622.48	2622.48	Yes	2353	111	111.5	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	603959	13C3-PFHxS	528886	2500	Avg	1.151233				2479.83	2479.83	Yes	2285	109	108.5	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	581080	13C5-PFNA	654706	1250	Avg	0.884789				1253.89	1253.89	Yes	1250	100	100.3	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	969194	13C9-PFNA	581080	1250	Avg	0.839373				2483.87	2483.88	Yes	2500	99	99.4	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	186878	18O2-PFHxS	463188	2500	Avg	0.201772				4998.96	4998.96	Yes	5000	100	100	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	672487	13C2-8:2FTS	186878	5000	Avg	1.818805				9892.58	9892.58	Yes	9600	103	103	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	606581	13C4-PFOS	571892	2500	Avg	0.460729				5755.32	5755.32	Yes	5000	115	115.1	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	233971	D3-NMeFOSAA	606581	5000	Avg	0.822512				2344.78	2344.77	Yes	2500	94	93.8	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	554246	13C2-PFDA	440977	1250	Avg	1.142396				1375.24	1375.24	Yes	1250	110	110	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	981938	13C6-PFDA	554246	1250	Avg	0.862667				2567.13	2567.13	Yes	2500	103	102.7	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	457944	13C4-PFOS	571892	2500	Avg	0.363285				5510.5	5510.5	Yes	5000	110	110.2	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	290198	D5-NEtFOSAA	457944	5000	Avg	1.058985				2992.01	2992	Yes	2500	120	119.7	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	622632	13C4-PFOS	571892	2500	Avg	1.0092				2696.99	2697	Yes	2500	108	107.9	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	514595	13C8-PFOS	622632	2500	Avg	0.875705				2359.48	2359.48	Yes	2383	99	99	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	576318	13C8-PFOS	622632	2500	Avg	0.972082				2380.5	2380.5	Yes	2320	103	102.6	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	717238	13C8-PFOS	622632	2500	Avg	1.079883				2666.83	2666.83	Yes	2405	111	110.9	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	630897	13C8-PFOS	622632	2500	Avg	0.978061				2590.01	2590.01	Yes	2413	107	107.3	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	456462	13C2-PFDA	440977	1250	Avg	1.021306				1266.9	1266.9	Yes	1250	101	101.4	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	942060	13C7-PFUnA	456462	1250	Avg	0.941499				2740.08	2740.09	Yes	2500	110	109.6	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	448596	13C2-PFDA	440977	1250	Avg	0.966171				1316.12	1316.12	Yes	1250	105	105.3	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1176842	13C2-PFDoA	448596	1250	Avg	1.182085				2774.11	2774.11	Yes	2500	111	111	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	742427	13C2-PFDoA	448596	1250	Avg	0.765454				2702.65	2702.65	Yes	2500	108	108.1	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	956234	13C4-PFOS	571892	2500	Avg	1.46881				2845.93	2845.93	Yes	2500	114	113.8	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	983522	13C8-PFOSA	956234	2500	Avg	1.008917				2548.62	2548.62	Yes	2500	102	101.9	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	405066	13C2-PFDA	440977	1250	Avg	0.890895				1288.82	1288.82	Yes	1250	103	103.1	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	768644	13C2-PFTeDA	405066	1250	Avg	0.92374				2567.79	2567.79	Yes	2500	103	102.7	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3898450	13C4-PFOS	571892	2500	Avg	0.602535				28284	28283.66	Yes	25000	113	113.1	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4082299	D7-NMeFOSE	3898450	25000	Avg	1.021618				25625	25625.03	Yes	25000	103	102.5	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	238226	13C4-PFOS	571892	2500	Avg	0.374254				2782.59	2782.59	Yes	2500	111	111.3	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	233401	D3-NMeFOSA	238226	2500	Avg	0.961277				2548.03	2548.03	Yes	2500	102	101.9	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4240653	13C4-PFOS	571892	2500	Avg	0.664194				27910	27910.25	Yes	25000	112	111.6	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	5184356	D9-NEtFOSE	4240653	25000	Avg	1.107685				27592	27592.17	Yes	25000	110	110.4	Yes
092524A082.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	255331	13C4-PFOS	571892	2500	Avg	0.398062				2804	2804.01	Yes	2500	112	112.2	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2938219	13C3-PFBA	1241201	5000	Avg	1.150256				10290	10290.05	Yes	10000	103	102.9	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2614224	13C4-PFBA	2938219	10000	Avg	0.860777				10336	10336.37	Yes	10000	103	103.4	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1309236	13C2-PFHxA	730219	2500	Avg	0.795934				5631.55	5631.55	Yes	5000	113	112.6	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1179241	13C5-PFPeA	1309236	5000	Avg	0.921502				4887.18	4887.18	Yes	5000	98	97.7	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	168825	18O2-PFHxS	475846	2500	Avg	0.18253				4859.32	4859.33	Yes	5000	97	97.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	702723	13C2-4:2FTS	168825	5000	Avg	1.989363				10462	10461.73	Yes	9375	112	111.6	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	882553	13C2-PFHxA	730219	2500	Avg	1.087908				2777.38	2777.38	Yes	2500	111	111.1	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	785800	13C5-PFHxA	882553	2500	Avg	0.90903				2448.69	2448.69	Yes	2500	98	97.9	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3587382	13C5-PFHxA	882553	2500	Avg	0.163284				62235	62234.79	Yes	62500	100	99.6	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	578920	18O2-PFHxS	475846	2500	Avg	1.317939				2307.79	2307.79	Yes	2500	92	92.3	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	678640	13C3-PFBS	578920	2500	Avg	1.269173				2309.09	2309.09	Yes	2218	104	104.1	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	581546	13C2-PFHxA	730219	2500	Avg	0.192552				10340	10340.06	Yes	10000	103	103.4	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	958623	13C2-PFHxA	730219	2500	Avg	1.191993				2753.35	2753.35	Yes	2500	110	110.1	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1073317	13C4-PFHpA	958623	2500	Avg	1.08709				2574.87	2574.87	Yes	2500	103	103	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	194964	18O2-PFHxS	475846	2500	Avg	0.205065				4995	4995.01	Yes	5000	100	99.9	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	842833	13C2-6:2FTS	194964	5000	Avg	2.126484				10165	10164.71	Yes	9500	107	107	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1157879	13C4-PFOA	147938	2500	Avg	6.935128				2821.43	2821.43	Yes	2500	113	112.9	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1166235	13C8-PFOA	1157879	2500	Avg	0.884977				2845.32	2845.32	Yes	2500	114	113.8	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	515096	18O2-PFHxS	475846	2500	Avg	1.159703				2333.54	2333.54	Yes	2500	93	93.3	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	634832	13C3-PFHxS	515096	2500	Avg	1.183053				2604.39	2604.39	Yes	2353	111	110.7	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	576422	13C3-PFHxS	515096	2500	Avg	1.151233				2430.13	2430.13	Yes	2285	106	106.4	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	575449	13C5-PFNA	646520	1250	Avg	0.884789				1257.46	1257.46	Yes	1250	101	100.6	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	984511	13C9-PFNA	575449	1250	Avg	0.839373				2547.82	2547.82	Yes	2500	102	101.9	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	184201	18O2-PFHxS	475846	2500	Avg	0.201772				4796.28	4796.28	Yes	5000	96	95.9	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	729066	13C2-8:2FTS	184201	5000	Avg	1.818805				10881	10880.75	Yes	9600	113	113.3	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	620085	13C4-PFOS	532291	2500	Avg	0.460729				6321.16	6321.16	Yes	5000	126	126.4	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	242188	D3-NMeFOSAA	620085	5000	Avg	0.822512				2374.27	2374.26	Yes	2500	95	95	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	562619	13C2-PFDA	405855	1250	Avg	1.142396				1516.83	1516.83	Yes	1250	121	121.3	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	994491	13C6-PFDA	562619	1250	Avg	0.862667				2561.26	2561.26	Yes	2500	102	102.5	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	474240	13C4-PFOS	532291	2500	Avg	0.363285				6131.14	6131.15	Yes	5000	123	122.6	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	265707	D5-NEtFOSAA	474240	5000	Avg	1.058985				2645.36	2645.36	Yes	2500	106	105.8	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	627367	13C4-PFOS	532291	2500	Avg	1.0092				2919.68	2919.68	Yes	2500	117	116.8	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	508045	13C8-PFOS	627367	2500	Avg	0.875705				2311.87	2311.87	Yes	2383	97	97	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	563026	13C8-PFOS	627367	2500	Avg	0.972082				2308.04	2308.04	Yes	2320	99	99.5	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	712291	13C8-PFOS	627367	2500	Avg	1.079883				2628.45	2628.45	Yes	2405	109	109.3	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	632525	13C8-PFOS	627367	2500	Avg	0.978061				2577.09	2577.09	Yes	2413	107	106.8	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	504969	13C2-PFDA	405855	1250	Avg	1.021306				1522.82	1522.82	Yes	1250	122	121.8	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	869019	13C7-PFUnA	504969	1250	Avg	0.941499				2284.83	2284.83	Yes	2500	91	91.4	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	481223	13C2-PFDA	405855	1250	Avg	0.966171				1534.02	1534.02	Yes	1250	123	122.7	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1219942	13C2-PFDoA	481223	1250	Avg	1.182085				2680.74	2680.74	Yes	2500	107	107.2	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	741916	13C2-PFDoA	481223	1250	Avg	0.765454				2517.67	2517.67	Yes	2500	101	100.7	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	979272	13C4-PFOS	532291	2500	Avg	1.46881				3131.33	3131.33	Yes	2500	125	125.3	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	954884	13C8-PFOSA	979272	2500	Avg	1.008917				2416.19	2416.19	Yes	2500	97	96.6	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	393633	13C2-PFDA	405855	1250	Avg	0.890895				1360.83	1360.83	Yes	1250	109	108.9	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	792124	13C2-PFTeDA	393633	1250	Avg	0.92374				2723.09	2723.09	Yes	2500	109	108.9	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3952828	13C4-PFOS	532291	2500	Avg	0.602535				30812	30811.76	Yes	25000	123	123.2	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4119892	D7-NMeFOSE	3952828	25000	Avg	1.021618				25505	25505.24	Yes	25000	102	102	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	234812	13C4-PFOS	532291	2500	Avg	0.374254				2946.76	2946.76	Yes	2500	118	117.9	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	237691	D3-NMeFOSA	234812	2500	Avg	0.961277				2632.59	2632.59	Yes	2500	105	105.3	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4313614	13C4-PFOS	532291	2500	Avg	0.664194				30503	30502.63	Yes	25000	122	122	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	5026555	D9-NEtFOSE	4313614	25000	Avg	1.107685				26300	26299.83	Yes	25000	105	105.2	Yes
092524A099.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	243838	13C4-PFOS	532291	2500	Avg	0.398062				2877.01	2877.01	Yes	2500	115	115.1	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2988100	13C3-PFBA	1266103	5000	Avg	1.150256				10259	10258.92	Yes	10000	103	102.6	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2666885	13C4-PFBA	2988100	10000	Avg	0.860777				10369	10368.56	Yes	10000	104	103.7	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1301755	13C2-PFHxA	749454	2500	Avg	0.795934				5455.66	5455.66	Yes	5000	109	109.1	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1201627	13C5-PFPeA	1301755	5000	Avg	0.921502				5008.57	5008.57	Yes	5000	100	100.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	167192	18O2-PFHxS	431621	2500	Avg	0.18253				5305.4	5305.41	Yes	5000	106	106.1	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	693782	13C2-4:2FTS	167192	5000	Avg	1.989363				10429	10429.5	Yes	9375	111	111.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	830461	13C2-PFHxA	749454	2500	Avg	1.087908				2546.37	2546.37	Yes	2500	102	101.9	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	770340	13C5-PFHxA	830461	2500	Avg	0.90903				2551.09	2551.09	Yes	2500	102	102	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3460370	13C5-PFHxA	830461	2500	Avg	0.163284				63797	63796.91	Yes	62500	102	102.1	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	580049	18O2-PFHxS	431621	2500	Avg	1.317939				2549.22	2549.22	Yes	2500	102	102	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	701203	13C3-PFBS	580049	2500	Avg	1.269173				2381.21	2381.21	Yes	2218	107	107.4	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	609940	13C2-PFHxA	749454	2500	Avg	0.192552				10567	10566.57	Yes	10000	106	105.7	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	988918	13C2-PFHxA	749454	2500	Avg	1.191993				2767.46	2767.46	Yes	2500	111	110.7	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1042155	13C4-PFHpA	988918	2500	Avg	1.08709				2423.52	2423.52	Yes	2500	97	96.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	223936	18O2-PFHxS	431621	2500	Avg	0.205065				6325.13	6325.14	Yes	5000	127	126.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	870022	13C2-6:2FTS	223936	5000	Avg	2.126484				9263.28	9263.28	Yes	9500	98	97.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1150479	13C4-PFOA	152045	2500	Avg	6.935128				2727.67	2727.67	Yes	2500	109	109.1	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1023490	13C8-PFOA	1150479	2500	Avg	0.884977				2513.12	2513.12	Yes	2500	101	100.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	548628	18O2-PFHxS	431621	2500	Avg	1.159703				2740.11	2740.11	Yes	2500	110	109.6	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	630486	13C3-PFHxS	548628	2500	Avg	1.183053				2428.47	2428.47	Yes	2353	103	103.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	540484	13C3-PFHxS	548628	2500	Avg	1.151233				2139.35	2139.35	Yes	2285	94	93.6	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	563696	13C5-PFNA	614761	1250	Avg	0.884789				1295.42	1295.42	Yes	1250	104	103.6	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	975183	13C9-PFNA	563696	1250	Avg	0.839373				2576.3	2576.3	Yes	2500	103	103.1	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	227193	18O2-PFHxS	431621	2500	Avg	0.201772				6521.86	6521.86	Yes	5000	130	130.4	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	794922	13C2-8:2FTS	227193	5000	Avg	1.818805				9618.64	9618.63	Yes	9600	100	100.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	642636	13C4-PFOS	593456	2500	Avg	0.460729				5875.86	5875.85	Yes	5000	118	117.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	259452	D3-NMeFOSAA	642636	5000	Avg	0.822512				2454.26	2454.26	Yes	2500	98	98.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	540100	13C2-PFDA	453734	1250	Avg	1.142396				1302.46	1302.47	Yes	1250	104	104.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	930731	13C6-PFDA	540100	1250	Avg	0.862667				2496.99	2496.99	Yes	2500	100	99.9	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	518688	13C4-PFOS	593456	2500	Avg	0.363285				6014.64	6014.65	Yes	5000	120	120.3	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	310025	D5-NEtFOSAA	518688	5000	Avg	1.058985				2822.09	2822.09	Yes	2500	113	112.9	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	594079	13C4-PFOS	593456	2500	Avg	1.0092				2479.81	2479.81	Yes	2500	99	99.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	542792	13C8-PFOS	594079	2500	Avg	0.875705				2608.38	2608.38	Yes	2383	109	109.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	602123	13C8-PFOS	594079	2500	Avg	0.972082				2606.62	2606.62	Yes	2320	112	112.4	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	693551	13C8-PFOS	594079	2500	Avg	1.079883				2702.7	2702.7	Yes	2405	112	112.4	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	636516	13C8-PFOS	594079	2500	Avg	0.978061				2738.67	2738.67	Yes	2413	113	113.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	499182	13C2-PFDA	453734	1250	Avg	1.021306				1346.52	1346.52	Yes	1250	108	107.7	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	911923	13C7-PFUnA	499182	1250	Avg	0.941499				2425.43	2425.43	Yes	2500	97	97	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	461167	13C2-PFDA	453734	1250	Avg	0.966171				1314.96	1314.96	Yes	1250	105	105.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1139631	13C2-PFDoA	461167	1250	Avg	1.182085				2613.17	2613.17	Yes	2500	105	104.5	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	711008	13C2-PFDoA	461167	1250	Avg	0.765454				2517.72	2517.72	Yes	2500	101	100.7	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	914622	13C4-PFOS	593456	2500	Avg	1.46881				2623.18	2623.18	Yes	2500	105	104.9	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	934120	13C8-PFOSA	914622	2500	Avg	1.008917				2530.73	2530.73	Yes	2500	101	101.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	414677	13C2-PFDA	453734	1250	Avg	0.890895				1282.31	1282.31	Yes	1250	103	102.6	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	800066	13C2-PFTeDA	414677	1250	Avg	0.92374				2610.82	2610.82	Yes	2500	104	104.4	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4157637	13C4-PFOS	593456	2500	Avg	0.602535				29068	29068.04	Yes	25000	116	116.3	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4434075	D7-NMeFOSE	4157637	25000	Avg	1.021618				26098	26098.04	Yes	25000	104	104.4	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	250988	13C4-PFOS	593456	2500	Avg	0.374254				2825.13	2825.13	Yes	2500	113	113	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	246602	D3-NMeFOSA	250988	2500	Avg	0.961277				2555.26	2555.26	Yes	2500	102	102.2	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4544942	13C4-PFOS	593456	2500	Avg	0.664194				28826	28826.03	Yes	25000	115	115.3	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	5502389	D9-NEtFOSE	4544942	25000	Avg	1.107685				27324	27324.15	Yes	25000	109	109.3	Yes
092624007.d	CCV L5A_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	264328	13C4-PFOS	593456	2500	Avg	0.398062				2797.33	2797.33	Yes	2500	112	111.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2954013	13C3-PFBA	1250763	5000	Avg	1.150256				10266	10266.27	Yes	10000	103	102.7	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2642901	13C4-PFBA	2954013	10000	Avg	0.860777				10394	10393.88	Yes	10000	104	103.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1275354	13C2-PFHxA	758118	2500	Avg	0.795934				5283.93	5283.93	Yes	5000	106	105.7	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1190771	13C5-PFPeA	1275354	5000	Avg	0.921502				5066.07	5066.07	Yes	5000	101	101.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	174147	18O2-PFHxS	497283	2500	Avg	0.18253				4796.42	4796.43	Yes	5000	96	95.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	681170	13C2-4:2FTS	174147	5000	Avg	1.989363				9830.95	9830.95	Yes	9375	105	104.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	841121	13C2-PFHxA	758118	2500	Avg	1.087908				2549.58	2549.59	Yes	2500	102	102	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	773461	13C5-PFHxA	841121	2500	Avg	0.90903				2528.96	2528.96	Yes	2500	101	101.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3811549	13C5-PFHxA	841121	2500	Avg	0.163284				69381	69380.82	Yes	62500	111	111	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	589198	18O2-PFHxS	497283	2500	Avg	1.317939				2247.51	2247.51	Yes	2500	90	89.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	696284	13C3-PFBS	589198	2500	Avg	1.269173				2327.79	2327.79	Yes	2218	105	105	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	625555	13C2-PFHxA	758118	2500	Avg	0.192552				10713	10713.24	Yes	10000	107	107.1	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	941118	13C2-PFHxA	758118	2500	Avg	1.191993				2603.6	2603.6	Yes	2500	104	104.1	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1057720	13C4-PFHpA	941118	2500	Avg	1.08709				2584.65	2584.65	Yes	2500	103	103.4	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	209613	18O2-PFHxS	497283	2500	Avg	0.205065				5138.81	5138.82	Yes	5000	103	102.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	861344	13C2-6:2FTS	209613	5000	Avg	2.126484				9799.67	9799.67	Yes	9500	103	103.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	981871	13C4-PFOA	149042	2500	Avg	6.935128				2374.82	2374.82	Yes	2500	95	95	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	993113	13C8-PFOA	981871	2500	Avg	0.884977				2857.28	2857.28	Yes	2500	114	114.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	544973	18O2-PFHxS	497283	2500	Avg	1.159703				2362.46	2362.46	Yes	2500	94	94.5	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	607966	13C3-PFHxS	544973	2500	Avg	1.183053				2357.44	2357.44	Yes	2353	100	100.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	606357	13C3-PFHxS	544973	2500	Avg	1.151233				2416.19	2416.19	Yes	2285	106	105.7	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	546917	13C5-PFNA	666044	1250	Avg	0.884789				1160.08	1160.08	Yes	1250	93	92.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	1009459	13C9-PFNA	546917	1250	Avg	0.839373				2748.67	2748.67	Yes	2500	110	109.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	195116	18O2-PFHxS	497283	2500	Avg	0.201772				4861.48	4861.48	Yes	5000	97	97.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	764410	13C2-8:2FTS	195116	5000	Avg	1.818805				10770	10770.04	Yes	9600	112	112.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	640912	13C4-PFOS	577640	2500	Avg	0.460729				6020.54	6020.54	Yes	5000	120	120.4	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	239897	D3-NMeFOSAA	640912	5000	Avg	0.822512				2275.38	2275.38	Yes	2500	91	91	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	530848	13C2-PFDA	465353	1250	Avg	1.142396				1248.19	1248.19	Yes	1250	100	99.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	955242	13C6-PFDA	530848	1250	Avg	0.862667				2607.41	2607.41	Yes	2500	104	104.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	469829	13C4-PFOS	577640	2500	Avg	0.363285				5597.25	5597.26	Yes	5000	112	111.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	253601	D5-NEtFOSAA	469829	5000	Avg	1.058985				2548.54	2548.54	Yes	2500	102	101.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	596733	13C4-PFOS	577640	2500	Avg	1.0092				2559.09	2559.09	Yes	2500	102	102.4	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	529425	13C8-PFOS	596733	2500	Avg	0.875705				2532.83	2532.83	Yes	2383	106	106.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	542757	13C8-PFOS	596733	2500	Avg	0.972082				2339.17	2339.17	Yes	2320	101	100.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	685735	13C8-PFOS	596733	2500	Avg	1.079883				2660.36	2660.35	Yes	2405	111	110.6	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	613347	13C8-PFOS	596733	2500	Avg	0.978061				2627.24	2627.24	Yes	2413	109	108.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	509972	13C2-PFDA	465353	1250	Avg	1.021306				1341.28	1341.28	Yes	1250	107	107.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	905390	13C7-PFUnA	509972	1250	Avg	0.941499				2357.11	2357.11	Yes	2500	94	94.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	458614	13C2-PFDA	465353	1250	Avg	0.966171				1275.03	1275.03	Yes	1250	102	102	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1110755	13C2-PFDoA	458614	1250	Avg	1.182085				2561.13	2561.13	Yes	2500	102	102.4	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	693601	13C2-PFDoA	458614	1250	Avg	0.765454				2469.75	2469.75	Yes	2500	99	98.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	939834	13C4-PFOS	577640	2500	Avg	1.46881				2769.29	2769.29	Yes	2500	111	110.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	936853	13C8-PFOSA	939834	2500	Avg	1.008917				2470.05	2470.05	Yes	2500	99	98.8	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	398643	13C2-PFDA	465353	1250	Avg	0.890895				1201.95	1201.95	Yes	1250	96	96.2	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	814603	13C2-PFTeDA	398643	1250	Avg	0.92374				2765.17	2765.17	Yes	2500	111	110.6	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3950541	13C4-PFOS	577640	2500	Avg	0.602535				28376	28376.38	Yes	25000	114	113.5	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4152595	D7-NMeFOSE	3950541	25000	Avg	1.021618				25723	25722.58	Yes	25000	103	102.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	223334	13C4-PFOS	577640	2500	Avg	0.374254				2582.69	2582.68	Yes	2500	103	103.3	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	229931	D3-NMeFOSA	223334	2500	Avg	0.961277				2677.53	2677.53	Yes	2500	107	107.1	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4253561	13C4-PFOS	577640	2500	Avg	0.664194				27717	27716.63	Yes	25000	111	110.9	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4999100	D9-NEtFOSE	4253561	25000	Avg	1.107685				26525	26525.46	Yes	25000	106	106.1	Yes
092624022.d	CCV L5B_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	247006	13C4-PFOS	577640	2500	Avg	0.398062				2685.59	2685.59	Yes	2500	107	107.4	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2918957	13C3-PFBA	1238539	5000	Avg	1.150256				10245	10244.56	Yes	10000	102	102.4	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2597630	13C4-PFBA	2918957	10000	Avg	0.860777				10339	10338.53	Yes	10000	103	103.4	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1251845	13C2-PFHxA	805523	2500	Avg	0.795934				4881.3	4881.3	Yes	5000	98	97.6	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1174959	13C5-PFPeA	1251845	5000	Avg	0.921502				5092.67	5092.67	Yes	5000	102	101.9	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	163603	18O2-PFHxS	388323	2500	Avg	0.18253				5770.36	5770.37	Yes	5000	115	115.4	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	668991	13C2-4:2FTS	163603	5000	Avg	1.989363				10277	10277.44	Yes	9375	110	109.6	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	822465	13C2-PFHxA	805523	2500	Avg	1.087908				2346.32	2346.32	Yes	2500	94	93.9	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	747815	13C5-PFHxA	822465	2500	Avg	0.90903				2500.57	2500.57	Yes	2500	100	100	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3496776	13C5-PFHxA	822465	2500	Avg	0.163284				65095	65094.87	Yes	62500	104	104.2	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	588824	18O2-PFHxS	388323	2500	Avg	1.317939				2876.32	2876.32	Yes	2500	115	115.1	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	706306	13C3-PFBS	588824	2500	Avg	1.269173				2362.8	2362.8	Yes	2218	107	106.5	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	601518	13C2-PFHxA	805523	2500	Avg	0.192552				9695.33	9695.33	Yes	10000	97	97	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	957327	13C2-PFHxA	805523	2500	Avg	1.191993				2492.58	2492.58	Yes	2500	100	99.7	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1063952	13C4-PFHpA	957327	2500	Avg	1.08709				2555.86	2555.86	Yes	2500	102	102.2	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	180599	18O2-PFHxS	388323	2500	Avg	0.205065				5669.83	5669.84	Yes	5000	113	113.4	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	810776	13C2-6:2FTS	180599	5000	Avg	2.126484				10710	10709.38	Yes	9500	113	112.7	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1173262	13C4-PFOA	146438	2500	Avg	6.935128				2888.2	2888.2	Yes	2500	116	115.5	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	922675	13C8-PFOA	1173262	2500	Avg	0.884977				2221.58	2221.58	Yes	2500	89	88.9	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	464763	18O2-PFHxS	388323	2500	Avg	1.159703				2580.07	2580.07	Yes	2500	103	103.2	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	608199	13C3-PFHxS	464763	2500	Avg	1.183053				2765.35	2765.35	Yes	2353	118	117.5	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	572920	13C3-PFHxS	464763	2500	Avg	1.151233				2676.94	2676.94	Yes	2285	117	117.2	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	575273	13C5-PFNA	621950	1250	Avg	0.884789				1306.74	1306.74	Yes	1250	105	104.5	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	950084	13C9-PFNA	575273	1250	Avg	0.839373				2459.48	2459.48	Yes	2500	98	98.4	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	189546	18O2-PFHxS	388323	2500	Avg	0.201772				6047.84	6047.84	Yes	5000	121	121	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	725102	13C2-8:2FTS	189546	5000	Avg	1.818805				10516	10516.43	Yes	9600	110	109.5	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	589141	13C4-PFOS	593696	2500	Avg	0.460729				5384.55	5384.55	Yes	5000	108	107.7	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	229243	D3-NMeFOSAA	589141	5000	Avg	0.822512				2365.4	2365.4	Yes	2500	95	94.6	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	526049	13C2-PFDA	428254	1250	Avg	1.142396				1344.06	1344.06	Yes	1250	108	107.5	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	973625	13C6-PFDA	526049	1250	Avg	0.862667				2681.84	2681.84	Yes	2500	107	107.3	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	439259	13C4-PFOS	593696	2500	Avg	0.363285				5091.54	5091.54	Yes	5000	102	101.8	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	298233	D5-NEtFOSAA	439259	5000	Avg	1.058985				3205.64	3205.64	Yes	2500	128	128.2	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	603720	13C4-PFOS	593696	2500	Avg	1.0092				2519.03	2519.04	Yes	2500	101	100.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	482280	13C8-PFOS	603720	2500	Avg	0.875705				2280.58	2280.58	Yes	2383	96	95.7	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	568003	13C8-PFOS	603720	2500	Avg	0.972082				2419.65	2419.65	Yes	2320	104	104.3	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	665362	13C8-PFOS	603720	2500	Avg	1.079883				2551.44	2551.44	Yes	2405	106	106.1	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	599156	13C8-PFOS	603720	2500	Avg	0.978061				2536.75	2536.75	Yes	2413	105	105.1	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	499579	13C2-PFDA	428254	1250	Avg	1.021306				1427.77	1427.77	Yes	1250	114	114.2	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	906914	13C7-PFUnA	499579	1250	Avg	0.941499				2410.19	2410.19	Yes	2500	96	96.4	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	465893	13C2-PFDA	428254	1250	Avg	0.966171				1407.47	1407.48	Yes	1250	113	112.6	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1144154	13C2-PFDoA	465893	1250	Avg	1.182085				2596.93	2596.93	Yes	2500	104	103.9	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	693762	13C2-PFDoA	465893	1250	Avg	0.765454				2431.73	2431.73	Yes	2500	97	97.3	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	955209	13C4-PFOS	593696	2500	Avg	1.46881				2738.47	2738.47	Yes	2500	110	109.5	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	968635	13C8-PFOSA	955209	2500	Avg	1.008917				2512.73	2512.73	Yes	2500	101	100.5	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	375222	13C2-PFDA	428254	1250	Avg	0.890895				1229.33	1229.34	Yes	1250	98	98.3	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	782987	13C2-PFTeDA	375222	1250	Avg	0.92374				2823.75	2823.75	Yes	2500	113	113	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3928784	13C4-PFOS	593696	2500	Avg	0.602535				27457	27456.92	Yes	25000	110	109.8	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	4031232	D7-NMeFOSE	3928784	25000	Avg	1.021618				25109	25109.1	Yes	25000	100	100.4	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	229382	13C4-PFOS	593696	2500	Avg	0.374254				2580.89	2580.89	Yes	2500	103	103.2	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	226929	D3-NMeFOSA	229382	2500	Avg	0.961277				2572.89	2572.9	Yes	2500	103	102.9	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4188657	13C4-PFOS	593696	2500	Avg	0.664194				26556	26555.58	Yes	25000	106	106.2	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4886962	D9-NEtFOSE	4188657	25000	Avg	1.107685				26332	26332.25	Yes	25000	105	105.3	Yes
092624037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	253685	13C4-PFOS	593696	2500	Avg	0.398062				2683.61	2683.61	Yes	2500	107	107.3	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2714090	13C3-PFBA	1150310	5000	Avg	1.143357				10318	10318.05	Yes	10000	103	103.2	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2391562	13C4-PFBA	2714090	10000	Avg	0.847439				10398	10397.98	Yes	10000	104	104	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1181315	13C2-PFHxA	678922	2500	Avg	0.801362				5428.21	5428.22	Yes	5000	109	108.6	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1077842	13C5-PFPeA	1181315	5000	Avg	0.909037				5018.55	5018.55	Yes	5000	100	100.4	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	156228	18O2-PFHxS	404285	2500	Avg	0.187001				5166.16	5166.15	Yes	5000	103	103.3	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	610889	13C2-4:2FTS	156228	5000	Avg	2.034518				9609.75	9609.75	Yes	9375	103	102.5	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	776977	13C2-PFHxA	678922	2500	Avg	1.059706				2699.87	2699.87	Yes	2500	108	108	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	718914	13C5-PFHxA	776977	2500	Avg	0.934717				2474.74	2474.73	Yes	2500	99	99	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3180199	13C5-PFHxA	776977	2500	Avg	0.16				63954	63953.77	Yes	62500	102	102.3	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	544431	18O2-PFHxS	404285	2500	Avg	1.358315				2478.53	2478.53	Yes	2500	99	99.1	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	593111	13C3-PFBS	544431	2500	Avg	1.185834				2296.73	2296.73	Yes	2218	104	103.5	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	573141	13C2-PFHxA	678922	2500	Avg	0.193362				10915	10914.67	Yes	10000	109	109.1	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	817551	13C2-PFHxA	678922	2500	Avg	1.173055				2566.35	2566.35	Yes	2500	103	102.7	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1021521	13C4-PFHpA	817551	2500	Avg	1.088317				2870.23	2870.23	Yes	2500	115	114.8	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	147842	18O2-PFHxS	404285	2500	Avg	0.197889				4619.86	4619.86	Yes	5000	92	92.4	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	760994	13C2-6:2FTS	147842	5000	Avg	2.364898				10883	10882.81	Yes	9500	115	114.6	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1042475	13C4-PFOA	129629	2500	Avg	7.712837				2606.69	2606.69	Yes	2500	104	104.3	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	920673	13C8-PFOA	1042475	2500	Avg	0.944212				2338.35	2338.35	Yes	2500	94	93.5	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	456150	18O2-PFHxS	404285	2500	Avg	1.176303				2397.95	2397.95	Yes	2500	96	95.9	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	557598	13C3-PFHxS	456150	2500	Avg	1.244827				2454.96	2454.96	Yes	2353	104	104.3	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	543431	13C3-PFHxS	456150	2500	Avg	1.190513				2501.74	2501.74	Yes	2285	109	109.5	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	486344	13C5-PFNA	527334	1250	Avg	0.936058				1231.59	1231.59	Yes	1250	99	98.5	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	765905	13C9-PFNA	486344	1250	Avg	0.822409				2393.61	2393.61	Yes	2500	96	95.7	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	146124	18O2-PFHxS	404285	2500	Avg	0.18929				4773.61	4773.6	Yes	5000	95	95.5	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	573501	13C2-8:2FTS	146124	5000	Avg	1.994899				9836.98	9836.98	Yes	9600	102	102.5	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	522773	13C4-PFOS	461702	2500	Avg	0.534223				5298.7	5298.69	Yes	5000	106	106	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	212392	D3-NMeFOSAA	522773	5000	Avg	0.821894				2471.61	2471.61	Yes	2500	99	98.9	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	469325	13C2-PFDA	362979	1250	Avg	1.172751				1378.15	1378.15	Yes	1250	110	110.3	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	769750	13C6-PFDA	469325	1250	Ln	0.808407	9.777264			2523.94	2523.94	Yes	2500	101	101	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	410524	13C4-PFOS	461702	2500	Avg	0.39747				5592.58	5592.58	Yes	5000	112	111.9	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	235705	D5-NEtFOSAA	410524	5000	Avg	1.094181				2623.68	2623.68	Yes	2500	105	104.9	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	505357	13C4-PFOS	461702	2500	Avg	1.055789				2591.79	2591.79	Yes	2500	104	103.7	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	439488	13C8-PFOS	505357	2500	Avg	0.864668				2514.43	2514.43	Yes	2383	106	105.5	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	441892	13C8-PFOS	505357	2500	Avg	0.969189				2255.53	2255.53	Yes	2320	97	97.2	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	631781	13C8-PFOS	505357	2500	Ln	1.144627	15.5564			2716.92	2716.92	Yes	2405	113	113	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	581287	13C8-PFOS	505357	2500	Avg	1.105585				2601	2601	Yes	2413	108	107.8	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	452915	13C2-PFDA	362979	1250	Avg	1.169063				1334.16	1334.16	Yes	1250	107	106.7	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	833777	13C7-PFUnA	452915	1250	Avg	0.943401				2439.2	2439.2	Yes	2500	98	97.6	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	414464	13C2-PFDA	362979	1250	Avg	1.008069				1415.87	1415.88	Yes	1250	113	113.3	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1013502	13C2-PFDoA	414464	1250	Avg	1.191025				2566.42	2566.42	Yes	2500	103	102.7	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	633940	13C2-PFDoA	414464	1250	Avg	0.76641				2494.65	2494.65	Yes	2500	100	99.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	845673	13C4-PFOS	461702	2500	Avg	1.639541				2792.92	2792.92	Yes	2500	112	111.7	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	843104	13C8-PFOSA	845673	2500	Avg	1.005021				2479.95	2479.95	Yes	2500	99	99.2	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	352091	13C2-PFDA	362979	1250	Avg	0.905673				1338.79	1338.79	Yes	1250	107	107.1	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	679488	13C2-PFTeDA	352091	1250	Avg	0.936594				2575.64	2575.64	Yes	2500	103	103	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3460391	13C4-PFOS	461702	2500	Avg	0.704162				26609	26609.14	Yes	25000	106	106.4	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3781962	D7-NMeFOSE	3460391	25000	Avg	1.061282				25745	25745.49	Yes	25000	103	103	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	199768	13C4-PFOS	461702	2500	Avg	0.42391				2551.71	2551.71	Yes	2500	102	102.1	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	203687	D3-NMeFOSA	199768	2500	Avg	0.968682				2631.46	2631.46	Yes	2500	105	105.3	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3775346	13C4-PFOS	461702	2500	Avg	0.766089				26684	26684.3	Yes	25000	107	106.7	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4538352	D9-NEtFOSE	3775346	25000	Avg	1.162702				25847	25847.17	Yes	25000	103	103.4	Yes
100124B092.d	CCV L5E_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	220439	13C4-PFOS	461702	2500	Avg	0.449382				2656.14	2656.14	Yes	2500	106	106.2	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2764960	13C3-PFBA	1182273	5000	Avg	1.143357				10227	10227.26	Yes	10000	102	102.3	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2432260	13C4-PFBA	2764960	10000	Avg	0.847439				10380	10380.37	Yes	10000	104	103.8	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1168633	13C2-PFHxA	699656	2500	Avg	0.801362				5210.8	5210.81	Yes	5000	104	104.2	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1065299	13C5-PFPeA	1168633	5000	Avg	0.909037				5013.97	5013.97	Yes	5000	100	100.3	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	152015	18O2-PFHxS	404157	2500	Avg	0.187001				5028.44	5028.43	Yes	5000	101	100.6	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	556960	13C2-4:2FTS	152015	5000	Avg	2.034518				9004.22	9004.22	Yes	9375	96	96	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	759579	13C2-PFHxA	699656	2500	Avg	1.059706				2561.2	2561.2	Yes	2500	102	102.4	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	717950	13C5-PFHxA	759579	2500	Avg	0.934717				2528.02	2528.02	Yes	2500	101	101.1	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	2864606	13C5-PFHxA	759579	2500	Avg	0.16				58927	58926.68	Yes	62500	94	94.3	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	528215	18O2-PFHxS	404157	2500	Avg	1.358315				2405.47	2405.47	Yes	2500	96	96.2	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	564398	13C3-PFBS	528215	2500	Avg	1.185834				2252.64	2252.64	Yes	2218	102	101.6	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	564430	13C2-PFHxA	699656	2500	Avg	0.193362				10430	10430.24	Yes	10000	104	104.3	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	846288	13C2-PFHxA	699656	2500	Avg	1.173055				2577.84	2577.84	Yes	2500	103	103.1	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1021996	13C4-PFHpA	846288	2500	Avg	1.088317				2774.06	2774.06	Yes	2500	111	111	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	164735	18O2-PFHxS	404157	2500	Avg	0.197889				5149.38	5149.37	Yes	5000	103	103	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	742844	13C2-6:2FTS	164735	5000	Avg	2.364898				9533.87	9533.87	Yes	9500	100	100.4	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1015506	13C4-PFOA	124730	2500	Avg	7.712837				2638.99	2638.99	Yes	2500	106	105.6	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	921306	13C8-PFOA	1015506	2500	Avg	0.944212				2402.1	2402.1	Yes	2500	96	96.1	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	480077	18O2-PFHxS	404157	2500	Avg	1.176303				2524.54	2524.54	Yes	2500	101	101	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	647349	13C3-PFHxS	480077	2500	Avg	1.244827				2708.06	2708.06	Yes	2353	115	115.1	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	514327	13C3-PFHxS	480077	2500	Avg	1.190513				2249.75	2249.75	Yes	2285	98	98.5	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	495196	13C5-PFNA	506360	1250	Avg	0.936058				1305.95	1305.95	Yes	1250	104	104.5	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	852782	13C9-PFNA	495196	1250	Avg	0.822409				2617.48	2617.48	Yes	2500	105	104.7	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	152874	18O2-PFHxS	404157	2500	Avg	0.18929				4995.7	4995.69	Yes	5000	100	99.9	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	569066	13C2-8:2FTS	152874	5000	Avg	1.994899				9329.93	9329.92	Yes	9600	97	97.2	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	515189	13C4-PFOS	446899	2500	Avg	0.534223				5394.8	5394.79	Yes	5000	108	107.9	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	218710	D3-NMeFOSAA	515189	5000	Avg	0.821894				2582.59	2582.59	Yes	2500	103	103.3	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	462589	13C2-PFDA	354925	1250	Avg	1.172751				1389.19	1389.19	Yes	1250	111	111.1	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	803014	13C6-PFDA	462589	1250	Ln	0.808407	9.777264			2672.06	2672.06	Yes	2500	107	106.9	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	416786	13C4-PFOS	446899	2500	Avg	0.39747				5865.96	5865.96	Yes	5000	117	117.3	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	226669	D5-NEtFOSAA	416786	5000	Avg	1.094181				2485.19	2485.19	Yes	2500	99	99.4	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	494639	13C4-PFOS	446899	2500	Avg	1.055789				2620.85	2620.85	Yes	2500	105	104.8	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	476183	13C8-PFOS	494639	2500	Avg	0.864668				2783.4	2783.4	Yes	2383	117	116.8	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	477346	13C8-PFOS	494639	2500	Avg	0.969189				2489.3	2489.3	Yes	2320	107	107.3	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	615463	13C8-PFOS	494639	2500	Ln	1.144627	15.5564			2704.03	2704.03	Yes	2405	112	112.4	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	564057	13C8-PFOS	494639	2500	Avg	1.105585				2578.59	2578.59	Yes	2413	107	106.9	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	488398	13C2-PFDA	354925	1250	Avg	1.169063				1471.33	1471.33	Yes	1250	118	117.7	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	834416	13C7-PFUnA	488398	1250	Avg	0.943401				2263.72	2263.72	Yes	2500	91	90.5	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	389854	13C2-PFDA	354925	1250	Avg	1.008069				1362.02	1362.03	Yes	1250	109	109	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	988261	13C2-PFDoA	389854	1250	Avg	1.191025				2660.47	2660.47	Yes	2500	106	106.4	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	613541	13C2-PFDoA	389854	1250	Avg	0.76641				2566.79	2566.79	Yes	2500	103	102.7	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	812585	13C4-PFOS	446899	2500	Avg	1.639541				2772.54	2772.54	Yes	2500	111	110.9	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	836566	13C8-PFOSA	812585	2500	Avg	1.005021				2560.92	2560.92	Yes	2500	102	102.4	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	343328	13C2-PFDA	354925	1250	Avg	0.905673				1335.09	1335.09	Yes	1250	107	106.8	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	668360	13C2-PFTeDA	343328	1250	Avg	0.936594				2598.13	2598.12	Yes	2500	104	103.9	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3556649	13C4-PFOS	446899	2500	Avg	0.704162				28255	28255.24	Yes	25000	113	113	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3831680	D7-NMeFOSE	3556649	25000	Avg	1.061282				25378	25378	Yes	25000	102	101.5	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	202369	13C4-PFOS	446899	2500	Avg	0.42391				2670.55	2670.55	Yes	2500	107	106.8	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	203933	D3-NMeFOSA	202369	2500	Avg	0.968682				2600.77	2600.77	Yes	2500	104	104	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3749522	13C4-PFOS	446899	2500	Avg	0.766089				27380	27379.61	Yes	25000	110	109.5	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4624277	D9-NEtFOSE	3749522	25000	Avg	1.162702				26518	26517.92	Yes	25000	106	106.1	Yes
100124B104.d	CCV L5F_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	222305	13C4-PFOS	446899	2500	Avg	0.449382				2767.35	2767.35	Yes	2500	111	110.7	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2772629	13C3-PFBA	1171448	5000	Avg	1.143357				10350	10350.39	Yes	10000	104	103.5	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2399680	13C4-PFBA	2772629	10000	Avg	0.847439				10213	10213	Yes	10000	102	102.1	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1160945	13C2-PFHxA	705442	2500	Avg	0.801362				5134.07	5134.07	Yes	5000	103	102.7	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1064856	13C5-PFPeA	1160945	5000	Avg	0.909037				5045.08	5045.08	Yes	5000	101	100.9	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	152016	18O2-PFHxS	400136	2500	Avg	0.187001				5079	5078.99	Yes	5000	102	101.6	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	552671	13C2-4:2FTS	152016	5000	Avg	2.034518				8934.82	8934.82	Yes	9375	95	95.3	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	747485	13C2-PFHxA	705442	2500	Avg	1.059706				2499.75	2499.75	Yes	2500	100	100	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	726706	13C5-PFHxA	747485	2500	Avg	0.934717				2600.26	2600.26	Yes	2500	104	104	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	2845170	13C5-PFHxA	747485	2500	Avg	0.16				59474	59473.81	Yes	62500	95	95.2	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	525816	18O2-PFHxS	400136	2500	Avg	1.358315				2418.61	2418.61	Yes	2500	97	96.7	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	567607	13C3-PFBS	525816	2500	Avg	1.185834				2275.78	2275.78	Yes	2218	103	102.6	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	575927	13C2-PFHxA	705442	2500	Avg	0.193362				10555	10555.41	Yes	10000	106	105.6	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	859448	13C2-PFHxA	705442	2500	Avg	1.173055				2596.45	2596.45	Yes	2500	104	103.9	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	965573	13C4-PFHpA	859448	2500	Avg	1.088317				2580.77	2580.77	Yes	2500	103	103.2	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	160500	18O2-PFHxS	400136	2500	Avg	0.197889				5067.41	5067.41	Yes	5000	101	101.3	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	680384	13C2-6:2FTS	160500	5000	Avg	2.364898				8962.65	8962.65	Yes	9500	94	94.3	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	945299	13C4-PFOA	121743	2500	Avg	7.712837				2516.81	2516.81	Yes	2500	101	100.7	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	916010	13C8-PFOA	945299	2500	Avg	0.944212				2565.67	2565.67	Yes	2500	103	102.6	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	473515	18O2-PFHxS	400136	2500	Avg	1.176303				2515.05	2515.05	Yes	2500	101	100.6	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	586670	13C3-PFHxS	473515	2500	Avg	1.244827				2488.23	2488.23	Yes	2353	106	105.7	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	527418	13C3-PFHxS	473515	2500	Avg	1.190513				2338.98	2338.98	Yes	2285	102	102.4	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	503219	13C5-PFNA	517923	1250	Avg	0.936058				1297.48	1297.48	Yes	1250	104	103.8	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	885453	13C9-PFNA	503219	1250	Avg	0.822409				2674.43	2674.43	Yes	2500	107	107	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	155321	18O2-PFHxS	400136	2500	Avg	0.18929				5126.67	5126.66	Yes	5000	103	102.5	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	593718	13C2-8:2FTS	155321	5000	Avg	1.994899				9580.74	9580.74	Yes	9600	100	99.8	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	527005	13C4-PFOS	475657	2500	Avg	0.534223				5184.88	5184.87	Yes	5000	104	103.7	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	221078	D3-NMeFOSAA	527005	5000	Avg	0.821894				2552.03	2552.03	Yes	2500	102	102.1	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	464590	13C2-PFDA	359291	1250	Avg	1.172751				1378.25	1378.25	Yes	1250	110	110.3	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	885888	13C6-PFDA	464590	1250	Ln	0.808407	9.777264			2936.32	2936.32	Yes	2500	117	117.5	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	401978	13C4-PFOS	475657	2500	Avg	0.39747				5315.49	5315.5	Yes	5000	106	106.3	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	226299	D5-NEtFOSAA	401978	5000	Avg	1.094181				2572.53	2572.53	Yes	2500	103	102.9	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	491007	13C4-PFOS	475657	2500	Avg	1.055789				2444.31	2444.31	Yes	2500	98	97.8	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	482883	13C8-PFOS	491007	2500	Avg	0.864668				2843.44	2843.45	Yes	2383	119	119.3	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	487132	13C8-PFOS	491007	2500	Avg	0.969189				2559.12	2559.12	Yes	2320	110	110.3	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	629499	13C8-PFOS	491007	2500	Ln	1.144627	15.5564			2786.57	2786.57	Yes	2405	116	115.9	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	594207	13C8-PFOS	491007	2500	Avg	1.105585				2736.52	2736.52	Yes	2413	113	113.4	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	393970	13C2-PFDA	359291	1250	Avg	1.169063				1172.43	1172.44	Yes	1250	94	93.8	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	868566	13C7-PFUnA	393970	1250	Avg	0.943401				2921.15	2921.15	Yes	2500	117	116.8	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	403449	13C2-PFDA	359291	1250	Avg	1.008069				1392.39	1392.39	Yes	1250	111	111.4	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1014305	13C2-PFDoA	403449	1250	Avg	1.191025				2638.57	2638.57	Yes	2500	106	105.5	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	670924	13C2-PFDoA	403449	1250	Avg	0.76641				2712.27	2712.27	Yes	2500	108	108.5	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	811382	13C4-PFOS	475657	2500	Avg	1.639541				2601.05	2601.05	Yes	2500	104	104	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	854183	13C8-PFOSA	811382	2500	Avg	1.005021				2618.73	2618.73	Yes	2500	105	104.7	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	353350	13C2-PFDA	359291	1250	Avg	0.905673				1357.37	1357.37	Yes	1250	109	108.6	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	687513	13C2-PFTeDA	353350	1250	Avg	0.936594				2596.78	2596.78	Yes	2500	104	103.9	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3517633	13C4-PFOS	475657	2500	Avg	0.704162				26256	26255.73	Yes	25000	105	105	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3807351	D7-NMeFOSE	3517633	25000	Avg	1.061282				25497	25496.56	Yes	25000	102	102	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	209289	13C4-PFOS	475657	2500	Avg	0.42391				2594.89	2594.89	Yes	2500	104	103.8	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	213787	D3-NMeFOSA	209289	2500	Avg	0.968682				2636.29	2636.29	Yes	2500	105	105.5	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3811306	13C4-PFOS	475657	2500	Avg	0.766089				26148	26148.13	Yes	25000	105	104.6	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4612607	D9-NEtFOSE	3811306	25000	Avg	1.162702				26022	26022.21	Yes	25000	104	104.1	Yes
100124B121.d	CCV L5G_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	222963	13C4-PFOS	475657	2500	Avg	0.449382				2607.74	2607.73	Yes	2500	104	104.3	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2828432	13C3-PFBA	1194859	5000	Avg	1.143357				10352	10351.83	Yes	10000	104	103.5	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2464664	13C4-PFBA	2828432	10000	Avg	0.847439				10283	10282.61	Yes	10000	103	102.8	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1202110	13C2-PFHxA	755878	2500	Avg	0.801362				4961.39	4961.39	Yes	5000	99	99.2	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1095673	13C5-PFPeA	1202110	5000	Avg	0.909037				5013.32	5013.32	Yes	5000	100	100.3	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	150038	18O2-PFHxS	429299	2500	Avg	0.187001				4672.38	4672.37	Yes	5000	93	93.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	587053	13C2-4:2FTS	150038	5000	Avg	2.034518				9615.78	9615.78	Yes	9375	103	102.6	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	771865	13C2-PFHxA	755878	2500	Avg	1.059706				2409.04	2409.04	Yes	2500	96	96.4	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	746402	13C5-PFHxA	771865	2500	Avg	0.934717				2586.37	2586.37	Yes	2500	103	103.5	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3378827	13C5-PFHxA	771865	2500	Avg	0.16				68398	68398.19	Yes	62500	109	109.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	538801	18O2-PFHxS	429299	2500	Avg	1.358315				2309.98	2309.98	Yes	2500	92	92.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	590056	13C3-PFBS	538801	2500	Avg	1.185834				2308.77	2308.77	Yes	2218	104	104.1	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	583627	13C2-PFHxA	755878	2500	Avg	0.193362				9982.8	9982.8	Yes	10000	100	99.8	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	894926	13C2-PFHxA	755878	2500	Avg	1.173055				2523.23	2523.23	Yes	2500	101	100.9	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1005885	13C4-PFHpA	894926	2500	Avg	1.088317				2581.94	2581.94	Yes	2500	103	103.3	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	148156	18O2-PFHxS	429299	2500	Avg	0.197889				4359.92	4359.91	Yes	5000	87	87.2	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	720743	13C2-6:2FTS	148156	5000	Avg	2.364898				10285	10285.34	Yes	9500	108	108.3	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1021942	13C4-PFOA	131401	2500	Avg	7.712837				2520.89	2520.89	Yes	2500	101	100.8	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	896963	13C8-PFOA	1021942	2500	Avg	0.944212				2323.91	2323.91	Yes	2500	93	93	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	490857	18O2-PFHxS	429299	2500	Avg	1.176303				2430.05	2430.05	Yes	2500	97	97.2	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	615937	13C3-PFHxS	490857	2500	Avg	1.244827				2520.07	2520.07	Yes	2353	107	107.1	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	549633	13C3-PFHxS	490857	2500	Avg	1.190513				2351.38	2351.38	Yes	2285	103	102.9	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	512090	13C5-PFNA	529327	1250	Avg	0.936058				1291.9	1291.9	Yes	1250	103	103.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	826999	13C9-PFNA	512090	1250	Avg	0.822409				2454.6	2454.6	Yes	2500	98	98.2	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	148873	18O2-PFHxS	429299	2500	Avg	0.18929				4580.04	4580.03	Yes	5000	92	91.6	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	604230	13C2-8:2FTS	148873	5000	Avg	1.994899				10173	10172.68	Yes	9600	106	106	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	536804	13C4-PFOS	480452	2500	Avg	0.534223				5228.58	5228.57	Yes	5000	105	104.6	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	214869	D3-NMeFOSAA	536804	5000	Avg	0.821894				2435.07	2435.07	Yes	2500	97	97.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	485169	13C2-PFDA	387038	1250	Avg	1.172751				1336.11	1336.11	Yes	1250	107	106.9	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	781712	13C6-PFDA	485169	1250	Ln	0.808407	9.777264			2479.25	2479.25	Yes	2500	99	99.2	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	380436	13C4-PFOS	480452	2500	Avg	0.39747				4980.43	4980.43	Yes	5000	100	99.6	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	244255	D5-NEtFOSAA	380436	5000	Avg	1.094181				2933.88	2933.88	Yes	2500	117	117.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	504972	13C4-PFOS	480452	2500	Avg	1.055789				2488.74	2488.74	Yes	2500	100	99.5	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	451818	13C8-PFOS	504972	2500	Avg	0.864668				2586.94	2586.94	Yes	2383	109	108.6	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	490832	13C8-PFOS	504972	2500	Avg	0.969189				2507.25	2507.25	Yes	2320	108	108.1	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	655557	13C8-PFOS	504972	2500	Ln	1.144627	15.5564			2821.84	2821.84	Yes	2405	117	117.3	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	585653	13C8-PFOS	504972	2500	Avg	1.105585				2622.53	2622.53	Yes	2413	109	108.7	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	460153	13C2-PFDA	387038	1250	Avg	1.169063				1271.22	1271.22	Yes	1250	102	101.7	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	854538	13C7-PFUnA	460153	1250	Avg	0.943401				2460.61	2460.61	Yes	2500	98	98.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	399458	13C2-PFDA	387038	1250	Avg	1.008069				1279.79	1279.79	Yes	1250	102	102.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	978165	13C2-PFDoA	399458	1250	Avg	1.191025				2569.98	2569.98	Yes	2500	103	102.8	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	621100	13C2-PFDoA	399458	1250	Avg	0.76641				2535.94	2535.94	Yes	2500	101	101.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	820793	13C4-PFOS	480452	2500	Avg	1.639541				2604.96	2604.96	Yes	2500	104	104.2	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	850691	13C8-PFOSA	820793	2500	Avg	1.005021				2578.12	2578.12	Yes	2500	103	103.1	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	348379	13C2-PFDA	387038	1250	Avg	0.905673				1242.33	1242.33	Yes	1250	99	99.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	634098	13C2-PFTeDA	348379	1250	Avg	0.936594				2429.2	2429.2	Yes	2500	97	97.2	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3534839	13C4-PFOS	480452	2500	Avg	0.704162				26121	26120.84	Yes	25000	104	104.5	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3916786	D7-NMeFOSE	3534839	25000	Avg	1.061282				26102	26101.74	Yes	25000	104	104.4	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	215593	13C4-PFOS	480452	2500	Avg	0.42391				2646.37	2646.37	Yes	2500	106	105.9	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	216864	D3-NMeFOSA	215593	2500	Avg	0.968682				2596.04	2596.04	Yes	2500	104	103.8	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3777404	13C4-PFOS	480452	2500	Avg	0.766089				25657	25656.9	Yes	25000	103	102.6	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4649127	D9-NEtFOSE	3777404	25000	Avg	1.162702				26464	26463.64	Yes	25000	106	105.9	Yes
100124B138.d	CCV L5H_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	217836	13C4-PFOS	480452	2500	Avg	0.449382				2522.34	2522.34	Yes	2500	101	100.9	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2746312	13C3-PFBA	1152834	5000	Avg	1.143357				10418	10417.69	Yes	10000	104	104.2	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2419673	13C4-PFBA	2746312	10000	Avg	0.847439				10397	10396.77	Yes	10000	104	104	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1185203	13C2-PFHxA	743923	2500	Avg	0.801362				4970.22	4970.22	Yes	5000	99	99.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1085361	13C5-PFPeA	1185203	5000	Avg	0.909037				5036.98	5036.98	Yes	5000	101	100.7	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	149833	18O2-PFHxS	388645	2500	Avg	0.187001				5154.08	5154.07	Yes	5000	103	103.1	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	574451	13C2-4:2FTS	149833	5000	Avg	2.034518				9422.24	9422.24	Yes	9375	101	100.5	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	786349	13C2-PFHxA	743923	2500	Avg	1.059706				2493.69	2493.69	Yes	2500	100	99.7	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	707648	13C5-PFHxA	786349	2500	Avg	0.934717				2406.92	2406.92	Yes	2500	96	96.3	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3245899	13C5-PFHxA	786349	2500	Avg	0.16				64497	64497.03	Yes	62500	103	103.2	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	547992	18O2-PFHxS	388645	2500	Avg	1.358315				2595.14	2595.14	Yes	2500	104	103.8	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	601659	13C3-PFBS	547992	2500	Avg	1.185834				2314.69	2314.69	Yes	2218	104	104.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	604660	13C2-PFHxA	743923	2500	Avg	0.193362				10509	10508.78	Yes	10000	105	105.1	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	883087	13C2-PFHxA	743923	2500	Avg	1.173055				2529.86	2529.86	Yes	2500	101	101.2	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1020480	13C4-PFHpA	883087	2500	Avg	1.088317				2654.52	2654.52	Yes	2500	106	106.2	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	146750	18O2-PFHxS	388645	2500	Avg	0.197889				4770.28	4770.27	Yes	5000	95	95.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	742588	13C2-6:2FTS	146750	5000	Avg	2.364898				10699	10698.61	Yes	9500	113	112.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	976164	13C4-PFOA	129323	2500	Avg	7.712837				2446.66	2446.66	Yes	2500	98	97.9	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1042954	13C8-PFOA	976164	2500	Avg	0.944212				2828.87	2828.87	Yes	2500	113	113.2	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	468371	18O2-PFHxS	388645	2500	Avg	1.176303				2561.28	2561.28	Yes	2500	102	102.5	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	594911	13C3-PFHxS	468371	2500	Avg	1.244827				2550.9	2550.9	Yes	2353	108	108.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	522578	13C3-PFHxS	468371	2500	Avg	1.190513				2342.97	2342.97	Yes	2285	103	102.5	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	463778	13C5-PFNA	507770	1250	Avg	0.936058				1219.69	1219.69	Yes	1250	98	97.6	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	963389	13C9-PFNA	463778	1250	Avg	0.822409				3157.28	3157.28	Yes	2500	126	126.3	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	152566	18O2-PFHxS	388645	2500	Avg	0.18929				5184.63	5184.62	Yes	5000	104	103.7	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	639977	13C2-8:2FTS	152566	5000	Avg	1.994899				10514	10513.7	Yes	9600	110	109.5	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	518824	13C4-PFOS	483527	2500	Avg	0.534223				5021.31	5021.31	Yes	5000	100	100.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	203059	D3-NMeFOSAA	518824	5000	Avg	0.821894				2380.98	2380.98	Yes	2500	95	95.2	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	505985	13C2-PFDA	378498	1250	Avg	1.172751				1424.88	1424.88	Yes	1250	114	114	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	796450	13C6-PFDA	505985	1250	Ln	0.808407	9.777264			2421.79	2421.79	Yes	2500	97	96.9	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	362923	13C4-PFOS	483527	2500	Avg	0.39747				4720.95	4720.95	Yes	5000	94	94.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	237085	D5-NEtFOSAA	362923	5000	Avg	1.094181				2985.18	2985.18	Yes	2500	119	119.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	513930	13C4-PFOS	483527	2500	Avg	1.055789				2516.78	2516.78	Yes	2500	101	100.7	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	465436	13C8-PFOS	513930	2500	Avg	0.864668				2618.46	2618.46	Yes	2383	110	109.9	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	482685	13C8-PFOS	513930	2500	Avg	0.969189				2422.65	2422.65	Yes	2320	104	104.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	657222	13C8-PFOS	513930	2500	Ln	1.144627	15.5564			2779.49	2779.49	Yes	2405	116	115.6	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	595612	13C8-PFOS	513930	2500	Avg	1.105585				2620.64	2620.64	Yes	2413	109	108.6	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	476213	13C2-PFDA	378498	1250	Avg	1.169063				1345.27	1345.27	Yes	1250	108	107.6	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	866688	13C7-PFUnA	476213	1250	Avg	0.943401				2411.43	2411.43	Yes	2500	96	96.5	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	375684	13C2-PFDA	378498	1250	Avg	1.008069				1230.78	1230.78	Yes	1250	98	98.5	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1069344	13C2-PFDoA	375684	1250	Avg	1.191025				2987.34	2987.33	Yes	2500	119	119.5	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	638541	13C2-PFDoA	375684	1250	Avg	0.76641				2772.14	2772.14	Yes	2500	111	110.9	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	875480	13C4-PFOS	483527	2500	Avg	1.639541				2760.85	2760.85	Yes	2500	110	110.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	902703	13C8-PFOSA	875480	2500	Avg	1.005021				2564.86	2564.86	Yes	2500	103	102.6	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	350553	13C2-PFDA	378498	1250	Avg	0.905673				1278.29	1278.29	Yes	1250	102	102.3	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	724731	13C2-PFTeDA	350553	1250	Avg	0.936594				2759.19	2759.19	Yes	2500	110	110.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3689584	13C4-PFOS	483527	2500	Avg	0.704162				27091	27090.94	Yes	25000	108	108.4	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3945814	D7-NMeFOSE	3689584	25000	Avg	1.061282				25192	25192.33	Yes	25000	101	100.8	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	208603	13C4-PFOS	483527	2500	Avg	0.42391				2544.29	2544.29	Yes	2500	102	101.8	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	207031	D3-NMeFOSA	208603	2500	Avg	0.968682				2561.38	2561.38	Yes	2500	102	102.5	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3958400	13C4-PFOS	483527	2500	Avg	0.766089				26715	26715.28	Yes	25000	107	106.9	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4746076	D9-NEtFOSE	3958400	25000	Avg	1.162702				25780	25780.22	Yes	25000	103	103.1	Yes
100224118.d	CCV L5I_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	221552	13C4-PFOS	483527	2500	Avg	0.449382				2549.06	2549.06	Yes	2500	102	102	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2918807	13C3-PFBA	1199190	5000	Avg	1.143357				10644	10644.02	Yes	10000	106	106.4	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2514373	13C4-PFBA	2918807	10000	Avg	0.847439				10165	10165.2	Yes	10000	102	101.7	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1196219	13C2-PFHxA	737182	2500	Avg	0.801362				5062.29	5062.29	Yes	5000	101	101.2	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1122946	13C5-PFPeA	1196219	5000	Avg	0.909037				5163.41	5163.41	Yes	5000	103	103.3	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	149305	18O2-PFHxS	425893	2500	Avg	0.187001				4686.74	4686.73	Yes	5000	94	93.7	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	591360	13C2-4:2FTS	149305	5000	Avg	2.034518				9733.88	9733.88	Yes	9375	104	103.8	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	812639	13C2-PFHxA	737182	2500	Avg	1.059706				2600.62	2600.62	Yes	2500	104	104	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	723709	13C5-PFHxA	812639	2500	Avg	0.934717				2381.92	2381.91	Yes	2500	95	95.3	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3342423	13C5-PFHxA	812639	2500	Avg	0.16				64266	64266.37	Yes	62500	103	102.8	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	566691	18O2-PFHxS	425893	2500	Avg	1.358315				2448.98	2448.98	Yes	2500	98	98	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	620450	13C3-PFBS	566691	2500	Avg	1.185834				2308.22	2308.22	Yes	2218	104	104.1	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	581784	13C2-PFHxA	737182	2500	Avg	0.193362				10204	10203.66	Yes	10000	102	102	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	909227	13C2-PFHxA	737182	2500	Avg	1.173055				2628.57	2628.57	Yes	2500	105	105.1	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1015061	13C4-PFHpA	909227	2500	Avg	1.088317				2564.51	2564.51	Yes	2500	103	102.6	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	138982	18O2-PFHxS	425893	2500	Avg	0.197889				4122.66	4122.65	Yes	5000	82	82.5	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	734012	13C2-6:2FTS	138982	5000	Avg	2.364898				11166	11166.12	Yes	9500	118	117.5	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1070146	13C4-PFOA	126328	2500	Avg	7.712837				2745.8	2745.8	Yes	2500	110	109.8	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	941719	13C8-PFOA	1070146	2500	Avg	0.944212				2329.96	2329.96	Yes	2500	93	93.2	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	519804	18O2-PFHxS	425893	2500	Avg	1.176303				2593.94	2593.94	Yes	2500	104	103.8	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	597403	13C3-PFHxS	519804	2500	Avg	1.244827				2308.12	2308.12	Yes	2353	98	98.1	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	533749	13C3-PFHxS	519804	2500	Avg	1.190513				2156.27	2156.27	Yes	2285	94	94.4	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	589152	13C5-PFNA	545092	1250	Avg	0.936058				1443.33	1443.33	Yes	1250	115	115.5	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	881521	13C9-PFNA	589152	1250	Avg	0.822409				2274.19	2274.19	Yes	2500	91	91	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	156121	18O2-PFHxS	425893	2500	Avg	0.18929				4841.43	4841.42	Yes	5000	97	96.8	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	651597	13C2-8:2FTS	156121	5000	Avg	1.994899				10461	10460.85	Yes	9600	109	109	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	539210	13C4-PFOS	524464	2500	Avg	0.534223				4811.27	4811.27	Yes	5000	96	96.2	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	199170	D3-NMeFOSAA	539210	5000	Avg	0.821894				2247.09	2247.09	Yes	2500	90	89.9	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	465775	13C2-PFDA	426167	1250	Avg	1.172751				1164.93	1164.93	Yes	1250	93	93.2	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	839236	13C6-PFDA	465775	1250	Ln	0.808407	9.777264			2773.95	2773.95	Yes	2500	111	111	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	379740	13C4-PFOS	524464	2500	Avg	0.39747				4554.13	4554.14	Yes	5000	91	91.1	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	230256	D5-NEtFOSAA	379740	5000	Avg	1.094181				2770.8	2770.8	Yes	2500	111	110.8	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	521685	13C4-PFOS	524464	2500	Avg	1.055789				2355.35	2355.35	Yes	2500	94	94.2	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	452316	13C8-PFOS	521685	2500	Avg	0.864668				2506.83	2506.83	Yes	2383	105	105.2	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	484212	13C8-PFOS	521685	2500	Avg	0.969189				2394.19	2394.19	Yes	2320	103	103.2	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	658719	13C8-PFOS	521685	2500	Ln	1.144627	15.5564			2744.24	2744.24	Yes	2405	114	114.1	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	581523	13C8-PFOS	521685	2500	Avg	1.105585				2520.61	2520.61	Yes	2413	104	104.5	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	472101	13C2-PFDA	426167	1250	Avg	1.169063				1184.48	1184.48	Yes	1250	95	94.8	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	822931	13C7-PFUnA	472101	1250	Avg	0.943401				2309.63	2309.63	Yes	2500	92	92.4	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	407927	13C2-PFDA	426167	1250	Avg	1.008069				1186.92	1186.92	Yes	1250	95	95	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1031884	13C2-PFDoA	407927	1250	Avg	1.191025				2654.84	2654.84	Yes	2500	106	106.2	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	639455	13C2-PFDoA	407927	1250	Avg	0.76641				2556.68	2556.68	Yes	2500	102	102.3	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	861871	13C4-PFOS	524464	2500	Avg	1.639541				2505.79	2505.79	Yes	2500	100	100.2	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	882311	13C8-PFOSA	861871	2500	Avg	1.005021				2546.5	2546.5	Yes	2500	102	101.9	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	361794	13C2-PFDA	426167	1250	Avg	0.905673				1171.71	1171.71	Yes	1250	94	93.7	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	710708	13C2-PFTeDA	361794	1250	Avg	0.936594				2621.73	2621.73	Yes	2500	105	104.9	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3752158	13C4-PFOS	524464	2500	Avg	0.704162				25400	25399.95	Yes	25000	102	101.6	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3969524	D7-NMeFOSE	3752158	25000	Avg	1.061282				24921	24921.06	Yes	25000	100	99.7	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	210999	13C4-PFOS	524464	2500	Avg	0.42391				2372.64	2372.64	Yes	2500	95	94.9	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	209346	D3-NMeFOSA	210999	2500	Avg	0.968682				2560.61	2560.61	Yes	2500	102	102.4	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3912961	13C4-PFOS	524464	2500	Avg	0.766089				24347	24347.29	Yes	25000	97	97.4	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4794356	D9-NEtFOSE	3912961	25000	Avg	1.162702				26345	26344.89	Yes	25000	105	105.4	Yes
100224132.d	CCV L5J_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	222338	13C4-PFOS	524464	2500	Avg	0.449382				2358.43	2358.43	Yes	2500	94	94.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2803381	13C3-PFBA	1199049	5000	Avg	1.143357				10224	10224.29	Yes	10000	102	102.2	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2478363	13C4-PFBA	2803381	10000	Avg	0.847439				10432	10432.16	Yes	10000	104	104.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1185051	13C2-PFHxA	759891	2500	Avg	0.801362				4865.16	4865.16	Yes	5000	97	97.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1093808	13C5-PFPeA	1185051	5000	Avg	0.909037				5076.83	5076.83	Yes	5000	102	101.5	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	146746	18O2-PFHxS	419869	2500	Avg	0.187001				4672.5	4672.49	Yes	5000	93	93.4	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	585585	13C2-4:2FTS	146746	5000	Avg	2.034518				9806.91	9806.91	Yes	9375	105	104.6	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	754868	13C2-PFHxA	759891	2500	Avg	1.059706				2343.55	2343.55	Yes	2500	94	93.7	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	736343	13C5-PFHxA	754868	2500	Avg	0.934717				2608.97	2608.97	Yes	2500	104	104.4	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3238780	13C5-PFHxA	754868	2500	Avg	0.16				67039	67039.45	Yes	62500	107	107.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	566538	18O2-PFHxS	419869	2500	Avg	1.358315				2483.45	2483.45	Yes	2500	99	99.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	605805	13C3-PFBS	566538	2500	Avg	1.185834				2254.34	2254.34	Yes	2218	102	101.6	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	555763	13C2-PFHxA	759891	2500	Avg	0.193362				9455.99	9455.99	Yes	10000	95	94.6	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	947863	13C2-PFHxA	759891	2500	Avg	1.173055				2658.37	2658.37	Yes	2500	106	106.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1024088	13C4-PFHpA	947863	2500	Avg	1.088317				2481.85	2481.85	Yes	2500	99	99.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	157489	18O2-PFHxS	419869	2500	Avg	0.197889				4738.66	4738.65	Yes	5000	95	94.8	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	722795	13C2-6:2FTS	157489	5000	Avg	2.364898				9703.37	9703.37	Yes	9500	102	102.1	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1025690	13C4-PFOA	123024	2500	Avg	7.712837				2702.42	2702.42	Yes	2500	108	108.1	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1087761	13C8-PFOA	1025690	2500	Avg	0.944212				2807.94	2807.94	Yes	2500	112	112.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	475062	18O2-PFHxS	419869	2500	Avg	1.176303				2404.68	2404.68	Yes	2500	96	96.2	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	596242	13C3-PFHxS	475062	2500	Avg	1.244827				2520.6	2520.6	Yes	2353	107	107.1	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	534195	13C3-PFHxS	475062	2500	Avg	1.190513				2361.32	2361.32	Yes	2285	103	103.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	502288	13C5-PFNA	468626	1250	Avg	0.936058				1431.31	1431.31	Yes	1250	115	114.5	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	929473	13C9-PFNA	502288	1250	Avg	0.822409				2812.59	2812.59	Yes	2500	113	112.5	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	150009	18O2-PFHxS	419869	2500	Avg	0.18929				4718.64	4718.63	Yes	5000	94	94.4	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	569229	13C2-8:2FTS	150009	5000	Avg	1.994899				9510.84	9510.84	Yes	9600	99	99.1	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	510443	13C4-PFOS	508157	2500	Avg	0.534223				4700.75	4700.75	Yes	5000	94	94	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	204862	D3-NMeFOSAA	510443	5000	Avg	0.821894				2441.57	2441.57	Yes	2500	98	97.7	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	470806	13C2-PFDA	393421	1250	Avg	1.172751				1275.52	1275.52	Yes	1250	102	102	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	834449	13C6-PFDA	470806	1250	Ln	0.808407	9.777264			2728.46	2728.46	Yes	2500	109	109.1	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	349581	13C4-PFOS	508157	2500	Avg	0.39747				4326.98	4326.99	Yes	5000	87	86.5	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	215895	D5-NEtFOSAA	349581	5000	Avg	1.094181				2822.12	2822.12	Yes	2500	113	112.9	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	534876	13C4-PFOS	508157	2500	Avg	1.055789				2492.4	2492.4	Yes	2500	100	99.7	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	482242	13C8-PFOS	534876	2500	Avg	0.864668				2606.77	2606.77	Yes	2383	109	109.4	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	499805	13C8-PFOS	534876	2500	Avg	0.969189				2410.34	2410.34	Yes	2320	104	103.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	676503	13C8-PFOS	534876	2500	Ln	1.144627	15.5564			2748.85	2748.85	Yes	2405	114	114.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	607711	13C8-PFOS	534876	2500	Avg	1.105585				2569.16	2569.16	Yes	2413	106	106.5	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	481869	13C2-PFDA	393421	1250	Avg	1.169063				1309.61	1309.61	Yes	1250	105	104.8	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	873426	13C7-PFUnA	481869	1250	Avg	0.943401				2401.66	2401.66	Yes	2500	96	96.1	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	391396	13C2-PFDA	393421	1250	Avg	1.008069				1233.61	1233.61	Yes	1250	99	98.7	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1022297	13C2-PFDoA	391396	1250	Avg	1.191025				2741.26	2741.26	Yes	2500	110	109.7	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	621795	13C2-PFDoA	391396	1250	Avg	0.76641				2591.07	2591.07	Yes	2500	104	103.6	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	864888	13C4-PFOS	508157	2500	Avg	1.639541				2595.25	2595.25	Yes	2500	104	103.8	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	901193	13C8-PFOSA	864888	2500	Avg	1.005021				2591.93	2591.93	Yes	2500	104	103.7	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	353993	13C2-PFDA	393421	1250	Avg	0.905673				1241.87	1241.87	Yes	1250	99	99.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	696772	13C2-PFTeDA	353993	1250	Avg	0.936594				2626.97	2626.97	Yes	2500	105	105.1	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3530613	13C4-PFOS	508157	2500	Avg	0.704162				24667	24667.19	Yes	25000	99	98.7	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3769731	D7-NMeFOSE	3530613	25000	Avg	1.061282				25152	25151.82	Yes	25000	101	100.6	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	208353	13C4-PFOS	508157	2500	Avg	0.42391				2418.07	2418.07	Yes	2500	97	96.7	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	215253	D3-NMeFOSA	208353	2500	Avg	0.968682				2666.3	2666.3	Yes	2500	107	106.7	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3798707	13C4-PFOS	508157	2500	Avg	0.766089				24395	24394.88	Yes	25000	98	97.6	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4651658	D9-NEtFOSE	3798707	25000	Avg	1.162702				26330	26329.56	Yes	25000	105	105.3	Yes
100324037.d	CCV L5C_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	223634	13C4-PFOS	508157	2500	Avg	0.449382				2448.3	2448.3	Yes	2500	98	97.9	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2735555	13C3-PFBA	1175843	5000	Avg	1.143357				10174	10173.82	Yes	10000	102	101.7	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2418694	13C4-PFBA	2735555	10000	Avg	0.847439				10433	10433.43	Yes	10000	104	104.3	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1183562	13C2-PFHxA	713214	2500	Avg	0.801362				5177.05	5177.05	Yes	5000	104	103.5	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1072248	13C5-PFPeA	1183562	5000	Avg	0.909037				4983.02	4983.02	Yes	5000	100	99.7	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	135946	18O2-PFHxS	413521	2500	Avg	0.187001				4395.07	4395.06	Yes	5000	88	87.9	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	537751	13C2-4:2FTS	135946	5000	Avg	2.034518				9721.28	9721.28	Yes	9375	104	103.7	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	805680	13C2-PFHxA	713214	2500	Avg	1.059706				2665	2665	Yes	2500	107	106.6	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	711585	13C5-PFHxA	805680	2500	Avg	0.934717				2362.24	2362.24	Yes	2500	94	94.5	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3151666	13C5-PFHxA	805680	2500	Avg	0.16				61122	61122.01	Yes	62500	98	97.8	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	553442	18O2-PFHxS	413521	2500	Avg	1.358315				2463.28	2463.28	Yes	2500	99	98.5	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	614910	13C3-PFBS	553442	2500	Avg	1.185834				2342.37	2342.37	Yes	2218	106	105.6	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	566852	13C2-PFHxA	713214	2500	Avg	0.193362				10276	10275.87	Yes	10000	103	102.8	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	856850	13C2-PFHxA	713214	2500	Avg	1.173055				2560.39	2560.39	Yes	2500	102	102.4	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	911055	13C4-PFHpA	856850	2500	Avg	1.088317				2442.44	2442.44	Yes	2500	98	97.7	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	138749	18O2-PFHxS	413521	2500	Avg	0.197889				4238.88	4238.88	Yes	5000	85	84.8	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	621172	13C2-6:2FTS	138749	5000	Avg	2.364898				9465.41	9465.41	Yes	9500	100	99.6	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	898745	13C4-PFOA	120758	2500	Avg	7.712837				2412.38	2412.38	Yes	2500	96	96.5	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	924673	13C8-PFOA	898745	2500	Avg	0.944212				2724.09	2724.09	Yes	2500	109	109	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	500100	18O2-PFHxS	413521	2500	Avg	1.176303				2570.28	2570.28	Yes	2500	103	102.8	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	608661	13C3-PFHxS	500100	2500	Avg	1.244827				2444.27	2444.27	Yes	2353	104	103.9	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	513240	13C3-PFHxS	500100	2500	Avg	1.190513				2155.11	2155.11	Yes	2285	94	94.3	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	483462	13C5-PFNA	484011	1250	Avg	0.936058				1333.87	1333.87	Yes	1250	107	106.7	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	754027	13C9-PFNA	483462	1250	Avg	0.822409				2370.54	2370.54	Yes	2500	95	94.8	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	141456	18O2-PFHxS	413521	2500	Avg	0.18929				4517.9	4517.9	Yes	5000	90	90.4	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	578832	13C2-8:2FTS	141456	5000	Avg	1.994899				10256	10256.05	Yes	9600	107	106.8	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	436733	13C4-PFOS	445002	2500	Avg	0.534223				4592.74	4592.74	Yes	5000	92	91.9	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	239601	D3-NMeFOSAA	436733	5000	Avg	0.821894				3337.54	3337.54	Yes	2500	134	133.5	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	483962	13C2-PFDA	359187	1250	Avg	1.172751				1436.13	1436.13	Yes	1250	115	114.9	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	781499	13C6-PFDA	483962	1250	Ln	0.808407	9.777264			2484.78	2484.78	Yes	2500	99	99.4	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	348205	13C4-PFOS	445002	2500	Avg	0.39747				4921.62	4921.63	Yes	5000	98	98.4	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	211178	D5-NEtFOSAA	348205	5000	Avg	1.094181				2771.37	2771.37	Yes	2500	111	110.9	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	500801	13C4-PFOS	445002	2500	Avg	1.055789				2664.81	2664.81	Yes	2500	107	106.6	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	461588	13C8-PFOS	500801	2500	Avg	0.864668				2664.89	2664.89	Yes	2383	112	111.8	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	496660	13C8-PFOS	500801	2500	Avg	0.969189				2558.15	2558.15	Yes	2320	110	110.3	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	651128	13C8-PFOS	500801	2500	Ln	1.144627	15.5564			2826.14	2826.14	Yes	2405	118	117.5	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	567114	13C8-PFOS	500801	2500	Avg	1.105585				2560.67	2560.67	Yes	2413	106	106.1	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	438761	13C2-PFDA	359187	1250	Avg	1.169063				1306.11	1306.11	Yes	1250	104	104.5	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	917348	13C7-PFUnA	438761	1250	Avg	0.943401				2770.26	2770.26	Yes	2500	111	110.8	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	384558	13C2-PFDA	359187	1250	Avg	1.008069				1327.58	1327.58	Yes	1250	106	106.2	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1005664	13C2-PFDoA	384558	1250	Avg	1.191025				2744.61	2744.61	Yes	2500	110	109.8	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	639506	13C2-PFDoA	384558	1250	Avg	0.76641				2712.26	2712.26	Yes	2500	108	108.5	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	830685	13C4-PFOS	445002	2500	Avg	1.639541				2846.38	2846.38	Yes	2500	114	113.9	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	842683	13C8-PFOSA	830685	2500	Avg	1.005021				2523.44	2523.44	Yes	2500	101	100.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	331582	13C2-PFDA	359187	1250	Avg	0.905673				1274.12	1274.12	Yes	1250	102	101.9	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	671068	13C2-PFTeDA	331582	1250	Avg	0.936594				2701.06	2701.06	Yes	2500	108	108	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3471281	13C4-PFOS	445002	2500	Avg	0.704162				27695	27694.61	Yes	25000	111	110.8	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3757887	D7-NMeFOSE	3471281	25000	Avg	1.061282				25501	25501.35	Yes	25000	102	102	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	203459	13C4-PFOS	445002	2500	Avg	0.42391				2696.38	2696.38	Yes	2500	108	107.9	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	208830	D3-NMeFOSA	203459	2500	Avg	0.968682				2648.96	2648.96	Yes	2500	106	106	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3794171	13C4-PFOS	445002	2500	Avg	0.766089				27824	27823.75	Yes	25000	111	111.3	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	4464715	D9-NEtFOSE	3794171	25000	Avg	1.162702				25302	25301.63	Yes	25000	101	101.2	Yes
100324049.d	CCV L5D_SVLC-4104	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	215465	13C4-PFOS	445002	2500	Avg	0.449382				2693.64	2693.64	Yes	2500	108	107.7	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1947462	13C3-PFBA	871774	5000	Avg	1.136894				9824.61	9824.61	Yes	10000	98	98.2	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	768580	13C2-PFHxA	424945	2500	Avg	0.891167				5073.85	5073.85	Yes	5000	101	101.5	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	94217	18O2-PFHxS	302770	2500	Avg	0.164935				4716.75	4716.76	Yes	5000	94	94.3	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	451447	13C2-PFHxA	424945	2500	Avg	0.967301				2745.7	2745.7	Yes	2500	110	109.8	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	396809	18O2-PFHxS	302770	2500	Avg	1.453938				2253.53	2253.53	Yes	2500	90	90.1	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	441267	13C2-PFHxA	424945	2500	Avg	0.256272				10130	10129.96	Yes	10000	101	101.3	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	421992	13C2-PFHxA	424945	2500	Avg	0.991907				2502.88	2502.88	Yes	2500	100	100.1	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	122101	18O2-PFHxS	302770	2500	Avg	0.219087				4601.83	4601.82	Yes	5000	92	92	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	456709	13C4-PFOA	104293	2500	Avg	4.175238				2622.06	2622.06	Yes	2500	105	104.9	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	313794	18O2-PFHxS	302770	2500	Avg	1.069919				2421.7	2421.7	Yes	2500	97	96.9	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	171996	13C5-PFNA	215910	1250	Avg	0.749868				1327.92	1327.92	Yes	1250	106	106.2	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	121769	18O2-PFHxS	302770	2500	Avg	0.206645				4865.63	4865.63	Yes	5000	97	97.3	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	296850	13C4-PFOS	407965	2500	Avg	0.360298				5048.85	5048.85	Yes	5000	101	101	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	224579	13C2-PFDA	222130	1250	Avg	0.917163				1377.93	1377.92	Yes	1250	110	110.2	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	361706	13C4-PFOS	407965	2500	Avg	0.377269				5875.18	5875.19	Yes	5000	118	117.5	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	383386	13C4-PFOS	407965	2500	Avg	0.93405				2515.26	2515.26	Yes	2500	101	100.6	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	167623	13C2-PFDA	222130	1250	Avg	0.734493				1284.25	1284.25	Yes	1250	103	102.7	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	165179	13C2-PFDA	222130	1250	Avg	0.66531				1397.12	1397.12	Yes	1250	112	111.8	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	796528	13C4-PFOS	407965	2500	Avg	1.926242				2534	2534	Yes	2500	101	101.4	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	124145	13C2-PFDA	222130	1250	Avg	0.514737				1357.21	1357.21	Yes	1250	109	108.6	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3244930	13C4-PFOS	407965	2500	Avg	0.747197				26613	26612.6	Yes	25000	106	106.5	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	192250	13C4-PFOS	407965	2500	Avg	0.468708				2513.51	2513.51	Yes	2500	101	100.5	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4180830	13C4-PFOS	407965	2500	Avg	0.967764				26473	26473.43	Yes	25000	106	105.9	Yes
092524044.d	CCB 2	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	234667	13C4-PFOS	407965	2500	Avg	0.548881				2619.94	2619.94	Yes	2500	105	104.8	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2003857	13C3-PFBA	873355	5000	Avg	1.136894				10091	10090.81	Yes	10000	101	100.9	Yes
092524060.d	CCB A3	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1495	13C4-PFBA	2003857	10000	Avg	0.895963		0.01	8.3269	0.08327	0.0833	Yes				
092524060.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	750953	13C2-PFHxA	450276	2500	Avg	0.891167				4678.59	4678.59	Yes	5000	94	93.6	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	90140	18O2-PFHxS	285983	2500	Avg	0.164935				4777.53	4777.54	Yes	5000	96	95.6	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	468979	13C2-PFHxA	450276	2500	Avg	0.967301				2691.86	2691.86	Yes	2500	108	107.7	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	413593	18O2-PFHxS	285983	2500	Avg	1.453938				2486.72	2486.72	Yes	2500	99	99.5	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	441046	13C2-PFHxA	450276	2500	Avg	0.256272				9555.28	9555.29	Yes	10000	96	95.6	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	420511	13C2-PFHxA	450276	2500	Avg	0.991907				2353.79	2353.79	Yes	2500	94	94.2	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	134308	18O2-PFHxS	285983	2500	Avg	0.219087				5359.02	5359.02	Yes	5000	107	107.2	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	495244	13C4-PFOA	108125	2500	Avg	4.175238				2742.53	2742.53	Yes	2500	110	109.7	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	299435	18O2-PFHxS	285983	2500	Avg	1.069919				2446.54	2446.54	Yes	2500	98	97.9	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	152959	13C5-PFNA	207839	1250	Avg	0.749868				1226.8	1226.8	Yes	1250	98	98.1	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	115811	18O2-PFHxS	285983	2500	Avg	0.206645				4899.19	4899.19	Yes	5000	98	98	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	272487	13C4-PFOS	418143	2500	Avg	0.360298				4521.67	4521.67	Yes	5000	90	90.4	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	196524	13C2-PFDA	219097	1250	Avg	0.917163				1222.48	1222.48	Yes	1250	98	97.8	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	367308	13C4-PFOS	418143	2500	Avg	0.377269				5820.95	5820.96	Yes	5000	116	116.4	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	414644	13C4-PFOS	418143	2500	Avg	0.93405				2654.12	2654.12	Yes	2500	106	106.2	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	167191	13C2-PFDA	219097	1250	Avg	0.734493				1298.67	1298.67	Yes	1250	104	103.9	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	149992	13C2-PFDA	219097	1250	Avg	0.66531				1286.23	1286.23	Yes	1250	103	102.9	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	815106	13C4-PFOS	418143	2500	Avg	1.926242				2529.99	2529.99	Yes	2500	101	101.2	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	122765	13C2-PFDA	219097	1250	Avg	0.514737				1360.7	1360.7	Yes	1250	109	108.9	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3211101	13C4-PFOS	418143	2500	Avg	0.747197				25694	25694.14	Yes	25000	103	102.8	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	195398	13C4-PFOS	418143	2500	Avg	0.468708				2492.48	2492.49	Yes	2500	100	99.7	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4102314	13C4-PFOS	418143	2500	Avg	0.967764				25344	25343.97	Yes	25000	101	101.4	Yes
092524060.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	229509	13C4-PFOS	418143	2500	Avg	0.548881				2499.98	2499.98	Yes	2500	100	100	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1962419	13C3-PFBA	851204	5000	Avg	1.136894				10139	10139.3	Yes	10000	101	101.4	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	715917	13C2-PFHxA	421633	2500	Avg	0.891167				4763.31	4763.31	Yes	5000	95	95.3	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	98037	18O2-PFHxS	303582	2500	Avg	0.164935				4894.86	4894.87	Yes	5000	98	97.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524092.d	CCB A5	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	428730	13C2-PFHxA	421633	2500	Avg	0.967301				2628.01	2628.01	Yes	2500	105	105.1	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	447917	18O2-PFHxS	303582	2500	Avg	1.453938				2536.97	2536.97	Yes	2500	101	101.5	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	406438	13C2-PFHxA	421633	2500	Avg	0.256272				9403.68	9403.7	Yes	10000	94	94	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	420235	13C2-PFHxA	421633	2500	Avg	0.991907				2512.04	2512.04	Yes	2500	100	100.5	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	119665	18O2-PFHxS	303582	2500	Avg	0.219087				4497.96	4497.95	Yes	5000	90	90	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	495934	13C4-PFOA	107335	2500	Avg	4.175238				2766.57	2766.57	Yes	2500	111	110.7	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	322057	18O2-PFHxS	303582	2500	Avg	1.069919				2478.82	2478.82	Yes	2500	99	99.2	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	147294	13C5-PFNA	209840	1250	Avg	0.749868				1170.1	1170.1	Yes	1250	94	93.6	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	110644	18O2-PFHxS	303582	2500	Avg	0.206645				4409.27	4409.27	Yes	5000	88	88.2	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	279327	13C4-PFOS	414910	2500	Avg	0.360298				4671.29	4671.29	Yes	5000	93	93.4	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	205316	13C2-PFDA	208719	1250	Avg	0.917163				1340.68	1340.68	Yes	1250	107	107.3	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	363839	13C4-PFOS	414910	2500	Avg	0.377269				5810.91	5810.91	Yes	5000	116	116.2	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	392126	13C4-PFOS	414910	2500	Avg	0.93405				2529.54	2529.54	Yes	2500	101	101.2	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	177081	13C2-PFDA	208719	1250	Avg	0.734493				1443.88	1443.88	Yes	1250	116	115.5	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	145968	13C2-PFDA	208719	1250	Avg	0.66531				1313.96	1313.96	Yes	1250	105	105.1	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	797100	13C4-PFOS	414910	2500	Avg	1.926242				2493.38	2493.38	Yes	2500	100	99.7	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	117887	13C2-PFDA	208719	1250	Avg	0.514737				1371.6	1371.6	Yes	1250	110	109.7	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3110858	13C4-PFOS	414910	2500	Avg	0.747197				25086	25085.99	Yes	25000	100	100.3	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	196554	13C4-PFOS	414910	2500	Avg	0.468708				2526.77	2526.77	Yes	2500	101	101.1	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3856448	13C4-PFOS	414910	2500	Avg	0.967764				24011	24010.66	Yes	25000	96	96	Yes
092524092.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	228063	13C4-PFOS	414910	2500	Avg	0.548881				2503.59	2503.59	Yes	2500	100	100.1	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1999217	13C3-PFBA	868083	5000	Avg	1.136894				10129	10128.58	Yes	10000	101	101.3	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	736679	13C2-PFHxA	428100	2500	Avg	0.891167				4827.41	4827.41	Yes	5000	97	96.5	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	93008	18O2-PFHxS	276689	2500	Avg	0.164935				5095.12	5095.13	Yes	5000	102	101.9	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	436052	13C2-PFHxA	428100	2500	Avg	0.967301				2632.52	2632.52	Yes	2500	105	105.3	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	444017	18O2-PFHxS	276689	2500	Avg	1.453938				2759.32	2759.32	Yes	2500	110	110.4	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	456304	13C2-PFHxA	428100	2500	Avg	0.256272				10398	10397.95	Yes	10000	104	104	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	422735	13C2-PFHxA	428100	2500	Avg	0.991907				2488.81	2488.81	Yes	2500	100	99.6	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	124268	18O2-PFHxS	276689	2500	Avg	0.219087				5124.97	5124.96	Yes	5000	102	102.5	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	467863	13C4-PFOA	113421	2500	Avg	4.175238				2469.93	2469.93	Yes	2500	99	98.8	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	333542	18O2-PFHxS	276689	2500	Avg	1.069919				2816.75	2816.75	Yes	2500	113	112.7	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	166823	13C5-PFNA	208619	1250	Avg	0.749868				1332.99	1332.99	Yes	1250	107	106.6	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	116606	18O2-PFHxS	276689	2500	Avg	0.206645				5098.52	5098.52	Yes	5000	102	102	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	302022	13C4-PFOS	405908	2500	Avg	0.360298				5162.85	5162.85	Yes	5000	103	103.3	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	196897	13C2-PFDA	211862	1250	Avg	0.917163				1266.63	1266.63	Yes	1250	101	101.3	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	350554	13C4-PFOS	405908	2500	Avg	0.377269				5722.9	5722.9	Yes	5000	114	114.5	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	404086	13C4-PFOS	405908	2500	Avg	0.93405				2664.5	2664.5	Yes	2500	107	106.6	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	177472	13C2-PFDA	211862	1250	Avg	0.734493				1425.6	1425.6	Yes	1250	114	114	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	153461	13C2-PFDA	211862	1250	Avg	0.66531				1360.91	1360.91	Yes	1250	109	108.9	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	846532	13C4-PFOS	405908	2500	Avg	1.926242				2706.73	2706.73	Yes	2500	108	108.3	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	117871	13C2-PFDA	211862	1250	Avg	0.514737				1351.07	1351.07	Yes	1250	108	108.1	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3141180	13C4-PFOS	405908	2500	Avg	0.747197				25892	25892.27	Yes	25000	104	103.6	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	193225	13C4-PFOS	405908	2500	Avg	0.468708				2539.06	2539.06	Yes	2500	102	101.6	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3974370	13C4-PFOS	405908	2500	Avg	0.967764				25294	25293.63	Yes	25000	101	101.2	Yes
092524106.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	231020	13C4-PFOS	405908	2500	Avg	0.548881				2592.29	2592.29	Yes	2500	104	103.7	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2022608	13C3-PFBA	861224	5000	Avg	1.136894				10329	10328.7	Yes	10000	103	103.3	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	756634	13C2-PFHxA	433304	2500	Avg	0.891167				4898.62	4898.62	Yes	5000	98	98	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	91353	18O2-PFHxS	271885	2500	Avg	0.164935				5092.88	5092.9	Yes	5000	102	101.9	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	449386	13C2-PFHxA	433304	2500	Avg	0.967301				2680.43	2680.43	Yes	2500	107	107.2	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	415885	18O2-PFHxS	271885	2500	Avg	1.453938				2630.16	2630.16	Yes	2500	105	105.2	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	465183	13C2-PFHxA	433304	2500	Avg	0.256272				10473	10472.97	Yes	10000	105	104.7	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	410915	13C2-PFHxA	433304	2500	Avg	0.991907				2390.17	2390.17	Yes	2500	96	95.6	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	126478	18O2-PFHxS	271885	2500	Avg	0.219087				5308.28	5308.27	Yes	5000	106	106.2	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	485826	13C4-PFOA	103856	2500	Avg	4.175238				2800.97	2800.97	Yes	2500	112	112	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	284978	18O2-PFHxS	271885	2500	Avg	1.069919				2449.15	2449.15	Yes	2500	98	98	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	160065	13C5-PFNA	205814	1250	Avg	0.749868				1296.42	1296.42	Yes	1250	104	103.7	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	112363	18O2-PFHxS	271885	2500	Avg	0.206645				4999.8	4999.81	Yes	5000	100	100	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	304603	13C4-PFOS	416307	2500	Avg	0.360298				5076.9	5076.9	Yes	5000	102	101.5	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	197019	13C2-PFDA	220077	1250	Avg	0.917163				1220.1	1220.1	Yes	1250	98	97.6	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	370381	13C4-PFOS	416307	2500	Avg	0.377269				5895.54	5895.54	Yes	5000	118	117.9	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	424031	13C4-PFOS	416307	2500	Avg	0.93405				2726.18	2726.18	Yes	2500	109	109	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524121.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	185020	13C2-PFDA	220077	1250	Avg	0.734493				1430.76	1430.76	Yes	1250	114	114.5	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	143616	13C2-PFDA	220077	1250	Avg	0.66531				1226.07	1226.07	Yes	1250	98	98.1	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	855508	13C4-PFOS	416307	2500	Avg	1.926242				2667.1	2667.1	Yes	2500	107	106.7	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	117347	13C2-PFDA	220077	1250	Avg	0.514737				1294.86	1294.86	Yes	1250	104	103.6	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3167430	13C4-PFOS	416307	2500	Avg	0.747197				25456	25456.47	Yes	25000	102	101.8	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	196962	13C4-PFOS	416307	2500	Avg	0.468708				2523.52	2523.52	Yes	2500	101	100.9	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3977382	13C4-PFOS	416307	2500	Avg	0.967764				24681	24680.51	Yes	25000	99	98.7	Yes
092524121.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	230648	13C4-PFOS	416307	2500	Avg	0.548881				2523.47	2523.47	Yes	2500	101	100.9	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1977683	13C3-PFBA	875710	5000	Avg	1.136894				9932.22	9932.22	Yes	10000	99	99.3	Yes
092524133.d	CCB A8	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1466	13C4-PFBA	1977683	10000	Avg	0.895963		0.01	8.2735	0.08273	0.0827	Yes				
092524133.d	CCB A8	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	747703	13C2-PFHxA	442663	2500	Avg	0.891167				4738.46	4738.46	Yes	5000	95	94.8	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	92097	18O2-PFHxS	304925	2500	Avg	0.164935				4578.03	4578.04	Yes	5000	92	91.6	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	423454	13C2-PFHxA	442663	2500	Avg	0.967301				2472.36	2472.36	Yes	2500	99	98.9	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	454913	18O2-PFHxS	304925	2500	Avg	1.453938				2565.25	2565.25	Yes	2500	103	102.6	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	449362	13C2-PFHxA	442663	2500	Avg	0.256272				9902.88	9902.89	Yes	10000	99	99	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	441585	13C2-PFHxA	442663	2500	Avg	0.991907				2514.26	2514.26	Yes	2500	101	100.6	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	131214	18O2-PFHxS	304925	2500	Avg	0.219087				4910.34	4910.33	Yes	5000	98	98.2	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	491689	13C4-PFOA	108157	2500	Avg	4.175238				2722.04	2722.04	Yes	2500	109	108.9	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	318386	18O2-PFHxS	304925	2500	Avg	1.069919				2439.78	2439.78	Yes	2500	98	97.6	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	151935	13C5-PFNA	216339	1250	Avg	0.749868				1170.71	1170.71	Yes	1250	94	93.7	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	112800	18O2-PFHxS	304925	2500	Avg	0.206645				4475.39	4475.39	Yes	5000	90	89.5	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	304200	13C4-PFOS	415180	2500	Avg	0.360298				5083.95	5083.95	Yes	5000	102	101.7	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	203600	13C2-PFDA	203239	1250	Avg	0.917163				1365.32	1365.32	Yes	1250	109	109.2	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	388032	13C4-PFOS	415180	2500	Avg	0.377269				6193.27	6193.27	Yes	5000	124	123.9	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	405846	13C4-PFOS	415180	2500	Avg	0.93405				2616.34	2616.34	Yes	2500	105	104.7	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	178322	13C2-PFDA	203239	1250	Avg	0.734493				1493.21	1493.21	Yes	1250	119	119.5	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	151228	13C2-PFDA	203239	1250	Avg	0.66531				1398.01	1398.01	Yes	1250	112	111.8	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	849017	13C4-PFOS	415180	2500	Avg	1.926242				2654.05	2654.05	Yes	2500	106	106.2	Yes
092524133.d	CCB A8	Instrument_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1916	13C8-PFOSA	849017	2500	Avg	1.101995		0.01	5.1196	0.0512	0.0512	Yes				
092524133.d	CCB A8	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	111280	13C2-PFDA	203239	1250	Avg	0.514737				1329.64	1329.64	Yes	1250	106	106.4	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3227628	13C4-PFOS	415180	2500	Avg	0.747197				26011	26010.69	Yes	25000	104	104	Yes
092524133.d	CCB A8	Instrument_Blank	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	2516	D7-NMeFOSE	3227628	25000	Avg	1.187485		0.01	16.411	0.16411	0.1641	Yes				
092524133.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	195790	13C4-PFOS	415180	2500	Avg	0.468708				2515.31	2515.31	Yes	2500	101	100.6	Yes
092524133.d	CCB A8	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3988231	13C4-PFOS	415180	2500	Avg	0.967764				24815	24815.01	Yes	25000	99	99.3	Yes
092524133.d	CCB A8	Instrument_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1744	D9-NEtFOSE	3988231	25000	Avg	1.044104		0.01	10.47	0.1047	0.1047	Yes				
092524133.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	229072	13C4-PFOS	415180	2500	Avg	0.548881				2513.03	2513.03	Yes	2500	101	100.5	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3029652	13C3-PFBA	1357414	5000	Avg	1.150256				9701.88	9701.88	Yes	10000	97	97	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1318830	13C2-PFHxA	878518	2500	Avg	0.795934				4715.21	4715.21	Yes	5000	94	94.3	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	177741	18O2-PFHxS	498706	2500	Avg	0.18253				4881.44	4881.45	Yes	5000	98	97.6	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	899231	13C2-PFHxA	878518	2500	Avg	1.087908				2352.17	2352.17	Yes	2500	94	94.1	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	635074	18O2-PFHxS	498706	2500	Avg	1.317939				2415.6	2415.6	Yes	2500	97	96.6	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	659231	13C2-PFHxA	878518	2500	Avg	0.192552				9742.69	9742.69	Yes	10000	97	97.4	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	980219	13C2-PFHxA	878518	2500	Avg	1.191993				2340.12	2340.12	Yes	2500	94	93.6	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	205120	18O2-PFHxS	498706	2500	Avg	0.205065				5014.31	5014.32	Yes	5000	100	100.3	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1194797	13C4-PFOA	170381	2500	Avg	6.935128				2527.89	2527.89	Yes	2500	101	101.1	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	570902	18O2-PFHxS	498706	2500	Avg	1.159703				2467.8	2467.8	Yes	2500	99	98.7	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	578319	13C5-PFNA	803715	1250	Avg	0.884789				1016.57	1016.57	Yes	1250	81	81.3	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	186746	18O2-PFHxS	498706	2500	Avg	0.201772				4639.66	4639.66	Yes	5000	93	92.8	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	764091	13C4-PFOS	676292	2500	Avg	0.460729				6130.63	6130.63	Yes	5000	123	122.6	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	586678	13C2-PFDA	474474	1250	Avg	1.142396				1352.95	1352.95	Yes	1250	108	108.2	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	508204	13C4-PFOS	676292	2500	Avg	0.363285				5171.26	5171.26	Yes	5000	103	103.4	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	698446	13C4-PFOS	676292	2500	Avg	1.0092				2558.36	2558.36	Yes	2500	102	102.3	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	494339	13C2-PFDA	474474	1250	Avg	1.021306				1275.17	1275.17	Yes	1250	102	102	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	497642	13C2-PFDA	474474	1250	Avg	0.966171				1356.94	1356.94	Yes	1250	109	108.6	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1011875	13C4-PFOS	676292	2500	Avg	1.46881				2546.64	2546.64	Yes	2500	102	101.9	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	438805	13C2-PFDA	474474	1250	Avg	0.890895				1297.6	1297.61	Yes	1250	104	103.8	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3981048	13C4-PFOS	676292	2500	Avg	0.602535				24424	24424.23	Yes	25000	98	97.7	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	249535	13C4-PFOS	676292	2500	Avg	0.374254				2464.74	2464.74	Yes	2500	99	98.6	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4462854	13C4-PFOS	676292	2500	Avg	0.664194				24838	24838.39	Yes	25000	99	99.4	Yes
092524A048.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	265376	13C4-PFOS	676292	2500	Avg	0.398062				2464.43	2464.43	Yes	2500	99	98.6	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3157510	13C3-PFBA	1422241	5000	Avg	1.150256				9650.44	9650.44	Yes	10000	97	96.5	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524A066.d	CCB A4	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3539	13C4-PFBA	3157510	10000	Avg	0.860777		0.01	13.021	0.13021	0.1302	Yes				
092524A066.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1355167	13C2-PFHxA	867732	2500	Avg	0.795934				4905.35	4905.35	Yes	5000	98	98.1	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	175523	18O2-PFHxS	434519	2500	Avg	0.18253				5532.61	5532.62	Yes	5000	111	110.7	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	900584	13C2-PFHxA	867732	2500	Avg	1.087908				2384.99	2384.99	Yes	2500	95	95.4	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	618557	18O2-PFHxS	434519	2500	Avg	1.317939				2700.32	2700.32	Yes	2500	108	108	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	627485	13C2-PFHxA	867732	2500	Avg	0.192552				9388.79	9388.79	Yes	10000	94	93.9	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	999792	13C2-PFHxA	867732	2500	Avg	1.191993				2416.52	2416.52	Yes	2500	97	96.7	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	201013	18O2-PFHxS	434519	2500	Avg	0.205065				5639.79	5639.8	Yes	5000	113	112.8	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1202382	13C4-PFOA	182418	2500	Avg	6.935128				2376.08	2376.08	Yes	2500	95	95	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	533201	18O2-PFHxS	434519	2500	Avg	1.159703				2645.3	2645.3	Yes	2500	106	105.8	Yes
092524A066.d	CCB A4	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3606	13C3-PFHxS	533201	2500	Avg	1.151233		0.01	14.686	0.14686	0.1469	Yes				
092524A066.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	582447	13C5-PFNA	693045	1250	Avg	0.884789				1187.31	1187.31	Yes	1250	95	95	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	173250	18O2-PFHxS	434519	2500	Avg	0.201772				4940.19	4940.19	Yes	5000	99	98.8	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	606367	13C4-PFOS	575845	2500	Avg	0.460729				5713.79	5713.79	Yes	5000	114	114.3	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	590946	13C2-PFDA	491252	1250	Avg	1.142396				1316.24	1316.25	Yes	1250	105	105.3	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	473953	13C4-PFOS	575845	2500	Avg	0.363285				5663.98	5663.99	Yes	5000	113	113.3	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	652359	13C4-PFOS	575845	2500	Avg	1.0092				2806.36	2806.36	Yes	2500	112	112.3	Yes
092524A066.d	CCB A4	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4102	13C8-PFOS	652359	2500	Avg	0.972082		0.01	16.171	0.16171	0.1617	Yes				
092524A066.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	534659	13C2-PFDA	491252	1250	Avg	1.021306				1332.07	1332.07	Yes	1250	107	106.6	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	461269	13C2-PFDA	491252	1250	Avg	0.966171				1214.8	1214.8	Yes	1250	97	97.2	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	973345	13C4-PFOS	575845	2500	Avg	1.46881				2876.97	2876.97	Yes	2500	115	115.1	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	409367	13C2-PFDA	491252	1250	Avg	0.890895				1169.21	1169.21	Yes	1250	94	93.5	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4195895	13C4-PFOS	575845	2500	Avg	0.602535				30233	30232.69	Yes	25000	121	120.9	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	242091	13C4-PFOS	575845	2500	Avg	0.374254				2808.32	2808.32	Yes	2500	112	112.3	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4446368	13C4-PFOS	575845	2500	Avg	0.664194				29063	29063.3	Yes	25000	116	116.3	Yes
092524A066.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	262761	13C4-PFOS	575845	2500	Avg	0.398062				2865.79	2865.79	Yes	2500	115	114.6	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3075458	13C3-PFBA	1360102	5000	Avg	1.150256				9829.1	9829.1	Yes	10000	98	98.3	Yes
092524A083.d	CCB A5	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	4291	13C4-PFBA	3075458	10000	Avg	0.860777		0.01	16.209	0.16209	0.1621	Yes				
092524A083.d	CCB A5	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1321434	13C2-PFHxA	860952	2500	Avg	0.795934				4820.92	4820.92	Yes	5000	96	96.4	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	183167	18O2-PFHxS	484742	2500	Avg	0.18253				5175.37	5175.38	Yes	5000	104	103.5	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	891049	13C2-PFHxA	860952	2500	Avg	1.087908				2378.32	2378.32	Yes	2500	95	95.1	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	618277	18O2-PFHxS	484742	2500	Avg	1.317939				2419.45	2419.45	Yes	2500	97	96.8	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	631394	13C2-PFHxA	860952	2500	Avg	0.192552				9521.68	9521.68	Yes	10000	95	95.2	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1003966	13C2-PFHxA	860952	2500	Avg	1.191993				2445.72	2445.72	Yes	2500	98	97.8	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	233275	18O2-PFHxS	484742	2500	Avg	0.205065				5866.86	5866.86	Yes	5000	117	117.3	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1201478	13C4-PFOA	171301	2500	Avg	6.935128				2528.37	2528.37	Yes	2500	101	101.1	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	561313	18O2-PFHxS	484742	2500	Avg	1.159703				2496.25	2496.25	Yes	2500	100	99.8	Yes
092524A083.d	CCB A5	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	4739	13C3-PFHxS	561313	2500	Avg	1.151233		0.01	18.334	0.18334	0.1833	Yes				
092524A083.d	CCB A5	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	612059	13C5-PFNA	709014	1250	Avg	0.884789				1219.58	1219.58	Yes	1250	98	97.6	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	195025	18O2-PFHxS	484742	2500	Avg	0.201772				4984.93	4984.93	Yes	5000	100	99.7	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	659229	13C4-PFOS	658989	2500	Avg	0.460729				5428.16	5428.16	Yes	5000	109	108.6	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	583779	13C2-PFDA	496470	1250	Avg	1.142396				1286.62	1286.62	Yes	1250	103	102.9	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	489985	13C4-PFOS	658989	2500	Avg	0.363285				5116.78	5116.78	Yes	5000	102	102.3	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	675795	13C4-PFOS	658989	2500	Avg	1.0092				2540.38	2540.39	Yes	2500	102	101.6	Yes
092524A083.d	CCB A5	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4299	13C8-PFOS	675795	2500	Avg	0.972082		0.01	16.36	0.1636	0.1636	Yes				
092524A083.d	CCB A5	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	522710	13C2-PFDA	496470	1250	Avg	1.021306				1288.61	1288.61	Yes	1250	103	103.1	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	468173	13C2-PFDA	496470	1250	Avg	0.966171				1220.03	1220.03	Yes	1250	98	97.6	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	986313	13C4-PFOS	658989	2500	Avg	1.46881				2547.48	2547.48	Yes	2500	102	101.9	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	428621	13C2-PFDA	496470	1250	Avg	0.890895				1211.33	1211.33	Yes	1250	97	96.9	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4094727	13C4-PFOS	658989	2500	Avg	0.602535				25781	25781.28	Yes	25000	103	103.1	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	246631	13C4-PFOS	658989	2500	Avg	0.374254				2500.02	2500.02	Yes	2500	100	100	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4505827	13C4-PFOS	658989	2500	Avg	0.664194				25736	25736.02	Yes	25000	103	102.9	Yes
092524A083.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	265051	13C4-PFOS	658989	2500	Avg	0.398062				2526.04	2526.04	Yes	2500	101	101	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3142867	13C3-PFBA	1397126	5000	Avg	1.150256				9778.36	9778.36	Yes	10000	98	97.8	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1367685	13C2-PFHxA	838976	2500	Avg	0.795934				5120.35	5120.35	Yes	5000	102	102.4	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	188789	18O2-PFHxS	487426	2500	Avg	0.18253				5304.85	5304.86	Yes	5000	106	106.1	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	907141	13C2-PFHxA	838976	2500	Avg	1.087908				2484.69	2484.7	Yes	2500	99	99.4	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	590074	18O2-PFHxS	487426	2500	Avg	1.317939				2296.37	2296.37	Yes	2500	92	91.9	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	655972	13C2-PFHxA	838976	2500	Avg	0.192552				10151	10151.44	Yes	10000	102	101.5	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1007630	13C2-PFHxA	838976	2500	Avg	1.191993				2518.94	2518.94	Yes	2500	101	100.8	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	225102	18O2-PFHxS	487426	2500	Avg	0.205065				5630.13	5630.14	Yes	5000	113	112.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092524A100.d	CCB A6	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1157577	13C4-PFOA	169869	2500	Avg	6.935128				2456.53	2456.53	Yes	2500	98	98.3	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	577337	18O2-PFHxS	487426	2500	Avg	1.159703				2553.37	2553.37	Yes	2500	102	102.1	Yes
092524A100.d	CCB A6	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3487	13C3-PFHxS	577337	2500	Avg	1.151233		0.01	13.116	0.13116	0.1312	Yes				
092524A100.d	CCB A6	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	558455	13C5-PFNA	645764	1250	Avg	0.884789				1221.76	1221.76	Yes	1250	98	97.7	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	189753	18O2-PFHxS	487426	2500	Avg	0.201772				4823.46	4823.46	Yes	5000	96	96.5	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	666841	13C4-PFOS	646711	2500	Avg	0.460729				5595.08	5595.08	Yes	5000	112	111.9	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	575167	13C2-PFDA	455996	1250	Avg	1.142396				1380.15	1380.15	Yes	1250	110	110.4	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	469895	13C4-PFOS	646711	2500	Avg	0.363285				5000.15	5000.15	Yes	5000	100	100	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	603034	13C4-PFOS	646711	2500	Avg	1.0092				2309.91	2309.91	Yes	2500	92	92.4	Yes
092524A100.d	CCB A6	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4665	13C8-PFOS	603034	2500	Avg	0.972082		0.01	19.895	0.19895	0.199	Yes				
092524A100.d	CCB A6	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	585401	13C2-PFDA	455996	1250	Avg	1.021306				1571.25	1571.25	Yes	1250	126	125.7	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	480268	13C2-PFDA	455996	1250	Avg	0.966171				1362.63	1362.63	Yes	1250	109	109	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	974248	13C4-PFOS	646711	2500	Avg	1.46881				2564.09	2564.09	Yes	2500	103	102.6	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	417006	13C2-PFDA	455996	1250	Avg	0.890895				1283.11	1283.11	Yes	1250	103	102.6	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4197066	13C4-PFOS	646711	2500	Avg	0.602535				26927	26927.33	Yes	25000	108	107.7	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	245563	13C4-PFOS	646711	2500	Avg	0.374254				2536.45	2536.45	Yes	2500	101	101.5	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4522148	13C4-PFOS	646711	2500	Avg	0.664194				26320	26319.62	Yes	25000	105	105.3	Yes
092524A100.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	264327	13C4-PFOS	646711	2500	Avg	0.398062				2566.97	2566.97	Yes	2500	103	102.7	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3285596	13C3-PFBA	1448936	5000	Avg	1.150256				9856.9	9856.9	Yes	10000	99	98.6	Yes
092624008.d	CCB A1	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1742	13C4-PFBA	3285596	10000	Avg	0.860777		0.01	6.1595	0.06159	0.0616	Yes				
092624008.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1399589	13C2-PFHxA	888516	2500	Avg	0.795934				4947.64	4947.64	Yes	5000	99	99	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	192083	18O2-PFHxS	530802	2500	Avg	0.18253				4956.34	4956.35	Yes	5000	99	99.1	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	976411	13C2-PFHxA	888516	2500	Avg	1.087908				2525.31	2525.31	Yes	2500	101	101	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	657925	18O2-PFHxS	530802	2500	Avg	1.317939				2351.19	2351.19	Yes	2500	94	94	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	687725	13C2-PFHxA	888516	2500	Avg	0.192552				10049	10049.43	Yes	10000	100	100.5	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1062488	13C2-PFHxA	888516	2500	Avg	1.191993				2507.99	2507.99	Yes	2500	100	100.3	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	233267	18O2-PFHxS	530802	2500	Avg	0.205065				5357.58	5357.59	Yes	5000	107	107.2	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1246820	13C4-PFOA	163895	2500	Avg	6.935128				2742.35	2742.35	Yes	2500	110	109.7	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	597635	18O2-PFHxS	530802	2500	Avg	1.159703				2427.15	2427.15	Yes	2500	97	97.1	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	639379	13C5-PFNA	758994	1250	Avg	0.884789				1190.12	1190.12	Yes	1250	95	95.2	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	224454	18O2-PFHxS	530802	2500	Avg	0.201772				5239.31	5239.31	Yes	5000	105	104.8	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	674505	13C4-PFOS	709580	2500	Avg	0.460729				5157.97	5157.96	Yes	5000	103	103.2	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	594854	13C2-PFDA	491351	1250	Avg	1.142396				1324.68	1324.68	Yes	1250	106	106	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	553278	13C4-PFOS	709580	2500	Avg	0.363285				5365.8	5365.8	Yes	5000	107	107.3	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	692256	13C4-PFOS	709580	2500	Avg	1.0092				2416.73	2416.73	Yes	2500	97	96.7	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	540088	13C2-PFDA	491351	1250	Avg	1.021306				1345.32	1345.32	Yes	1250	108	107.6	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	491484	13C2-PFDA	491351	1250	Avg	0.966171				1294.12	1294.12	Yes	1250	104	103.5	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1039781	13C4-PFOS	709580	2500	Avg	1.46881				2494.11	2494.11	Yes	2500	100	99.8	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	453870	13C2-PFDA	491351	1250	Avg	0.890895				1296.05	1296.05	Yes	1250	104	103.7	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4369318	13C4-PFOS	709580	2500	Avg	0.602535				25549	25548.77	Yes	25000	102	102.2	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	250741	13C4-PFOS	709580	2500	Avg	0.374254				2360.47	2360.46	Yes	2500	94	94.4	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4796103	13C4-PFOS	709580	2500	Avg	0.664194				25441	25440.88	Yes	25000	102	101.8	Yes
092624008.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	272420	13C4-PFOS	709580	2500	Avg	0.398062				2411.16	2411.16	Yes	2500	96	96.4	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3285339	13C3-PFBA	1447816	5000	Avg	1.150256				9863.76	9863.76	Yes	10000	99	98.6	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1427590	13C2-PFHxA	860326	2500	Avg	0.795934				5211.99	5211.99	Yes	5000	104	104.2	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	197134	18O2-PFHxS	504638	2500	Avg	0.18253				5350.4	5350.41	Yes	5000	107	107	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	953797	13C2-PFHxA	860326	2500	Avg	1.087908				2547.65	2547.66	Yes	2500	102	101.9	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	642550	18O2-PFHxS	504638	2500	Avg	1.317939				2415.3	2415.3	Yes	2500	97	96.6	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	654078	13C2-PFHxA	860326	2500	Avg	0.192552				9870.94	9870.94	Yes	10000	99	98.7	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1112503	13C2-PFHxA	860326	2500	Avg	1.191993				2712.09	2712.09	Yes	2500	108	108.5	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	241337	18O2-PFHxS	504638	2500	Avg	0.205065				5830.31	5830.32	Yes	5000	117	116.6	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1088529	13C4-PFOA	182731	2500	Avg	6.935128				2147.4	2147.4	Yes	2500	86	85.9	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	589033	18O2-PFHxS	504638	2500	Avg	1.159703				2516.24	2516.24	Yes	2500	101	100.6	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	615075	13C5-PFNA	750353	1250	Avg	0.884789				1158.06	1158.06	Yes	1250	93	92.6	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	209724	18O2-PFHxS	504638	2500	Avg	0.201772				5149.29	5149.29	Yes	5000	103	103	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	688051	13C4-PFOS	664441	2500	Avg	0.460729				5619	5619	Yes	5000	112	112.4	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	586483	13C2-PFDA	502059	1250	Avg	1.142396				1278.19	1278.19	Yes	1250	102	102.3	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	511029	13C4-PFOS	664441	2500	Avg	0.363285				5292.75	5292.75	Yes	5000	106	105.9	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	695062	13C4-PFOS	664441	2500	Avg	1.0092				2591.37	2591.37	Yes	2500	104	103.7	Yes
092624023.d	CCB A2	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	6129	13C8-PFOS	695062	2500	Avg	0.972082		0.01	22.678	0.22678	0.2268	Yes				
092624023.d	CCB A2	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	560168	13C2-PFDA	502059	1250	Avg	1.021306				1365.58	1365.58	Yes	1250	109	109.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
092624023.d	CCB A2	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	534731	13C2-PFDA	502059	1250	Avg	0.966171				1377.96	1377.96	Yes	1250	110	110.2	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	996307	13C4-PFOS	664441	2500	Avg	1.46881				2552.18	2552.18	Yes	2500	102	102.1	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	423545	13C2-PFDA	502059	1250	Avg	0.890895				1183.66	1183.66	Yes	1250	95	94.7	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4336918	13C4-PFOS	664441	2500	Avg	0.602535				27082	27082.11	Yes	25000	108	108.3	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	254571	13C4-PFOS	664441	2500	Avg	0.374254				2559.33	2559.33	Yes	2500	102	102.4	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4628861	13C4-PFOS	664441	2500	Avg	0.664194				26222	26221.82	Yes	25000	105	104.9	Yes
092624023.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	272693	13C4-PFOS	664441	2500	Avg	0.398062				2577.55	2577.55	Yes	2500	103	103.1	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3269407	13C3-PFBA	1467290	5000	Avg	1.150256				9685.65	9685.64	Yes	10000	97	96.9	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1388121	13C2-PFHxA	897372	2500	Avg	0.795934				4858.68	4858.67	Yes	5000	97	97.2	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	190667	18O2-PFHxS	507820	2500	Avg	0.18253				5142.46	5142.47	Yes	5000	103	102.8	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	939732	13C2-PFHxA	897372	2500	Avg	1.087908				2406.46	2406.46	Yes	2500	96	96.3	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	646065	18O2-PFHxS	507820	2500	Avg	1.317939				2413.3	2413.3	Yes	2500	97	96.5	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	672002	13C2-PFHxA	897372	2500	Avg	0.192552				9722.77	9722.77	Yes	10000	97	97.2	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1000218	13C2-PFHxA	897372	2500	Avg	1.191993				2337.7	2337.7	Yes	2500	94	93.5	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	228748	18O2-PFHxS	507820	2500	Avg	0.205065				5491.56	5491.56	Yes	5000	110	109.8	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1166733	13C4-PFOA	204404	2500	Avg	6.935128				2057.63	2057.63	Yes	2500	82	82.3	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	575538	18O2-PFHxS	507820	2500	Avg	1.159703				2443.19	2443.19	Yes	2500	98	97.7	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	627599	13C5-PFNA	776613	1250	Avg	0.884789				1141.69	1141.69	Yes	1250	91	91.3	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	201723	18O2-PFHxS	507820	2500	Avg	0.201772				4921.81	4921.81	Yes	5000	98	98.4	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	757556	13C4-PFOS	692051	2500	Avg	0.460729				5939.79	5939.79	Yes	5000	119	118.8	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	568729	13C2-PFDA	522338	1250	Avg	1.142396				1191.37	1191.37	Yes	1250	95	95.3	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	495353	13C4-PFOS	692051	2500	Avg	0.363285				4925.71	4925.71	Yes	5000	99	98.5	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	670150	13C4-PFOS	692051	2500	Avg	1.0092				2398.81	2398.81	Yes	2500	96	96	Yes
092624038.d	CCB A3	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2723	13C8-PFOS	670150	2500	Avg	0.972082		0.01	10.45	0.1045	0.1045	Yes				
092624038.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	583565	13C2-PFDA	522338	1250	Avg	1.021306				1367.39	1367.39	Yes	1250	109	109.4	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	516532	13C2-PFDA	522338	1250	Avg	0.966171				1279.39	1279.39	Yes	1250	102	102.4	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	1068212	13C4-PFOS	692051	2500	Avg	1.46881				2627.2	2627.2	Yes	2500	105	105.1	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	431778	13C2-PFDA	522338	1250	Avg	0.890895				1159.82	1159.82	Yes	1250	93	92.8	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4363188	13C4-PFOS	692051	2500	Avg	0.602535				26159	26159.15	Yes	25000	105	104.6	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	250278	13C4-PFOS	692051	2500	Avg	0.374254				2415.79	2415.78	Yes	2500	97	96.6	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4749655	13C4-PFOS	692051	2500	Avg	0.664194				25833	25832.65	Yes	25000	103	103.3	Yes
092624038.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	276000	13C4-PFOS	692051	2500	Avg	0.398062				2504.73	2504.73	Yes	2500	100	100.2	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2893178	13C3-PFBA	1263943	5000	Avg	1.143357				10010	10010.04	Yes	10000	100	100.1	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1247481	13C2-PFHxA	760015	2500	Avg	0.801362				5120.62	5120.63	Yes	5000	102	102.4	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	168178	18O2-PFHxS	443550	2500	Avg	0.187001				5069.01	5069	Yes	5000	101	101.4	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	775311	13C2-PFHxA	760015	2500	Avg	1.059706				2406.63	2406.62	Yes	2500	96	96.3	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	575738	18O2-PFHxS	443550	2500	Avg	1.358315				2389.03	2389.03	Yes	2500	96	95.6	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	556483	13C2-PFHxA	760015	2500	Avg	0.193362				9466.7	9466.7	Yes	10000	95	94.7	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	916087	13C2-PFHxA	760015	2500	Avg	1.173055				2568.84	2568.83	Yes	2500	103	102.8	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	160606	18O2-PFHxS	443550	2500	Avg	0.197889				4574.44	4574.44	Yes	5000	91	91.5	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1048151	13C4-PFOA	128522	2500	Avg	7.712837				2643.46	2643.46	Yes	2500	106	105.7	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	468280	18O2-PFHxS	443550	2500	Avg	1.176303				2243.8	2243.8	Yes	2500	90	89.8	Yes
100124B093.d	CCB A5	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2475	13C3-PFHxS	468280	2500	Avg	1.190513		0.01	11.099	0.11099	0.111	Yes				
100124B093.d	CCB A5	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	520504	13C5-PFNA	537450	1250	Avg	0.936058				1293.28	1293.28	Yes	1250	103	103.5	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	158550	18O2-PFHxS	443550	2500	Avg	0.18929				4721.03	4721.02	Yes	5000	94	94.4	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	565250	13C4-PFOS	508272	2500	Avg	0.534223				5204.3	5204.29	Yes	5000	104	104.1	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	467750	13C2-PFDA	390794	1250	Avg	1.172751				1275.76	1275.76	Yes	1250	102	102.1	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	410715	13C4-PFOS	508272	2500	Avg	0.39747				5082.53	5082.53	Yes	5000	102	101.7	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	551419	13C4-PFOS	508272	2500	Avg	1.055789				2568.91	2568.91	Yes	2500	103	102.8	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	483300	13C2-PFDA	390794	1250	Avg	1.169063				1322.33	1322.33	Yes	1250	106	105.8	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	422685	13C2-PFDA	390794	1250	Avg	1.008069				1341.18	1341.19	Yes	1250	107	107.3	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	854948	13C4-PFOS	508272	2500	Avg	1.639541				2564.85	2564.85	Yes	2500	103	102.6	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	360426	13C2-PFDA	390794	1250	Avg	0.905673				1272.94	1272.94	Yes	1250	102	101.8	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3686331	13C4-PFOS	508272	2500	Avg	0.704162				25749	25749.31	Yes	25000	103	103	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	220192	13C4-PFOS	508272	2500	Avg	0.42391				2554.89	2554.89	Yes	2500	102	102.2	Yes
100124B093.d	CCB A5	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3977529	13C4-PFOS	508272	2500	Avg	0.766089				25537	25537.47	Yes	25000	102	102.1	Yes
100124B093.d	CCB A5	Instrument_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	679	D9-NEtFOSE	3977529	25000	Avg	1.162702		0.01	3.6705	0.03671	0.0367	Yes				
100124B093.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	236597	13C4-PFOS	508272	2500	Avg	0.449382				2589.63	2589.63	Yes	2500	104	103.6	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2937146	13C3-PFBA	1317243	5000	Avg	1.143357				9750.97	9750.97	Yes	10000	98	97.5	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1254495	13C2-PFHxA	735179	2500	Avg	0.801362				5323.37	5323.38	Yes	5000	106	106.5	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	159965	18O2-PFHxS	411420	2500	Avg	0.187001				5198	5197.99	Yes	5000	104	104	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100124B105.d	CCB A6	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	787711	13C2-PFHxA	735179	2500	Avg	1.059706				2527.72	2527.72	Yes	2500	101	101.1	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	587176	18O2-PFHxS	411420	2500	Avg	1.358315				2626.77	2626.77	Yes	2500	105	105.1	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	626776	13C2-PFHxA	735179	2500	Avg	0.193362				11023	11022.7	Yes	10000	110	110.2	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	961736	13C2-PFHxA	735179	2500	Avg	1.173055				2787.95	2787.95	Yes	2500	112	111.5	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	160094	18O2-PFHxS	411420	2500	Avg	0.197889				4915.96	4915.96	Yes	5000	98	98.3	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1063058	13C4-PFOA	140397	2500	Avg	7.712837				2454.29	2454.28	Yes	2500	98	98.2	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	566013	18O2-PFHxS	411420	2500	Avg	1.176303				2923.9	2923.9	Yes	2500	117	117	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	585092	13C5-PFNA	571936	1250	Avg	0.936058				1366.11	1366.1	Yes	1250	109	109.3	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	157061	18O2-PFHxS	411420	2500	Avg	0.18929				5041.92	5041.91	Yes	5000	101	100.8	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	543071	13C4-PFOS	559175	2500	Avg	0.534223				4544.92	4544.92	Yes	5000	91	90.9	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	476733	13C2-PFDA	403741	1250	Avg	1.172751				1258.57	1258.57	Yes	1250	101	100.7	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	419568	13C4-PFOS	559175	2500	Avg	0.39747				4719.43	4719.44	Yes	5000	94	94.4	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	576250	13C4-PFOS	559175	2500	Avg	1.055789				2440.2	2440.2	Yes	2500	98	97.6	Yes
100124B105.d	CCB A6	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2312	13C8-PFOS	576250	2500	Avg	0.969189		0.01	10.349	0.10349	0.1035	Yes				
100124B105.d	CCB A6	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	469555	13C2-PFDA	403741	1250	Avg	1.169063				1243.53	1243.53	Yes	1250	99	99.5	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	418860	13C2-PFDA	403741	1250	Avg	1.008069				1286.43	1286.43	Yes	1250	103	102.9	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	911261	13C4-PFOS	559175	2500	Avg	1.639541				2484.92	2484.92	Yes	2500	99	99.4	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	366035	13C2-PFDA	403741	1250	Avg	0.905673				1251.29	1251.29	Yes	1250	100	100.1	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3802242	13C4-PFOS	559175	2500	Avg	0.704162				24141	24141.23	Yes	25000	97	96.6	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	219645	13C4-PFOS	559175	2500	Avg	0.42391				2316.54	2316.54	Yes	2500	93	92.7	Yes
100124B105.d	CCB A6	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4112272	13C4-PFOS	559175	2500	Avg	0.766089				23999	23999.1	Yes	25000	96	96	Yes
100124B105.d	CCB A6	Instrument_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1717	D9-NEtFOSE	4112272	25000	Avg	1.162702		0.01	8.9776	0.08978	0.0898	Yes				
100124B105.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	231859	13C4-PFOS	559175	2500	Avg	0.449382				2306.75	2306.75	Yes	2500	92	92.3	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2947855	13C3-PFBA	1300514	5000	Avg	1.143357				9912.41	9912.41	Yes	10000	99	99.1	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1283738	13C2-PFHxA	808724	2500	Avg	0.801362				4952.07	4952.08	Yes	5000	99	99	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	155950	18O2-PFHxS	430493	2500	Avg	0.187001				4843.02	4843.01	Yes	5000	97	96.9	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	818733	13C2-PFHxA	808724	2500	Avg	1.059706				2388.34	2388.34	Yes	2500	96	95.5	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	592298	18O2-PFHxS	430493	2500	Avg	1.358315				2532.29	2532.29	Yes	2500	101	101.3	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	616872	13C2-PFHxA	808724	2500	Avg	0.193362				9861.96	9861.97	Yes	10000	99	98.6	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	965251	13C2-PFHxA	808724	2500	Avg	1.173055				2543.68	2543.67	Yes	2500	102	101.7	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	150604	18O2-PFHxS	430493	2500	Avg	0.197889				4419.67	4419.66	Yes	5000	88	88.4	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1032223	13C4-PFOA	138884	2500	Avg	7.712837				2409.06	2409.06	Yes	2500	96	96.4	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	518832	18O2-PFHxS	430493	2500	Avg	1.176303				2561.42	2561.42	Yes	2500	102	102.5	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	518939	13C5-PFNA	619041	1250	Avg	0.936058				1119.45	1119.45	Yes	1250	90	89.6	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	167995	18O2-PFHxS	430493	2500	Avg	0.18929				5153.99	5153.98	Yes	5000	103	103.1	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	633479	13C4-PFOS	488130	2500	Avg	0.534223				6073.16	6073.15	Yes	5000	121	121.5	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	470891	13C2-PFDA	415591	1250	Avg	1.172751				1207.7	1207.7	Yes	1250	97	96.6	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	427020	13C4-PFOS	488130	2500	Avg	0.39747				5502.35	5502.35	Yes	5000	110	110	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	531310	13C4-PFOS	488130	2500	Avg	1.055789				2577.36	2577.36	Yes	2500	103	103.1	Yes
100124B122.d	CCB A7	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2579	13C8-PFOS	531310	2500	Avg	0.969189		0.01	12.521	0.12521	0.1252	Yes				
100124B122.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	465585	13C2-PFDA	415591	1250	Avg	1.169063				1197.86	1197.86	Yes	1250	96	95.8	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	435394	13C2-PFDA	415591	1250	Avg	1.008069				1299.08	1299.08	Yes	1250	104	103.9	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	888350	13C4-PFOS	488130	2500	Avg	1.639541				2775.02	2775.02	Yes	2500	111	111	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	386142	13C2-PFDA	415591	1250	Avg	0.905673				1282.39	1282.39	Yes	1250	103	102.6	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3814079	13C4-PFOS	488130	2500	Avg	0.704162				27741	27740.97	Yes	25000	111	111	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	228199	13C4-PFOS	488130	2500	Avg	0.42391				2757.05	2757.05	Yes	2500	110	110.3	Yes
100124B122.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4069940	13C4-PFOS	488130	2500	Avg	0.766089				27209	27209.04	Yes	25000	109	108.8	Yes
100124B122.d	CCB A7	Instrument_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	2567	D9-NEtFOSE	4069940	25000	Avg	1.162702		0.01	13.562	0.13562	0.1356	Yes				
100124B122.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	240174	13C4-PFOS	488130	2500	Avg	0.449382				2737.25	2737.25	Yes	2500	109	109.5	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2901945	13C3-PFBA	1267900	5000	Avg	1.143357				10009	10009.04	Yes	10000	100	100.1	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1213732	13C2-PFHxA	774213	2500	Avg	0.801362				4890.73	4890.73	Yes	5000	98	97.8	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	149810	18O2-PFHxS	435764	2500	Avg	0.187001				4596.07	4596.06	Yes	5000	92	91.9	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	820283	13C2-PFHxA	774213	2500	Avg	1.059706				2499.53	2499.53	Yes	2500	100	100	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	575578	18O2-PFHxS	435764	2500	Avg	1.358315				2431.04	2431.04	Yes	2500	97	97.2	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	607568	13C2-PFHxA	774213	2500	Avg	0.193362				10146	10146.2	Yes	10000	101	101.5	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	967232	13C2-PFHxA	774213	2500	Avg	1.173055				2662.51	2662.51	Yes	2500	107	106.5	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	147838	18O2-PFHxS	435764	2500	Avg	0.197889				4286.02	4286.01	Yes	5000	86	85.7	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1143082	13C4-PFOA	143437	2500	Avg	7.712837				2583.1	2583.1	Yes	2500	103	103.3	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	560605	18O2-PFHxS	435764	2500	Avg	1.176303				2734.18	2734.18	Yes	2500	109	109.4	Yes
100124B139.d	CCB A8	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2367	13C3-PFHxS	560605	2500	Avg	1.190513		0.01	8.8664	0.08866	0.0887	Yes				
100124B139.d	CCB A8	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	530897	13C5-PFNA	520407	1250	Avg	0.936058				1362.31	1362.31	Yes	1250	109	109	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100124B139.d	CCB A8	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	136509	18O2-PFHxS	435764	2500	Avg	0.18929				4137.36	4137.35	Yes	5000	83	82.7	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	572415	13C4-PFOS	521300	2500	Avg	0.534223				5138.56	5138.55	Yes	5000	103	102.8	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	450331	13C2-PFDA	350783	1250	Avg	1.172751				1368.35	1368.35	Yes	1250	109	109.5	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	405107	13C4-PFOS	521300	2500	Avg	0.39747				4887.84	4887.85	Yes	5000	98	97.8	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	543150	13C4-PFOS	521300	2500	Avg	1.055789				2467.15	2467.15	Yes	2500	99	98.7	Yes
100124B139.d	CCB A8	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1363	13C8-PFOS	543150	2500	Avg	0.969189		0.01	6.473	0.06473	0.0647	Yes				
100124B139.d	CCB A8	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	475801	13C2-PFDA	350783	1250	Avg	1.169063				1450.3	1450.3	Yes	1250	116	116	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	410797	13C2-PFDA	350783	1250	Avg	1.008069				1452.14	1452.14	Yes	1250	116	116.2	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	860223	13C4-PFOS	521300	2500	Avg	1.639541				2516.18	2516.18	Yes	2500	101	100.6	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	357931	13C2-PFDA	350783	1250	Avg	0.905673				1408.31	1408.31	Yes	1250	113	112.7	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3591572	13C4-PFOS	521300	2500	Avg	0.704162				24460	24460.44	Yes	25000	98	97.8	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	218227	13C4-PFOS	521300	2500	Avg	0.42391				2468.81	2468.81	Yes	2500	99	98.8	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3840319	13C4-PFOS	521300	2500	Avg	0.766089				24040	24040.33	Yes	25000	96	96.2	Yes
100124B139.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	229603	13C4-PFOS	521300	2500	Avg	0.449382				2450.27	2450.27	Yes	2500	98	98	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3117674	13C3-PFBA	1297458	5000	Avg	1.143357				10508	10508.13	Yes	10000	105	105.1	Yes
100224119.d	CCB A9	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1728	13C4-PFBA	3117674	10000	Avg	0.847439		0.01	6.5404	0.0654	0.0654	Yes				
100224119.d	CCB A9	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1317524	13C2-PFHxA	785425	2500	Avg	0.801362				5233.17	5233.17	Yes	5000	105	104.7	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	161706	18O2-PFHxS	463897	2500	Avg	0.187001				4660.17	4660.16	Yes	5000	93	93.2	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	884762	13C2-PFHxA	785425	2500	Avg	1.059706				2657.52	2657.52	Yes	2500	106	106.3	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	617542	18O2-PFHxS	463897	2500	Avg	1.358315				2450.1	2450.1	Yes	2500	98	98	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	613064	13C2-PFHxA	785425	2500	Avg	0.193362				10092	10091.83	Yes	10000	101	100.9	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1063475	13C2-PFHxA	785425	2500	Avg	1.173055				2885.65	2885.65	Yes	2500	115	115.4	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	156843	18O2-PFHxS	463897	2500	Avg	0.197889				4271.32	4271.32	Yes	5000	85	85.4	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1146958	13C4-PFOA	119713	2500	Avg	7.712837				3105.5	3105.5	Yes	2500	124	124.2	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	571078	18O2-PFHxS	463897	2500	Avg	1.176303				2616.34	2616.34	Yes	2500	105	104.7	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	520123	13C5-PFNA	543307	1250	Avg	0.936058				1278.4	1278.4	Yes	1250	102	102.3	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	165381	18O2-PFHxS	463897	2500	Avg	0.18929				4708.44	4708.43	Yes	5000	94	94.2	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	534318	13C4-PFOS	518354	2500	Avg	0.534223				4823.82	4823.82	Yes	5000	96	96.5	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	558977	13C2-PFDA	426016	1250	Avg	1.172751				1398.53	1398.53	Yes	1250	112	111.9	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	410744	13C4-PFOS	518354	2500	Avg	0.39747				4984.02	4984.03	Yes	5000	100	99.7	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	579852	13C4-PFOS	518354	2500	Avg	1.055789				2648.83	2648.83	Yes	2500	106	106	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	520985	13C2-PFDA	426016	1250	Avg	1.169063				1307.59	1307.59	Yes	1250	105	104.6	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	455688	13C2-PFDA	426016	1250	Avg	1.008069				1326.36	1326.36	Yes	1250	106	106.1	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	934288	13C4-PFOS	518354	2500	Avg	1.639541				2748.35	2748.35	Yes	2500	110	109.9	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	392820	13C2-PFDA	426016	1250	Avg	0.905673				1272.64	1272.64	Yes	1250	102	101.8	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4005081	13C4-PFOS	518354	2500	Avg	0.704162				27432	27431.67	Yes	25000	110	109.7	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	227755	13C4-PFOS	518354	2500	Avg	0.42391				2591.24	2591.24	Yes	2500	104	103.6	Yes
100224119.d	CCB A9	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4277551	13C4-PFOS	518354	2500	Avg	0.766089				26930	26929.58	Yes	25000	108	107.7	Yes
100224119.d	CCB A9	Instrument_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	963	D9-NEtFOSE	4277551	25000	Avg	1.162702		0.01	4.8406	0.04841	0.0484	Yes				
100224119.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	244564	13C4-PFOS	518354	2500	Avg	0.449382				2624.77	2624.76	Yes	2500	105	105	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3159038	13C3-PFBA	1295404	5000	Avg	1.143357				10664	10664.43	Yes	10000	107	106.6	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1313027	13C2-PFHxA	800351	2500	Avg	0.801362				5118.05	5118.05	Yes	5000	102	102.4	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	156767	18O2-PFHxS	450243	2500	Avg	0.187001				4654.84	4654.83	Yes	5000	93	93.1	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	862304	13C2-PFHxA	800351	2500	Avg	1.059706				2541.76	2541.76	Yes	2500	102	101.7	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	614133	18O2-PFHxS	450243	2500	Avg	1.358315				2510.47	2510.47	Yes	2500	100	100.4	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	643884	13C2-PFHxA	800351	2500	Avg	0.193362				10401	10401.5	Yes	10000	104	104	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1098363	13C2-PFHxA	800351	2500	Avg	1.173055				2924.74	2924.74	Yes	2500	117	117	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	171498	18O2-PFHxS	450243	2500	Avg	0.197889				4812.06	4812.05	Yes	5000	96	96.2	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1163874	13C4-PFOA	154107	2500	Avg	7.712837				2447.99	2447.99	Yes	2500	98	97.9	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	570538	18O2-PFHxS	450243	2500	Avg	1.176303				2693.14	2693.14	Yes	2500	108	107.7	Yes
100224133.d	CCB A10	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2694	13C3-PFHxS	570538	2500	Avg	1.190513		0.01	9.9156	0.09916	0.0992	Yes				
100224133.d	CCB A10	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	569865	13C5-PFNA	553430	1250	Avg	0.936058				1375.04	1375.04	Yes	1250	110	110	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	164248	18O2-PFHxS	450243	2500	Avg	0.18929				4817.99	4817.99	Yes	5000	96	96.4	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	604045	13C4-PFOS	510897	2500	Avg	0.534223				5532.91	5532.91	Yes	5000	111	110.7	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	546768	13C2-PFDA	417693	1250	Avg	1.172751				1395.24	1395.24	Yes	1250	112	111.6	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	409874	13C4-PFOS	510897	2500	Avg	0.39747				5046.06	5046.06	Yes	5000	101	100.9	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	595837	13C4-PFOS	510897	2500	Avg	1.055789				2761.58	2761.58	Yes	2500	110	110.5	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	542194	13C2-PFDA	417693	1250	Avg	1.169063				1387.94	1387.94	Yes	1250	111	111	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	433984	13C2-PFDA	417693	1250	Avg	1.008069				1288.36	1288.36	Yes	1250	103	103.1	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	915559	13C4-PFOS	510897	2500	Avg	1.639541				2732.57	2732.57	Yes	2500	109	109.3	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	396652	13C2-PFDA	417693	1250	Avg	0.905673				1310.66	1310.66	Yes	1250	105	104.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100224133.d	CCB A10	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3988782	13C4-PFOS	510897	2500	Avg	0.704162				27719	27718.8	Yes	25000	111	110.9	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	233891	13C4-PFOS	510897	2500	Avg	0.42391				2699.89	2699.89	Yes	2500	108	108	Yes
100224133.d	CCB A10	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4301868	13C4-PFOS	510897	2500	Avg	0.766089				27478	27477.96	Yes	25000	110	109.9	Yes
100224133.d	CCB A10	Instrument_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	260	D9-NEtFOSE	4301868	25000	Avg	1.162702		0.01	1.2995	0.013	0.013	Yes				
100224133.d	CCB A10	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	242472	13C4-PFOS	510897	2500	Avg	0.449382				2640.3	2640.3	Yes	2500	106	105.6	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3025647	13C3-PFBA	1286337	5000	Avg	1.143357				10286	10286.12	Yes	10000	103	102.9	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1294958	13C2-PFHxA	734052	2500	Avg	0.801362				5503.51	5503.51	Yes	5000	110	110.1	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	152464	18O2-PFHxS	470598	2500	Avg	0.187001				4331.26	4331.25	Yes	5000	87	86.6	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	853190	13C2-PFHxA	734052	2500	Avg	1.059706				2742.04	2742.04	Yes	2500	110	109.7	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	586769	18O2-PFHxS	470598	2500	Avg	1.358315				2294.86	2294.86	Yes	2500	92	91.8	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	617529	13C2-PFHxA	734052	2500	Avg	0.193362				10877	10876.76	Yes	10000	109	108.8	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	971946	13C2-PFHxA	734052	2500	Avg	1.173055				2821.87	2821.87	Yes	2500	113	112.9	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	156060	18O2-PFHxS	470598	2500	Avg	0.197889				4189.48	4189.48	Yes	5000	84	83.8	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1094703	13C4-PFOA	135673	2500	Avg	7.712837				2615.34	2615.34	Yes	2500	105	104.6	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	526254	18O2-PFHxS	470598	2500	Avg	1.176303				2376.66	2376.65	Yes	2500	95	95.1	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	493471	13C5-PFNA	535421	1250	Avg	0.936058				1230.76	1230.76	Yes	1250	98	98.5	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	167252	18O2-PFHxS	470598	2500	Avg	0.18929				4693.9	4693.9	Yes	5000	94	93.9	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	529867	13C4-PFOS	530732	2500	Avg	0.534223				4672.07	4672.07	Yes	5000	93	93.4	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	510989	13C2-PFDA	410769	1250	Avg	1.172751				1325.92	1325.92	Yes	1250	106	106.1	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	384803	13C4-PFOS	530732	2500	Avg	0.39747				4560.35	4560.36	Yes	5000	91	91.2	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	592598	13C4-PFOS	530732	2500	Avg	1.055789				2643.92	2643.92	Yes	2500	106	105.8	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	499657	13C2-PFDA	410769	1250	Avg	1.169063				1300.61	1300.61	Yes	1250	104	104	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	396612	13C2-PFDA	410769	1250	Avg	1.008069				1197.26	1197.26	Yes	1250	96	95.8	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	908311	13C4-PFOS	530732	2500	Avg	1.639541				2609.62	2609.62	Yes	2500	104	104.4	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	363267	13C2-PFDA	410769	1250	Avg	0.905673				1220.58	1220.58	Yes	1250	98	97.6	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3843785	13C4-PFOS	530732	2500	Avg	0.704162				25713	25712.91	Yes	25000	103	102.9	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	231098	13C4-PFOS	530732	2500	Avg	0.42391				2567.96	2567.95	Yes	2500	103	102.7	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4082703	13C4-PFOS	530732	2500	Avg	0.766089				25103	25103.44	Yes	25000	100	100.4	Yes
100324038.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	236926	13C4-PFOS	530732	2500	Avg	0.449382				2483.49	2483.49	Yes	2500	99	99.3	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3047553	13C3-PFBA	1292031	5000	Avg	1.143357				10315	10314.93	Yes	10000	103	103.1	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1312223	13C2-PFHxA	778059	2500	Avg	0.801362				5261.46	5261.46	Yes	5000	105	105.2	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	155119	18O2-PFHxS	435313	2500	Avg	0.187001				4763.87	4763.86	Yes	5000	95	95.3	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	893440	13C2-PFHxA	778059	2500	Avg	1.059706				2708.99	2708.99	Yes	2500	108	108.4	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	597611	18O2-PFHxS	435313	2500	Avg	1.358315				2526.72	2526.72	Yes	2500	101	101.1	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	622568	13C2-PFHxA	778059	2500	Avg	0.193362				10345	10345.3	Yes	10000	103	103.5	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	930015	13C2-PFHxA	778059	2500	Avg	1.173055				2547.41	2547.41	Yes	2500	102	101.9	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	172260	18O2-PFHxS	435313	2500	Avg	0.197889				4999.22	4999.21	Yes	5000	100	100	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1201137	13C4-PFOA	125262	2500	Avg	7.712837				3108.13	3108.13	Yes	2500	124	124.3	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	549075	18O2-PFHxS	435313	2500	Avg	1.176303				2680.72	2680.72	Yes	2500	107	107.2	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	536007	13C5-PFNA	548330	1250	Avg	0.936058				1305.38	1305.38	Yes	1250	104	104.4	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	161219	18O2-PFHxS	435313	2500	Avg	0.18929				4891.34	4891.33	Yes	5000	98	97.8	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	620030	13C4-PFOS	514211	2500	Avg	0.534223				5642.73	5642.72	Yes	5000	113	112.9	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	515675	13C2-PFDA	411637	1250	Avg	1.172751				1335.26	1335.26	Yes	1250	107	106.8	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	368187	13C4-PFOS	514211	2500	Avg	0.39747				4503.63	4503.63	Yes	5000	90	90.1	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	558453	13C4-PFOS	514211	2500	Avg	1.055789				2571.63	2571.63	Yes	2500	103	102.9	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	493789	13C2-PFDA	411637	1250	Avg	1.169063				1282.62	1282.62	Yes	1250	103	102.6	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	439403	13C2-PFDA	411637	1250	Avg	1.008069				1323.63	1323.64	Yes	1250	106	105.9	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	981336	13C4-PFOS	514211	2500	Avg	1.639541				2910.01	2910.01	Yes	2500	116	116.4	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	363013	13C2-PFDA	411637	1250	Avg	0.905673				1217.16	1217.16	Yes	1250	97	97.4	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3873866	13C4-PFOS	514211	2500	Avg	0.704162				26747	26746.73	Yes	25000	107	107	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	231799	13C4-PFOS	514211	2500	Avg	0.42391				2658.5	2658.5	Yes	2500	106	106.3	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4206504	13C4-PFOS	514211	2500	Avg	0.766089				26696	26695.66	Yes	25000	107	106.8	Yes
100324050.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	240348	13C4-PFOS	514211	2500	Avg	0.449382				2600.3	2600.3	Yes	2500	104	104	Yes

Key

- from quantitation report
- from reported calibration
- from lab report/EDD
- calculated value/comparison

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
ND	not detected
ng/L	nanograms per liter
RF	response factor

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124A013.d	BLK L10	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1491666	13C3-PFBA	671574	5000	Avg	1.118527				9928.91	9928.9	Yes	10000	99	99.3	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	583296	13C2-PFHxA	340353	2500	Avg	0.871653				4915.36	4915.37	Yes	5000	98	98.3	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	81545	18O2-PFHxS	241151	2500	Avg	0.184152				4590.62	4590.63	Yes	5000	92	91.8	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	336240	13C2-PFHxA	340353	2500	Avg	0.934444				2643.06	2643.06	Yes	2500	106	105.7	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	341808	18O2-PFHxS	241151	2500	Avg	1.42701				2483.17	2483.17	Yes	2500	99	99.3	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	351975	13C2-PFHxA	340353	2500	Avg	0.255897				10103	10103.16	Yes	10000	101	101	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	336299	13C2-PFHxA	340353	2500	Avg	0.958996				2575.84	2575.84	Yes	2500	103	103	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	109353	18O2-PFHxS	241151	2500	Avg	0.237031				4782.74	4782.74	Yes	5000	96	95.7	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	361632	13C4-PFOA	90923	2500	Avg	4.113993				2416.96	2416.96	Yes	2500	97	96.7	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	251788	18O2-PFHxS	241151	2500	Avg	1.059286				2464.18	2464.18	Yes	2500	99	98.6	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	115587	18O2-PFHxS	153747	1250	Avg	0.708475				1326.44	1326.44	Yes	1250	106	106.1	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	92605	18O2-PFHxS	241151	2500	Avg	0.22157				4332.86	4332.86	Yes	5000	87	86.7	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	231436	13C4-PFOS	336097	2500	Avg	0.344978				4990.17	4990.16	Yes	5000	100	99.8	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	159674	13C2-PFDA	161807	1250	Avg	0.946606				1303.1	1303.1	Yes	1250	104	104.2	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	273308	13C4-PFOS	336097	2500	Avg	0.411975				4934.65	4934.66	Yes	5000	99	98.7	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	323836	13C4-PFOS	336097	2500	Avg	0.970524				2481.96	2481.96	Yes	2500	99	99.3	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	124826	13C2-PFDA	161807	1250	Avg	0.746662				1291.5	1291.5	Yes	1250	103	103.3	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	105303	13C2-PFDA	161807	1250	Avg	0.682188				1192.48	1192.48	Yes	1250	95	95.4	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	638769	13C4-PFOS	336097	2500	Avg	1.882752				2523.63	2523.63	Yes	2500	101	100.9	Yes
101124A013.d	BLK L10	Instrument_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	5682	13C8-PFOSA	638769	2500	Avg	1.081611		0.01	20.56	0.2056	0.2056	Yes				
101124A013.d	BLK L10	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	87379	13C2-PFDA	161807	1250	Avg	0.517569				1304.22	1304.22	Yes	1250	104	104.3	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2383009	13C4-PFOS	336097	2500	Avg	0.691275				25642	25641.9	Yes	25000	103	102.6	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	140674	13C4-PFOS	336097	2500	Avg	0.423406				2471.34	2471.34	Yes	2500	99	98.9	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3005874	13C4-PFOS	336097	2500	Avg	0.876774				25501	25501.07	Yes	25000	102	102	Yes
101124A013.d	BLK L10	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	167212	13C4-PFOS	336097	2500	Avg	0.49678				2503.68	2503.68	Yes	2500	100	100.1	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1522623	13C3-PFBA	690987	5000	Avg	1.118527				9850.23	9850.22	Yes	10000	99	98.5	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	604828	13C2-PFHxA	347981	2500	Avg	0.871653				4985.09	4985.09	Yes	5000	100	99.7	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	144400	13C5-PFPeA	604828	5000	Avg	1.129824				1056.56	1056.56	Yes	1000	106	105.7	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	80479	18O2-PFHxS	235000	2500	Avg	0.184152				4649.19	4649.2	Yes	5000	93	93	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	332019	13C2-PFHxA	347981	2500	Avg	0.934444				2552.67	2552.67	Yes	2500	102	102.1	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	170324	13C5-PFHxA	332019	2500	Avg	1.272886				1007.54	1007.54	Yes	1000	101	100.8	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	329994	18O2-PFHxS	235000	2500	Avg	1.42701				2460.09	2460.09	Yes	2500	98	98.4	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	261073	13C3-PFBS	329994	2500	Avg	1.829947				1080.83	1080.83	Yes	887	122	121.9	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	345929	13C2-PFHxA	347981	2500	Avg	0.255897				9711.94	9711.95	Yes	10000	97	97.1	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	339267	13C2-PFHxA	347981	2500	Avg	0.958996				2541.61	2541.61	Yes	2500	102	101.7	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	151347	13C4-PFHpA	339267	2500	Avg	1.238034				900.82	900.82	Yes	1000	90	90.1	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	111125	18O2-PFHxS	235000	2500	Avg	0.237031				4987.45	4987.45	Yes	5000	100	99.7	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	44810	13C2-6:2FTS	111125	5000	Avg	2.102409				958.99	958.99	Yes	950	101	100.9	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	369476	13C4-PFOA	82795	2500	Avg	4.113993				2711.81	2711.81	Yes	2500	108	108.5	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	151278	13C8-PFOA	369476	2500	Ln	1.093564	59.2597			881.83	881.83	Yes	1000	88	88.2	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	268296	18O2-PFHxS	235000	2500	Avg	1.059286				2694.47	2694.47	Yes	2500	108	107.8	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	127095	13C3-PFHxS	268296	2500	Avg	1.15963				1021.26	1021.26	Yes	941	109	108.5	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	111812	13C3-PFHxS	268296	2500	Avg	1.084036				961.1	961.1	Yes	914	105	105.2	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	120989	13C5-PFNA	156360	1250	Avg	0.708475				1365.23	1365.23	Yes	1250	109	109.2	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	123043	13C9-PFNA	120989	1250	Avg	1.278701				994.15	994.15	Yes	1000	99	99.4	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	102347	18O2-PFHxS	235000	2500	Avg	0.22157				4914.02	4914.01	Yes	5000	98	98.3	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	35002	13C2-8:2FTS	102347	5000	Ln	1.479635	312			944.75	944.81	Yes	960	98	98.4	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	247070	13C4-PFOS	354173	2500	Avg	0.344978				5055.38	5055.37	Yes	5000	101	101.1	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	35642	D3-NMeFOSAA	247070	5000	Ln	0.76139	35.3665			900.89	900.89	Yes	1000	90	90.1	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	145594	13C2-PFDA	155850	1250	Avg	0.946606				1233.61	1233.61	Yes	1250	99	98.7	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	130359	13C6-PFDA	145594	1250	Avg	1.059188				1056.66	1056.66	Yes	1000	106	105.7	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	253886	13C4-PFOS	354173	2500	Avg	0.411975				4350.03	4350.03	Yes	5000	87	87	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	48746	D5-NEtFOSAA	253886	5000	Avg	0.909463				1055.57	1055.57	Yes	1000	106	105.6	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	324224	13C4-PFOS	354173	2500	Avg	0.970524				2358.11	2358.11	Yes	2500	94	94.3	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	124958	13C8-PFOS	324224	2500	Ln	0.863557	26.3302			1085.26	1085.26	Yes	953	114	113.9	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	120745	13C8-PFOS	324224	2500	Avg	0.967431				962.37	962.37	Yes	928	104	103.7	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	120732	13C2-PFDA	155850	1250	Avg	0.746662				1296.89	1296.89	Yes	1250	104	103.8	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	93861	13C7-PFUnA	120732	1250	Avg	1.005752				966.23	966.23	Yes	1000	97	96.6	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	109352	13C2-PFDA	155850	1250	Avg	0.682188				1285.66	1285.66	Yes	1250	103	102.9	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	52777	13C2-PFDoA	109352	1250	Avg	0.6804				886.67	886.67	Yes	1000	89	88.7	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	638917	13C4-PFOS	354173	2500	Avg	1.882752				2395.39	2395.39	Yes	2500	96	95.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124A014.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	252345	13C8-PFOSA	638917	2500	Avg	1.081611				912.89	912.89	Yes	1000	91	91.3	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	79768	13C2-PFDA	155850	1250	Avg	0.517569				1236.13	1236.13	Yes	1250	99	98.9	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2411917	13C4-PFOS	354173	2500	Avg	0.691275				24628	24628.39	Yes	25000	99	98.5	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	139733	13C4-PFOS	354173	2500	Avg	0.423406				2329.52	2329.52	Yes	2500	93	93.2	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3057686	13C4-PFOS	354173	2500	Avg	0.876774				24617	24616.7	Yes	25000	98	98.5	Yes
101124A014.d	ICV_SVLC-4116	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	170629	13C4-PFOS	354173	2500	Avg	0.49678				2424.45	2424.45	Yes	2500	97	97	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3078578	13C3-PFBA	1365372	5000	Avg	1.14247				9867.89	9867.89	Yes	10000	99	98.7	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1296191	13C2-PFHxA	822523	2500	Avg	0.796557				4945.89	4945.89	Yes	5000	99	98.9	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1119681	13C5-PFPeA	1296191	5000	Avg	0.874543				4938.72	4938.72	Yes	5000	99	98.8	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	157564	18O2-PFHxS	428379	2500	Avg	0.169955				5410.48	5410.47	Yes	5000	108	108.2	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	848620	13C2-PFHxA	822523	2500	Avg	1.046383				2464.99	2464.99	Yes	2500	99	98.6	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	732657	13C5-PFHxA	848620	2500	Avg	0.9029				2390.49	2390.49	Yes	2500	96	95.6	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	585869	18O2-PFHxS	428379	2500	Avg	1.319962				2590.3	2590.31	Yes	2500	104	103.6	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	624890	13C3-PFBS	585869	2500	Avg	1.207053				2209.11	2209.11	Yes	2218	100	99.6	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	615659	13C2-PFHxA	822523	2500	Avg	0.186581				10029	10029.16	Yes	10000	100	100.3	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	947140	13C2-PFHxA	822523	2500	Avg	1.170685				2459.04	2459.04	Yes	2500	98	98.4	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1033894	13C4-PFHpA	947140	2500	Avg	1.077361				2533.03	2533.03	Yes	2500	101	101.3	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	155073	18O2-PFHxS	428379	2500	Avg	0.184115				4915.41	4915.4	Yes	5000	98	98.3	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	700871	13C2-6:2FTS	155073	5000	Avg	2.253868				10026	10026.36	Yes	9500	106	105.5	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1060143	13C4-PFOA	132038	2500	Avg	7.728869				2597.11	2597.11	Yes	2500	104	103.9	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	917942	13C8-PFOA	1060143	2500	Ln	0.828626	32.8119			2572.76	2572.76	Yes	2500	103	102.9	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	488985	18O2-PFHxS	428379	2500	Avg	1.171154				2436.65	2436.65	Yes	2500	97	97.5	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	595864	13C3-PFHxS	488985	2500	Avg	1.194012				2551.43	2551.43	Yes	2353	108	108.4	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	551471	13C3-PFHxS	488985	2500	Ln	1.119323	33.81			2488.7	2488.7	Yes	2285	109	108.9	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	588773	13C5-PFNA	545899	1250	Avg	0.935659				1440.88	1440.88	Yes	1250	115	115.3	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	901055	13C9-PFNA	588773	1250	Avg	0.837317				2284.67	2284.67	Yes	2500	91	91.4	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	143797	18O2-PFHxS	428379	2500	Avg	0.170753				4914.66	4914.66	Yes	5000	98	98.3	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	605649	13C2-8:2FTS	143797	5000	Ln	1.94256	137			10770	10770.41	Yes	9600	112	112.2	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	560715	13C4-PFOS	550561	2500	Avg	0.495989				5133.39	5133.4	Yes	5000	103	102.7	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	201321	D3-NMeFOSAA	560715	5000	Avg	0.795786				2255.9	2255.9	Yes	2500	90	90.2	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	495865	13C2-PFDA	411788	1250	Avg	1.232298				1221.47	1221.47	Yes	1250	98	97.7	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	788953	13C6-PFDA	495865	1250	Avg	0.819341				2427.35	2427.35	Yes	2500	97	97.1	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	381971	13C4-PFOS	550561	2500	Avg	0.364519				4758.22	4758.22	Yes	5000	95	95.2	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	199141	D5-NEtFOSAA	381971	5000	Avg	1.162779				2241.83	2241.83	Yes	2500	90	89.7	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	573182	13C4-PFOS	550561	2500	Avg	0.970887				2680.76	2680.76	Yes	2500	107	107.2	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	449728	13C8-PFOS	573182	2500	Avg	0.939894				2086.98	2086.98	Yes	2383	88	87.6	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	504580	13C8-PFOS	573182	2500	Avg	1.054191				2087.65	2087.65	Yes	2320	90	90	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	483536	13C2-PFDA	411788	1250	Avg	1.191252				1232.14	1232.14	Yes	1250	99	98.6	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	868381	13C7-PFUnA	483536	1250	Avg	0.853896				2628.98	2628.98	Yes	2500	105	105.2	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	378857	13C2-PFDA	411788	1250	Avg	1.01948				1128.06	1128.06	Yes	1250	90	90.2	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	613952	13C2-PFDoA	378857	1250	Avg	0.772781				2621.28	2621.28	Yes	2500	105	104.9	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	886913	13C4-PFOS	550561	2500	Avg	1.694128				2377.22	2377.22	Yes	2500	95	95.1	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	873646	13C8-PFOSA	886913	2500	Avg	0.99659				2471.03	2471.03	Yes	2500	99	98.8	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	350237	13C2-PFDA	411788	1250	Avg	0.871708				1219.63	1219.63	Yes	1250	98	97.6	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3918312	13C4-PFOS	550561	2500	Avg	0.708623				25108	25108.36	Yes	25000	100	100.4	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	222668	13C4-PFOS	550561	2500	Avg	0.415479				2433.57	2433.57	Yes	2500	97	97.3	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4236143	13C4-PFOS	550561	2500	Avg	0.758997				25343	25343.41	Yes	25000	101	101.4	Yes
100724A032.d	CCV L5A_SVLC-4127	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	235219	13C4-PFOS	550561	2500	Avg	0.441246				2420.62	2420.62	Yes	2500	97	96.8	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	3090125	13C3-PFBA	1371166	5000	Avg	1.14247				9863.05	9863.05	Yes	10000	99	98.6	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1297285	13C2-PFHxA	832201	2500	Avg	0.796557				4892.5	4892.49	Yes	5000	98	97.8	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1105919	13C5-PFPeA	1297285	5000	Avg	0.874543				4873.9	4873.9	Yes	5000	97	97.5	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	145355	18O2-PFHxS	479807	2500	Avg	0.169955				4456.26	4456.25	Yes	5000	89	89.1	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	862434	13C2-PFHxA	832201	2500	Avg	1.046383				2475.98	2475.98	Yes	2500	99	99	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	717138	13C5-PFHxA	862434	2500	Avg	0.9029				2302.38	2302.38	Yes	2500	92	92.1	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	620249	18O2-PFHxS	479807	2500	Avg	1.319962				2448.38	2448.38	Yes	2500	98	97.9	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	614099	13C3-PFBS	620249	2500	Avg	1.207053				2050.62	2050.62	Yes	2218	92	92.5	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	570911	13C2-PFHxA	832201	2500	Avg	0.186581				9192.06	9192.06	Yes	10000	92	91.9	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	943804	13C2-PFHxA	832201	2500	Avg	1.170685				2421.89	2421.89	Yes	2500	97	96.9	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	929573	13C4-PFHpA	943804	2500	Avg	1.077361				2285.5	2285.5	Yes	2500	91	91.4	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	160164	18O2-PFHxS	479807	2500	Avg	0.184115				4532.63	4532.62	Yes	5000	91	90.7	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	572805	13C2-6:2FTS	160164	5000	Avg	2.253868				7933.84	7933.84	Yes	9500	84	83.5	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1089611	13C4-PFOA	153183	2500	Avg	7.728869				2300.83	2300.83	Yes	2500	92	92	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	920199	13C8-PFOA	1089611	2500	Ln	0.828626	32.8119			2508.36	2508.36	Yes	2500	100	100.3	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	529429	18O2-PFHxS	479807	2500	Avg	1.171154				2355.41	2355.41	Yes	2500	94	94.2	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	580404	13C3-PFHxS	529429	2500	Avg	1.194012				2295.38	2295.38	Yes	2353	98	97.6	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	576272	13C3-PFHxS	529429	2500	Ln	1.119323	33.81			2400.9	2400.9	Yes	2285	105	105.1	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	515461	13C5-PFNA	564953	1250	Avg	0.935659				1218.92	1218.92	Yes	1250	98	97.5	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	835615	13C9-PFNA	515461	1250	Avg	0.837317				2420.08	2420.08	Yes	2500	97	96.8	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	158666	18O2-PFHxS	479807	2500	Avg	0.170753				4841.6	4841.6	Yes	5000	97	96.8	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	638022	13C2-8:2FTS	158666	5000	Ln	1.94256	137			10279	10279.64	Yes	9600	107	107.1	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	536514	13C4-PFOS	522043	2500	Avg	0.495989				5180.15	5180.15	Yes	5000	104	103.6	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	203244	D3-NMeFOSAA	536514	5000	Avg	0.795786				2380.18	2380.18	Yes	2500	95	95.2	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	468170	13C2-PFDA	463823	1250	Avg	1.232298				1023.87	1023.87	Yes	1250	82	81.9	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	773248	13C6-PFDA	468170	1250	Avg	0.819341				2519.77	2519.77	Yes	2500	101	100.8	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	377710	13C4-PFOS	522043	2500	Avg	0.364519				4962.17	4962.17	Yes	5000	99	99.2	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	220410	D5-NEtFOSAA	377710	5000	Avg	1.162779				2509.26	2509.26	Yes	2500	100	100.4	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	546939	13C4-PFOS	522043	2500	Avg	0.970887				2697.76	2697.76	Yes	2500	108	107.9	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	440521	13C8-PFOS	546939	2500	Avg	0.939894				2142.34	2142.34	Yes	2383	90	89.9	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	492193	13C8-PFOS	546939	2500	Avg	1.054191				2134.11	2134.11	Yes	2320	92	92	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	497033	13C2-PFDA	463823	1250	Avg	1.191252				1124.45	1124.45	Yes	1250	90	90	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	814396	13C7-PFUnA	497033	1250	Avg	0.853896				2398.59	2398.59	Yes	2500	96	95.9	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	423394	13C2-PFDA	463823	1250	Avg	1.01948				1119.24	1119.24	Yes	1250	90	89.5	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	603834	13C2-PFDoA	423394	1250	Avg	0.772781				2306.89	2306.89	Yes	2500	92	92.3	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	896633	13C4-PFOS	522043	2500	Avg	1.694128				2534.56	2534.56	Yes	2500	101	101.4	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	825729	13C8-PFOSA	896633	2500	Avg	0.99659				2310.18	2310.18	Yes	2500	92	92.4	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	339213	13C2-PFDA	463823	1250	Avg	0.871708				1048.72	1048.72	Yes	1250	84	83.9	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4047185	13C4-PFOS	522043	2500	Avg	0.708623				27351	27350.9	Yes	25000	109	109.4	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	221157	13C4-PFOS	522043	2500	Avg	0.415479				2549.09	2549.09	Yes	2500	102	102	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4177494	13C4-PFOS	522043	2500	Avg	0.758997				26358	26357.82	Yes	25000	105	105.4	Yes
100724A050.d	CCV L5B_SVLC-4127	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	231722	13C4-PFOS	522043	2500	Avg	0.441246				2514.9	2514.9	Yes	2500	101	100.6	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2793175	13C3-PFBA	1249754	5000	Avg	1.14247				9781.35	9781.35	Yes	10000	98	97.8	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1155075	13C2-PFHxA	727443	2500	Avg	0.796557				4983.5	4983.5	Yes	5000	100	99.7	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1065997	13C5-PFPeA	1155075	5000	Avg	0.874543				5276.36	5276.36	Yes	5000	106	105.5	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	149797	18O2-PFHxS	400599	2500	Avg	0.169955				5500.47	5500.46	Yes	5000	110	110	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	737766	13C2-PFHxA	727443	2500	Avg	1.046383				2423.09	2423.09	Yes	2500	97	96.9	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	664879	13C5-PFHxA	737766	2500	Avg	0.9029				2495.31	2495.31	Yes	2500	100	99.8	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	512341	18O2-PFHxS	400599	2500	Avg	1.319962				2422.3	2422.3	Yes	2500	97	96.9	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	590666	13C3-PFBS	512341	2500	Avg	1.207053				2387.79	2387.79	Yes	2218	108	107.7	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	534009	13C2-PFHxA	727443	2500	Avg	0.186581				9836.08	9836.08	Yes	10000	98	98.4	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	846415	13C2-PFHxA	727443	2500	Avg	1.170685				2484.76	2484.76	Yes	2500	99	99.4	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	923182	13C4-PFHpA	846415	2500	Avg	1.077361				2530.95	2530.95	Yes	2500	101	101.2	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	143927	18O2-PFHxS	400599	2500	Avg	0.184115				4878.47	4878.47	Yes	5000	98	97.6	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	680795	13C2-6:2FTS	143927	5000	Avg	2.253868				10493	10493.39	Yes	9500	110	110.5	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	991683	13C4-PFOA	122161	2500	Avg	7.728869				2625.82	2625.82	Yes	2500	105	105	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	800010	13C8-PFOA	991683	2500	Ln	0.828626	32.8119			2394.31	2394.31	Yes	2500	96	95.8	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	431745	18O2-PFHxS	400599	2500	Avg	1.171154				2300.61	2300.61	Yes	2500	92	92	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	539099	13C3-PFHxS	431745	2500	Avg	1.194012				2614.4	2614.4	Yes	2353	111	111.1	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	527165	13C3-PFHxS	431745	2500	Ln	1.119323	33.81			2696.91	2696.91	Yes	2285	118	118	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	452260	13C5-PFNA	500268	1250	Avg	0.935659				1207.75	1207.75	Yes	1250	97	96.6	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	787876	13C9-PFNA	452260	1250	Avg	0.837317				2600.7	2600.7	Yes	2500	104	104	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	145327	18O2-PFHxS	400599	2500	Avg	0.170753				5311.39	5311.39	Yes	5000	106	106.2	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	628237	13C2-8:2FTS	145327	5000	Ln	1.94256	137			11056	11056.34	Yes	9600	115	115.2	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	514866	13C4-PFOS	469544	2500	Avg	0.495989				5526.95	5526.95	Yes	5000	111	110.5	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	189525	D3-NMeFOSAA	514866	5000	Avg	0.795786				2312.84	2312.84	Yes	2500	93	92.5	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	452396	13C2-PFDA	375223	1250	Avg	1.232298				1222.99	1222.99	Yes	1250	98	97.8	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	740014	13C6-PFDA	452396	1250	Avg	0.819341				2495.55	2495.55	Yes	2500	100	99.8	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	391618	13C4-PFOS	469544	2500	Avg	0.364519				5720.13	5720.13	Yes	5000	114	114.4	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	239245	D5-NEtFOSAA	391618	5000	Avg	1.162779				2626.96	2626.96	Yes	2500	105	105.1	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	500612	13C4-PFOS	469544	2500	Avg	0.970887				2745.34	2745.34	Yes	2500	110	109.8	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	456428	13C8-PFOS	500612	2500	Avg	0.939894				2425.11	2425.11	Yes	2383	102	101.8	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	478229	13C8-PFOS	500612	2500	Avg	1.054191				2265.45	2265.45	Yes	2320	98	97.6	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	388756	13C2-PFDA	375223	1250	Avg	1.191252				1087.16	1087.16	Yes	1250	87	87	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	700336	13C7-PFUnA	388756	1250	Avg	0.853896				2637.15	2637.15	Yes	2500	105	105.5	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	411252	13C2-PFDA	375223	1250	Avg	1.01948				1343.85	1343.85	Yes	1250	108	107.5	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	627075	13C2-PFDoA	411252	1250	Avg	0.772781				2466.41	2466.41	Yes	2500	99	98.7	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	814661	13C4-PFOS	469544	2500	Avg	1.694128				2560.32	2560.32	Yes	2500	102	102.4	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	856505	13C8-PFOSA	814661	2500	Avg	0.99659				2637.4	2637.4	Yes	2500	105	105.5	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	340084	13C2-PFDA	375223	1250	Avg	0.871708				1299.68	1299.68	Yes	1250	104	104	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3638126	13C4-PFOS	469544	2500	Avg	0.708623				27335	27335.45	Yes	25000	109	109.3	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	210295	13C4-PFOS	469544	2500	Avg	0.415479				2694.91	2694.91	Yes	2500	108	107.8	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3946014	13C4-PFOS	469544	2500	Avg	0.758997				27681	27681.03	Yes	25000	111	110.7	Yes
100924115.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	219419	13C4-PFOS	469544	2500	Avg	0.441246				2647.63	2647.63	Yes	2500	106	105.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2782344	13C3-PFBA	1228330	5000	Avg	1.14247				9913.36	9913.36	Yes	10000	99	99.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1159260	13C2-PFHxA	744759	2500	Avg	0.796557				4885.27	4885.27	Yes	5000	98	97.7	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1043504	13C5-PFPeA	1159260	5000	Avg	0.874543				5146.38	5146.38	Yes	5000	103	102.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	142421	18O2-PFHxS	480823	2500	Avg	0.169955				4357.08	4357.07	Yes	5000	87	87.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	748836	13C2-PFHxA	744759	2500	Avg	1.046383				2402.26	2402.26	Yes	2500	96	96.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	659930	13C5-PFHxA	748836	2500	Avg	0.9029				2440.12	2440.12	Yes	2500	98	97.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	502149	18O2-PFHxS	480823	2500	Avg	1.319962				1978	1978	Yes	2500	79	79.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	566629	13C3-PFBS	502149	2500	Avg	1.207053				2337.11	2337.11	Yes	2218	105	105.4	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	528577	13C2-PFHxA	744759	2500	Avg	0.186581				9509.66	9509.66	Yes	10000	95	95.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	842839	13C2-PFHxA	744759	2500	Avg	1.170685				2416.73	2416.73	Yes	2500	97	96.7	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	953998	13C4-PFHpA	842839	2500	Avg	1.077361				2626.53	2626.53	Yes	2500	105	105.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	155299	18O2-PFHxS	480823	2500	Avg	0.184115				4385.66	4385.65	Yes	5000	88	87.7	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	662413	13C2-6:2FTS	155299	5000	Avg	2.253868				9462.41	9462.41	Yes	9500	100	99.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1008013	13C4-PFOA	130702	2500	Avg	7.728869				2494.64	2494.64	Yes	2500	100	99.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	852064	13C8-PFOA	1008013	2500	Ln	0.828626	32.8119			2510.68	2510.68	Yes	2500	100	100.4	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	469112	18O2-PFHxS	480823	2500	Avg	1.171154				2082.65	2082.65	Yes	2500	83	83.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	543024	13C3-PFHxS	469112	2500	Avg	1.194012				2423.67	2423.67	Yes	2353	103	103	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	440445	13C3-PFHxS	469112	2500	Ln	1.119323	33.81			2066.8	2066.8	Yes	2285	90	90.5	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	427536	13C5-PFNA	497784	1250	Avg	0.935659				1147.42	1147.42	Yes	1250	92	91.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	815456	13C9-PFNA	427536	1250	Avg	0.837317				2847.4	2847.4	Yes	2500	114	113.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	148619	18O2-PFHxS	480823	2500	Avg	0.170753				4525.44	4525.44	Yes	5000	91	90.5	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	645852	13C2-8:2FTS	148619	5000	Ln	1.94256	137			11115	11114.94	Yes	9600	116	115.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	540091	13C4-PFOS	460408	2500	Avg	0.495989				5912.78	5912.78	Yes	5000	118	118.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	214357	D3-NMeFOSAA	540091	5000	Avg	0.795786				2493.7	2493.7	Yes	2500	100	99.7	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	473787	13C2-PFDA	387189	1250	Avg	1.232298				1241.24	1241.24	Yes	1250	99	99.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	780223	13C6-PFDA	473787	1250	Avg	0.819341				2512.36	2512.35	Yes	2500	100	100.5	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	414854	13C4-PFOS	460408	2500	Avg	0.364519				6179.77	6179.77	Yes	5000	124	123.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	220353	D5-NEtFOSAA	414854	5000	Avg	1.162779				2284	2284	Yes	2500	91	91.4	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	416378	13C4-PFOS	460408	2500	Avg	0.970887				2328.72	2328.71	Yes	2500	93	93.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	393865	13C8-PFOS	416378	2500	Avg	0.939894				2516.06	2516.06	Yes	2383	106	105.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	447723	13C8-PFOS	416378	2500	Avg	1.054191				2550.01	2550.01	Yes	2320	110	109.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	428488	13C2-PFDA	387189	1250	Avg	1.191252				1161.24	1161.24	Yes	1250	93	92.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	689940	13C7-PFUnA	428488	1250	Avg	0.853896				2357.1	2357.1	Yes	2500	94	94.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	385098	13C2-PFDA	387189	1250	Avg	1.01948				1219.49	1219.49	Yes	1250	98	97.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	600539	13C2-PFDoA	385098	1250	Avg	0.772781				2522.46	2522.46	Yes	2500	101	100.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	844458	13C4-PFOS	460408	2500	Avg	1.694128				2706.63	2706.63	Yes	2500	108	108.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	810273	13C8-PFOSA	844458	2500	Avg	0.99659				2407	2407	Yes	2500	96	96.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	330118	13C2-PFDA	387189	1250	Avg	0.871708				1222.6	1222.6	Yes	1250	98	97.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3809255	13C4-PFOS	460408	2500	Avg	0.708623				29189	29189.18	Yes	25000	117	116.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	200089	13C4-PFOS	460408	2500	Avg	0.415479				2615	2615	Yes	2500	105	104.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4088645	13C4-PFOS	460408	2500	Avg	0.758997				29251	29250.72	Yes	25000	117	117	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	224180	13C4-PFOS	460408	2500	Avg	0.441246				2758.75	2758.76	Yes	2500	110	110.4	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2885915	13C3-PFBA	1287254	5000	Avg	1.14247				9811.71	9811.71	Yes	10000	98	98.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1209792	13C2-PFHxA	775675	2500	Avg	0.796557				4895.02	4895.02	Yes	5000	98	97.9	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1105990	13C5-PFPeA	1209792	5000	Avg	0.874543				5226.72	5226.72	Yes	5000	105	104.5	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	154061	18O2-PFHxS	440017	2500	Avg	0.169955				5150.27	5150.26	Yes	5000	103	103	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	802507	13C2-PFHxA	775675	2500	Avg	1.046383				2471.83	2471.83	Yes	2500	99	98.9	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	693336	13C5-PFHxA	802507	2500	Avg	0.9029				2392.19	2392.19	Yes	2500	96	95.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	529842	18O2-PFHxS	440017	2500	Avg	1.319962				2280.63	2280.63	Yes	2500	91	91.2	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	622997	13C3-PFBS	529842	2500	Avg	1.207053				2435.3	2435.3	Yes	2218	110	109.8	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	603358	13C2-PFHxA	775675	2500	Avg	0.186581				10422	10422.4	Yes	10000	104	104.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	927121	13C2-PFHxA	775675	2500	Avg	1.170685				2552.45	2552.45	Yes	2500	102	102.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1045514	13C4-PFHpA	927121	2500	Avg	1.077361				2616.81	2616.81	Yes	2500	105	104.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	187801	18O2-PFHxS	440017	2500	Avg	0.184115				5795.36	5795.34	Yes	5000	116	115.9	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	721780	13C2-6:2FTS	187801	5000	Avg	2.253868				8526.06	8526.06	Yes	9500	90	89.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1054911	13C4-PFOA	131573	2500	Avg	7.728869				2593.42	2593.42	Yes	2500	104	103.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	897312	13C8-PFOA	1054911	2500	Ln	0.828626	32.8119			2526.71	2526.71	Yes	2500	101	101.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	474431	18O2-PFHxS	440017	2500	Avg	1.171154				2301.6	2301.6	Yes	2500	92	92.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	641337	13C3-PFHxS	474431	2500	Avg	1.194012				2830.38	2830.38	Yes	2353	120	120.3	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	528358	13C3-PFHxS	474431	2500	Ln	1.119323	33.81			2457.16	2457.16	Yes	2285	108	107.5	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	508637	13C5-PFNA	518677	1250	Avg	0.935659				1310.1	1310.1	Yes	1250	105	104.8	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	829463	13C9-PFNA	508637	1250	Avg	0.837317				2434.5	2434.5	Yes	2500	97	97.4	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	155258	18O2-PFHxS	440017	2500	Avg	0.170753				5166.02	5166.02	Yes	5000	103	103.3	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	664704	13C2-8:2FTS	155258	5000	Ln	1.94256	137			10949	10949.18	Yes	9600	114	114.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	556777	13C4-PFOS	529446	2500	Avg	0.495989				5300.63	5300.63	Yes	5000	106	106	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	220873	D3-NMeFOSAA	556777	5000	Avg	0.795786				2492.5	2492.5	Yes	2500	100	99.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	474879	13C2-PFDA	435460	1250	Avg	1.232298				1106.19	1106.19	Yes	1250	88	88.5	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	842828	13C6-PFDA	474879	1250	Avg	0.819341				2707.71	2707.7	Yes	2500	108	108.3	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	405005	13C4-PFOS	529446	2500	Avg	0.364519				5246.36	5246.37	Yes	5000	105	104.9	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	240653	D5-NEtFOSAA	405005	5000	Avg	1.162779				2555.08	2555.08	Yes	2500	102	102.2	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	512757	13C4-PFOS	529446	2500	Avg	0.970887				2493.8	2493.8	Yes	2500	100	99.8	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	455837	13C8-PFOS	512757	2500	Avg	0.939894				2364.61	2364.61	Yes	2383	99	99.2	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	458099	13C8-PFOS	512757	2500	Avg	1.054191				2118.69	2118.7	Yes	2320	91	91.3	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	433146	13C2-PFDA	435460	1250	Avg	1.191252				1043.74	1043.74	Yes	1250	83	83.5	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	715649	13C7-PFUnA	433146	1250	Avg	0.853896				2418.64	2418.64	Yes	2500	97	96.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	432029	13C2-PFDA	435460	1250	Avg	1.01948				1216.45	1216.45	Yes	1250	97	97.3	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	651301	13C2-PFDoA	432029	1250	Avg	0.772781				2438.5	2438.5	Yes	2500	98	97.5	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	905942	13C4-PFOS	529446	2500	Avg	1.694128				2525.06	2525.06	Yes	2500	101	101	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	876347	13C8-PFOSA	905942	2500	Avg	0.99659				2426.61	2426.61	Yes	2500	97	97.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	351337	13C2-PFDA	435460	1250	Avg	0.871708				1156.95	1156.95	Yes	1250	93	92.6	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4005152	13C4-PFOS	529446	2500	Avg	0.708623				26688	26688.37	Yes	25000	107	106.8	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	228120	13C4-PFOS	529446	2500	Avg	0.415479				2592.58	2592.58	Yes	2500	104	103.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4344806	13C4-PFOS	529446	2500	Avg	0.758997				27030	27030.16	Yes	25000	108	108.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	243066	13C4-PFOS	529446	2500	Avg	0.441246				2601.13	2601.13	Yes	2500	104	104	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1519603	13C3-PFBA	721943	5000	Avg	1.118527				9409.16	9409.16	Yes	10000	94	94.1	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	618338	13C2-PFHxA	371168	2500	Avg	0.871653				4778.06	4778.06	Yes	5000	96	95.6	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	711072	13C5-PFPeA	618338	5000	Avg	1.129824				5089.17	5089.17	Yes	5000	102	101.8	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	84228	18O2-PFHxS	239760	2500	Avg	0.184152				4769.17	4769.18	Yes	5000	95	95.4	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	336428	13C2-PFHxA	371168	2500	Avg	0.934444				2424.98	2424.98	Yes	2500	97	97	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	416376	13C5-PFHxA	336428	2500	Avg	1.272886				2430.77	2430.77	Yes	2500	97	97.2	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	349854	18O2-PFHxS	239760	2500	Avg	1.42701				2556.37	2556.37	Yes	2500	102	102.3	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	573264	13C3-PFBS	349854	2500	Avg	1.829947				2238.56	2238.56	Yes	2218	101	100.9	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	359231	13C2-PFHxA	371168	2500	Avg	0.255897				9455.35	9455.36	Yes	10000	95	94.6	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	348421	13C2-PFHxA	371168	2500	Avg	0.958996				2447.13	2447.13	Yes	2500	98	97.9	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	414408	13C4-PFHpA	348421	2500	Avg	1.238034				2401.77	2401.77	Yes	2500	96	96.1	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	101870	18O2-PFHxS	239760	2500	Avg	0.237031				4481.31	4481.3	Yes	5000	90	89.6	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	464543	13C2-6:2FTS	101870	5000	Avg	2.102409				10845	10845.07	Yes	9500	114	114.2	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	377810	13C4-PFOA	90951	2500	Avg	4.113993				2524.31	2524.31	Yes	2500	101	101	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	443748	13C8-PFOA	377810	2500	Ln	1.093564	59.2597			2630.9	2630.9	Yes	2500	105	105.2	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	229118	18O2-PFHxS	239760	2500	Avg	1.059286				2255.33	2255.33	Yes	2500	90	90.2	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	304538	13C3-PFHxS	229118	2500	Avg	1.15963				2865.52	2865.52	Yes	2353	122	121.8	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	234414	13C3-PFHxS	229118	2500	Avg	1.084036				2359.5	2359.5	Yes	2285	103	103.3	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	120133	13C5-PFNA	163964	1250	Avg	0.708475				1292.71	1292.7	Yes	1250	103	103.4	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	297311	13C9-PFNA	120133	1250	Avg	1.278701				2419.3	2419.3	Yes	2500	97	96.8	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	106390	18O2-PFHxS	239760	2500	Avg	0.22157				5006.72	5006.72	Yes	5000	100	100.1	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	344959	13C2-8:2FTS	106390	5000	Ln	1.479635	312			10746	10745.9	Yes	9600	112	111.9	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	223657	13C4-PFOS	348643	2500	Avg	0.344978				4648.9	4648.9	Yes	5000	93	93	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	93000	D3-NMeFOSAA	223657	5000	Ln	0.76139	35.3665			2684.18	2684.18	Yes	2500	107	107.4	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	139163	13C2-PFDA	162108	1250	Avg	0.946606				1133.6	1133.6	Yes	1250	91	90.7	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	304399	13C6-PFDA	139163	1250	Avg	1.059188				2581.41	2581.41	Yes	2500	103	103.3	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	298260	13C4-PFOS	348643	2500	Avg	0.411975				5191.38	5191.38	Yes	5000	104	103.8	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	117336	D5-NEtFOSAA	298260	5000	Avg	0.909463				2162.82	2162.82	Yes	2500	87	86.5	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	323622	13C4-PFOS	348643	2500	Avg	0.970524				2391.06	2391.06	Yes	2500	96	95.6	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	288234	13C8-PFOS	323622	2500	Ln	0.863557	26.3302			2547.95	2547.94	Yes	2383	107	106.9	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	296633	13C8-PFOS	323622	2500	Avg	0.967431				2368.65	2368.65	Yes	2320	102	102.1	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	128217	13C2-PFDA	162108	1250	Avg	0.746662				1324.12	1324.12	Yes	1250	106	105.9	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	275196	13C7-PFUnA	128217	1250	Avg	1.005752				2667.57	2667.57	Yes	2500	107	106.7	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	122028	13C2-PFDA	162108	1250	Avg	0.682188				1379.31	1379.31	Yes	1250	110	110.3	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	166938	13C2-PFDoA	122028	1250	Avg	0.6804				2513.28	2513.28	Yes	2500	101	100.5	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	644950	13C4-PFOS	348643	2500	Avg	1.882752				2456.36	2456.36	Yes	2500	98	98.3	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	739340	13C8-PFOSA	644950	2500	Avg	1.081611				2649.64	2649.64	Yes	2500	106	106	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	86481	13C2-PFDA	162108	1250	Avg	0.517569				1288.42	1288.42	Yes	1250	103	103.1	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2387238	13C4-PFOS	348643	2500	Avg	0.691275				24763	24763.04	Yes	25000	99	99.1	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	144657	13C4-PFOS	348643	2500	Avg	0.423406				2449.86	2449.86	Yes	2500	98	98	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3065554	13C4-PFOS	348643	2500	Avg	0.876774				25072	25071.5	Yes	25000	100	100.3	Yes
101124A146.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	172195	13C4-PFOS	348643	2500	Avg	0.49678				2485.51	2485.51	Yes	2500	99	99.4	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1600104	13C3-PFBA	739725	5000	Avg	1.118527				9669.45	9669.44	Yes	10000	97	96.7	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	624570	13C2-PFHxA	345377	2500	Avg	0.871653				5186.61	5186.62	Yes	5000	104	103.7	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	722904	13C5-PFPeA	624570	5000	Avg	1.129824				5122.23	5122.23	Yes	5000	102	102.4	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	90748	18O2-PFHxS	256405	2500	Avg	0.184152				4804.78	4804.79	Yes	5000	96	96.1	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	333956	13C2-PFHxA	345377	2500	Avg	0.934444				2586.92	2586.92	Yes	2500	103	103.5	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	433134	13C5-PFHxA	333956	2500	Avg	1.272886				2547.32	2547.32	Yes	2500	102	101.9	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	345121	18O2-PFHxS	256405	2500	Avg	1.42701				2358.08	2358.08	Yes	2500	94	94.3	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	561429	13C3-PFBS	345121	2500	Avg	1.829947				2222.41	2222.41	Yes	2218	100	100.2	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	354008	13C2-PFHxA	345377	2500	Avg	0.255897				10014	10013.7	Yes	10000	100	100.1	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	327648	13C2-PFHxA	345377	2500	Avg	0.958996				2473.07	2473.08	Yes	2500	99	98.9	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	413260	13C4-PFHpA	327648	2500	Avg	1.238034				2546.97	2546.97	Yes	2500	102	101.9	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	103888	18O2-PFHxS	256405	2500	Avg	0.237031				4273.4	4273.4	Yes	5000	85	85.5	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	471988	13C2-6:2FTS	103888	5000	Avg	2.102409				10805	10804.84	Yes	9500	114	113.7	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	388185	13C4-PFOA	90290	2500	Avg	4.113993				2612.62	2612.62	Yes	2500	105	104.5	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	420068	13C8-PFOA	388185	2500	Ln	1.093564	59.2597			2419.68	2419.68	Yes	2500	97	96.8	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	259172	18O2-PFHxS	256405	2500	Avg	1.059286				2385.55	2385.55	Yes	2500	95	95.4	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	284441	13C3-PFHxS	259172	2500	Avg	1.15963				2366.05	2366.05	Yes	2353	101	100.6	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	252851	13C3-PFHxS	259172	2500	Avg	1.084036				2249.95	2249.95	Yes	2285	98	98.5	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	117808	13C5-PFNA	155859	1250	Avg	0.708475				1333.61	1333.61	Yes	1250	107	106.7	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	315908	13C9-PFNA	117808	1250	Avg	1.278701				2621.36	2621.36	Yes	2500	105	104.9	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	111310	18O2-PFHxS	256405	2500	Avg	0.22157				4898.21	4898.2	Yes	5000	98	98	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	325965	13C2-8:2FTS	111310	5000	Ln	1.479635	312			9684.92	9684.97	Yes	9600	101	100.9	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	238397	13C4-PFOS	350877	2500	Avg	0.344978				4923.74	4923.73	Yes	5000	98	98.5	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	99323	D3-NMeFOSAA	238397	5000	Ln	0.76139	35.3665			2689.52	2689.52	Yes	2500	108	107.6	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	165142	13C2-PFDA	169980	1250	Avg	0.946606				1282.92	1282.92	Yes	1250	103	102.6	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	327759	13C6-PFDA	165142	1250	Avg	1.059188				2342.25	2342.25	Yes	2500	94	93.7	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	283873	13C4-PFOS	350877	2500	Avg	0.411975				4909.51	4909.51	Yes	5000	98	98.2	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	133645	D5-NEtFOSAA	283873	5000	Avg	0.909463				2588.29	2588.29	Yes	2500	104	103.5	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	342867	13C4-PFOS	350877	2500	Avg	0.970524				2517.12	2517.12	Yes	2500	101	100.7	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	296400	13C8-PFOS	342867	2500	Ln	0.863557	26.3302			2472.17	2472.17	Yes	2383	104	103.7	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	322682	13C8-PFOS	342867	2500	Avg	0.967431				2432.03	2432.03	Yes	2320	105	104.8	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	139437	13C2-PFDA	169980	1250	Avg	0.746662				1373.3	1373.3	Yes	1250	110	109.9	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	263766	13C7-PFUnA	139437	1250	Avg	1.005752				2351.04	2351.04	Yes	2500	94	94	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	119546	13C2-PFDA	169980	1250	Avg	0.682188				1288.68	1288.67	Yes	1250	103	103.1	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	154008	13C2-PFDoA	119546	1250	Avg	0.6804				2366.76	2366.76	Yes	2500	95	94.7	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	680576	13C4-PFOS	350877	2500	Avg	1.882752				2575.54	2575.54	Yes	2500	103	103	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	760239	13C8-PFOSA	680576	2500	Avg	1.081611				2581.92	2581.92	Yes	2500	103	103.3	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	81729	13C2-PFDA	169980	1250	Avg	0.517569				1161.23	1161.23	Yes	1250	93	92.9	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2516039	13C4-PFOS	350877	2500	Avg	0.691275				25933	25932.93	Yes	25000	104	103.7	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	147919	13C4-PFOS	350877	2500	Avg	0.423406				2489.16	2489.16	Yes	2500	100	99.6	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3170333	13C4-PFOS	350877	2500	Avg	0.876774				25763	25763.35	Yes	25000	103	103.1	Yes
101124A158.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	176816	13C4-PFOS	350877	2500	Avg	0.49678				2535.96	2535.96	Yes	2500	101	101.4	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3077481	13C3-PFBA	1278225	5000	Avg	1.14247				10537	10536.91	Yes	10000	105	105.4	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1286277	13C2-PFHxA	715044	2500	Avg	0.796557				5645.8	5645.79	Yes	5000	113	112.9	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	151218	18O2-PFHxS	408078	2500	Avg	0.169955				5450.88	5450.88	Yes	5000	109	109	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	831378	13C2-PFHxA	715044	2500	Avg	1.046383				2777.89	2777.89	Yes	2500	111	111.1	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	585236	18O2-PFHxS	408078	2500	Avg	1.319962				2716.23	2716.23	Yes	2500	109	108.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100724A033.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	617298	13C2-PFHxA	715044	2500	Avg	0.186581				11567	11567.37	Yes	10000	116	115.7	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	908081	13C2-PFHxA	715044	2500	Avg	1.170685				2712.01	2712.01	Yes	2500	108	108.5	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	179831	18O2-PFHxS	408078	2500	Avg	0.184115				5983.74	5983.73	Yes	5000	120	119.7	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1080535	13C4-PFOA	123144	2500	Avg	7.728869				2838.24	2838.24	Yes	2500	114	113.5	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	547536	18O2-PFHxS	408078	2500	Avg	1.171154				2864.15	2864.15	Yes	2500	115	114.6	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	573646	13C5-PFNA	541853	1250	Avg	0.935659				1414.34	1414.34	Yes	1250	113	113.1	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	158442	18O2-PFHxS	408078	2500	Avg	0.170753				5684.58	5684.59	Yes	5000	114	113.7	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	553895	13C4-PFOS	497298	2500	Avg	0.495989				5614.08	5614.08	Yes	5000	112	112.3	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	548910	13C2-PFDA	379508	1250	Avg	1.232298				1467.15	1467.15	Yes	1250	117	117.4	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	395110	13C4-PFOS	497298	2500	Avg	0.364519				5449.05	5449.05	Yes	5000	109	109	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	530469	13C4-PFOS	497298	2500	Avg	0.970887				2746.72	2746.72	Yes	2500	110	109.9	Yes
100724A033.d	CCB A1	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2954	13C8-PFOS	530469	2500	Avg	1.054191		0.01	13.206	0.13206	0.1321	Yes				
100724A033.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	503316	13C2-PFDA	379508	1250	Avg	1.191252				1391.64	1391.64	Yes	1250	111	111.3	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	438935	13C2-PFDA	379508	1250	Avg	1.01948				1418.11	1418.11	Yes	1250	113	113.4	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	880739	13C4-PFOS	497298	2500	Avg	1.694128				2613.51	2613.51	Yes	2500	105	104.5	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	352924	13C2-PFDA	379508	1250	Avg	0.871708				1333.52	1333.52	Yes	1250	107	106.7	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3853925	13C4-PFOS	497298	2500	Avg	0.708623				27341	27340.81	Yes	25000	109	109.4	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	215849	13C4-PFOS	497298	2500	Avg	0.415479				2611.71	2611.71	Yes	2500	104	104.5	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4096913	13C4-PFOS	497298	2500	Avg	0.758997				27136	27135.63	Yes	25000	109	108.5	Yes
100724A033.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	241830	13C4-PFOS	497298	2500	Avg	0.441246				2755.2	2755.2	Yes	2500	110	110.2	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3116318	13C3-PFBA	1292051	5000	Avg	1.14247				10556	10555.71	Yes	10000	106	105.6	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1316423	13C2-PFHxA	802897	2500	Avg	0.796557				5145.87	5145.87	Yes	5000	103	102.9	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	150872	18O2-PFHxS	427744	2500	Avg	0.169955				5188.38	5188.37	Yes	5000	104	103.8	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	831603	13C2-PFHxA	802897	2500	Avg	1.046383				2474.6	2474.6	Yes	2500	99	99	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	574087	18O2-PFHxS	427744	2500	Avg	1.319962				2541.98	2541.98	Yes	2500	102	101.7	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	613012	13C2-PFHxA	802897	2500	Avg	0.186581				10230	10230.14	Yes	10000	102	102.3	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	906281	13C2-PFHxA	802897	2500	Avg	1.170685				2410.48	2410.48	Yes	2500	96	96.4	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	165187	18O2-PFHxS	427744	2500	Avg	0.184115				5243.77	5243.76	Yes	5000	105	104.9	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1268166	13C4-PFOA	154440	2500	Avg	7.728869				2656.08	2656.08	Yes	2500	106	106.2	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	518231	18O2-PFHxS	427744	2500	Avg	1.171154				2586.22	2586.22	Yes	2500	103	103.4	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	508884	13C5-PFNA	514599	1250	Avg	0.935659				1321.12	1321.12	Yes	1250	106	105.7	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	132165	18O2-PFHxS	427744	2500	Avg	0.170753				4523.81	4523.81	Yes	5000	90	90.5	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	570412	13C4-PFOS	447985	2500	Avg	0.495989				6417.9	6417.9	Yes	5000	128	128.4	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	518880	13C2-PFDA	358163	1250	Avg	1.232298				1469.54	1469.54	Yes	1250	118	117.6	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	411367	13C4-PFOS	447985	2500	Avg	0.364519				6297.75	6297.76	Yes	5000	126	126	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	543957	13C4-PFOS	447985	2500	Avg	0.970887				3126.6	3126.6	Yes	2500	125	125.1	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	474094	13C2-PFDA	358163	1250	Avg	1.191252				1388.96	1388.96	Yes	1250	111	111.1	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	451128	13C2-PFDA	358163	1250	Avg	1.01948				1544.37	1544.37	Yes	1250	124	123.5	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	926406	13C4-PFOS	447985	2500	Avg	1.694128				3051.63	3051.63	Yes	2500	122	122.1	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	351612	13C2-PFDA	358163	1250	Avg	0.871708				1407.74	1407.74	Yes	1250	113	112.6	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4001037	13C4-PFOS	447985	2500	Avg	0.708623				31509	31508.94	Yes	25000	126	126	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	220227	13C4-PFOS	447985	2500	Avg	0.415479				2958	2958	Yes	2500	118	118.3	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4170084	13C4-PFOS	447985	2500	Avg	0.758997				30661	30660.64	Yes	25000	123	122.6	Yes
100724A051.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	242753	13C4-PFOS	447985	2500	Avg	0.441246				3070.15	3070.16	Yes	2500	123	122.8	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3028554	13C3-PFBA	1356951	5000	Avg	1.14247				9767.79	9767.79	Yes	10000	98	97.7	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1273489	13C2-PFHxA	813200	2500	Avg	0.796557				4914.97	4914.97	Yes	5000	98	98.3	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	160731	18O2-PFHxS	448604	2500	Avg	0.169955				5270.4	5270.39	Yes	5000	105	105.4	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	801184	13C2-PFHxA	813200	2500	Avg	1.046383				2353.88	2353.88	Yes	2500	94	94.2	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	572143	18O2-PFHxS	448604	2500	Avg	1.319962				2415.57	2415.57	Yes	2500	97	96.6	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	585914	13C2-PFHxA	813200	2500	Avg	0.186581				9654.04	9654.04	Yes	10000	97	96.5	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	942068	13C2-PFHxA	813200	2500	Avg	1.170685				2473.92	2473.92	Yes	2500	99	99	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	181008	18O2-PFHxS	448604	2500	Avg	0.184115				5478.81	5478.8	Yes	5000	110	109.6	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1076495	13C4-PFOA	150563	2500	Avg	7.728869				2312.69	2312.69	Yes	2500	93	92.5	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	512737	18O2-PFHxS	448604	2500	Avg	1.171154				2439.82	2439.82	Yes	2500	98	97.6	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	502465	13C5-PFNA	557083	1250	Avg	0.935659				1204.98	1204.98	Yes	1250	96	96.4	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	163701	18O2-PFHxS	448604	2500	Avg	0.170753				5342.69	5342.69	Yes	5000	107	106.9	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	535313	13C4-PFOS	496488	2500	Avg	0.495989				5434.59	5434.59	Yes	5000	109	108.7	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	518834	13C2-PFDA	413042	1250	Avg	1.232298				1274.17	1274.17	Yes	1250	102	101.9	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	383768	13C4-PFOS	496488	2500	Avg	0.364519				5301.27	5301.27	Yes	5000	106	106	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	514464	13C4-PFOS	496488	2500	Avg	0.970887				2668.2	2668.19	Yes	2500	107	106.7	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	449441	13C2-PFDA	413042	1250	Avg	1.191252				1141.79	1141.79	Yes	1250	91	91.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100924116.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	467993	13C2-PFDA	413042	1250	Avg	1.01948				1389.24	1389.24	Yes	1250	111	111.1	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	894112	13C4-PFOS	496488	2500	Avg	1.694128				2657.52	2657.52	Yes	2500	106	106.3	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	372019	13C2-PFDA	413042	1250	Avg	0.871708				1291.55	1291.55	Yes	1250	103	103.3	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3975917	13C4-PFOS	496488	2500	Avg	0.708623				28252	28252.27	Yes	25000	113	113	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	224161	13C4-PFOS	496488	2500	Avg	0.415479				2716.71	2716.7	Yes	2500	109	108.7	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4378393	13C4-PFOS	496488	2500	Avg	0.758997				29047	29047.31	Yes	25000	116	116.2	Yes
100924116.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	243022	13C4-PFOS	496488	2500	Avg	0.441246				2773.29	2773.29	Yes	2500	111	110.9	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3120021	13C3-PFBA	1397558	5000	Avg	1.14247				9770.41	9770.41	Yes	10000	98	97.7	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1303125	13C2-PFHxA	813645	2500	Avg	0.796557				5026.6	5026.6	Yes	5000	101	100.5	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	156151	18O2-PFHxS	451335	2500	Avg	0.169955				5089.23	5089.23	Yes	5000	102	101.8	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	852748	13C2-PFHxA	813645	2500	Avg	1.046383				2504	2504	Yes	2500	100	100.2	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	568844	18O2-PFHxS	451335	2500	Avg	1.319962				2387.11	2387.11	Yes	2500	95	95.5	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	594825	13C2-PFHxA	813645	2500	Avg	0.186581				9795.5	9795.51	Yes	10000	98	98	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	972966	13C2-PFHxA	813645	2500	Avg	1.170685				2553.66	2553.66	Yes	2500	102	102.1	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	169026	18O2-PFHxS	451335	2500	Avg	0.184115				5085.18	5085.17	Yes	5000	102	101.7	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1076431	13C4-PFOA	132821	2500	Avg	7.728869				2621.46	2621.46	Yes	2500	105	104.9	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	550692	18O2-PFHxS	451335	2500	Avg	1.171154				2604.57	2604.57	Yes	2500	104	104.2	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	480036	13C5-PFNA	554028	1250	Avg	0.935659				1157.54	1157.54	Yes	1250	93	92.6	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	159171	18O2-PFHxS	451335	2500	Avg	0.170753				5163.41	5163.41	Yes	5000	103	103.3	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	614204	13C4-PFOS	545435	2500	Avg	0.495989				5675.94	5675.94	Yes	5000	114	113.5	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	545018	13C2-PFDA	435479	1250	Avg	1.232298				1269.52	1269.52	Yes	1250	102	101.6	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	433645	13C4-PFOS	545435	2500	Avg	0.364519				5452.69	5452.69	Yes	5000	109	109.1	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	520158	13C4-PFOS	545435	2500	Avg	0.970887				2455.63	2455.63	Yes	2500	98	98.2	Yes
100924130.d	CCB A8	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3548	13C8-PFOS	520158	2500	Avg	1.054191		0.01	16.176	0.16176	0.1618	Yes				
100924130.d	CCB A8	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	450584	13C2-PFDA	435479	1250	Avg	1.191252				1085.71	1085.71	Yes	1250	87	86.9	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	433867	13C2-PFDA	435479	1250	Avg	1.01948				1221.58	1221.58	Yes	1250	98	97.7	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	945059	13C4-PFOS	545435	2500	Avg	1.694128				2556.88	2556.88	Yes	2500	102	102.3	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	369576	13C2-PFDA	435479	1250	Avg	0.871708				1216.96	1216.96	Yes	1250	97	97.4	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4206097	13C4-PFOS	545435	2500	Avg	0.708623				27206	27205.77	Yes	25000	109	108.8	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	238747	13C4-PFOS	545435	2500	Avg	0.415479				2633.82	2633.82	Yes	2500	105	105.4	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4579185	13C4-PFOS	545435	2500	Avg	0.758997				27653	27653.18	Yes	25000	111	110.6	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	252035	13C4-PFOS	545435	2500	Avg	0.441246				2618.04	2618.04	Yes	2500	105	104.7	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3105292	13C3-PFBA	1375255	5000	Avg	1.14247				9881.99	9881.99	Yes	10000	99	98.8	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1291950	13C2-PFHxA	807337	2500	Avg	0.796557				5022.43	5022.43	Yes	5000	100	100.4	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	151837	18O2-PFHxS	433635	2500	Avg	0.169955				5150.63	5150.62	Yes	5000	103	103	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	852879	13C2-PFHxA	807337	2500	Avg	1.046383				2523.96	2523.96	Yes	2500	101	101	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	568224	18O2-PFHxS	433635	2500	Avg	1.319962				2481.84	2481.84	Yes	2500	99	99.3	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	604981	13C2-PFHxA	807337	2500	Avg	0.186581				10041	10040.6	Yes	10000	100	100.4	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	939550	13C2-PFHxA	807337	2500	Avg	1.170685				2485.22	2485.22	Yes	2500	99	99.4	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	154498	18O2-PFHxS	433635	2500	Avg	0.184115				4837.83	4837.82	Yes	5000	97	96.8	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1091863	13C4-PFOA	115902	2500	Avg	7.728869				3047.2	3047.2	Yes	2500	122	121.9	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	507275	18O2-PFHxS	433635	2500	Avg	1.171154				2497.15	2497.15	Yes	2500	100	99.9	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	537463	13C5-PFNA	531564	1250	Avg	0.935659				1350.78	1350.78	Yes	1250	108	108.1	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	165249	18O2-PFHxS	433635	2500	Avg	0.170753				5579.38	5579.38	Yes	5000	112	111.6	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	583352	13C4-PFOS	529630	2500	Avg	0.495989				5551.7	5551.7	Yes	5000	111	111	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	540779	13C2-PFDA	429644	1250	Avg	1.232298				1276.75	1276.75	Yes	1250	102	102.1	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	457852	13C4-PFOS	529630	2500	Avg	0.364519				5928.87	5928.88	Yes	5000	119	118.6	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	519929	13C4-PFOS	529630	2500	Avg	0.970887				2527.8	2527.8	Yes	2500	101	101.1	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	491151	13C2-PFDA	429644	1250	Avg	1.191252				1199.53	1199.53	Yes	1250	96	96	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	413462	13C2-PFDA	429644	1250	Avg	1.01948				1179.94	1179.94	Yes	1250	94	94.4	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	987367	13C4-PFOS	529630	2500	Avg	1.694128				2751.06	2751.06	Yes	2500	110	110	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	373710	13C2-PFDA	429644	1250	Avg	0.871708				1247.28	1247.28	Yes	1250	100	99.8	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4286355	13C4-PFOS	529630	2500	Avg	0.708623				28552	28552.25	Yes	25000	114	114.2	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	232737	13C4-PFOS	529630	2500	Avg	0.415479				2644.14	2644.14	Yes	2500	106	105.8	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4644680	13C4-PFOS	529630	2500	Avg	0.758997				28886	28885.72	Yes	25000	116	115.5	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	254177	13C4-PFOS	529630	2500	Avg	0.441246				2719.08	2719.09	Yes	2500	109	108.8	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1551889	13C3-PFBA	694984	5000	Avg	1.118527				9981.82	9981.81	Yes	10000	100	99.8	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	566698	13C2-PFHxA	327458	2500	Avg	0.871653				4963.55	4963.55	Yes	5000	99	99.3	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	80559	18O2-PFHxS	227775	2500	Avg	0.184152				4801.43	4801.44	Yes	5000	96	96	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	311784	13C2-PFHxA	327458	2500	Avg	0.934444				2547.33	2547.33	Yes	2500	102	101.9	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	327957	18O2-PFHxS	227775	2500	Avg	1.42701				2522.46	2522.46	Yes	2500	101	100.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124A147.d	CCB A8	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	342181	13C2-PFHxA	327458	2500	Avg	0.255897				10209	10208.81	Yes	10000	102	102.1	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	329987	13C2-PFHxA	327458	2500	Avg	0.958996				2627.03	2627.03	Yes	2500	105	105.1	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	106196	18O2-PFHxS	227775	2500	Avg	0.237031				4917.42	4917.42	Yes	5000	98	98.3	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	369960	13C4-PFOA	90123	2500	Avg	4.113993				2494.57	2494.57	Yes	2500	100	99.8	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	254127	18O2-PFHxS	227775	2500	Avg	1.059286				2633.13	2633.13	Yes	2500	105	105.3	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	123800	13C5-PFNA	145834	1250	Avg	0.708475				1497.78	1497.78	Yes	1250	120	119.8	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	102511	18O2-PFHxS	227775	2500	Avg	0.22157				5078.01	5078.01	Yes	5000	102	101.6	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	241210	13C4-PFOS	347420	2500	Avg	0.344978				5031.41	5031.4	Yes	5000	101	100.6	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	150953	13C2-PFDA	168536	1250	Avg	0.946606				1182.74	1182.74	Yes	1250	95	94.6	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	299908	13C4-PFOS	347420	2500	Avg	0.411975				5238.44	5238.44	Yes	5000	105	104.8	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	336399	13C4-PFOS	347420	2500	Avg	0.970524				2494.21	2494.21	Yes	2500	100	99.8	Yes
101124A147.d	CCB A8	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1496	13C8-PFOS	336399	2500	Avg	0.967431		0.01	11.492	0.11492	0.1149	Yes				
101124A147.d	CCB A8	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	125717	13C2-PFDA	168536	1250	Avg	0.746662				1248.78	1248.78	Yes	1250	100	99.9	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	126450	13C2-PFDA	168536	1250	Avg	0.682188				1374.78	1374.78	Yes	1250	110	110	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	671507	13C4-PFOS	347420	2500	Avg	1.882752				2566.51	2566.51	Yes	2500	103	102.7	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	90803	13C2-PFDA	168536	1250	Avg	0.517569				1301.22	1301.22	Yes	1250	104	104.1	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2303464	13C4-PFOS	347420	2500	Avg	0.691275				23978	23978.16	Yes	25000	96	95.9	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	143803	13C4-PFOS	347420	2500	Avg	0.423406				2443.97	2443.97	Yes	2500	98	97.8	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	2965115	13C4-PFOS	347420	2500	Avg	0.876774				24335	24335.43	Yes	25000	97	97.3	Yes
101124A147.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	168602	13C4-PFOS	347420	2500	Avg	0.49678				2442.22	2442.21	Yes	2500	98	97.7	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1565335	13C3-PFBA	707504	5000	Avg	1.118527				9890.13	9890.13	Yes	10000	99	98.9	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	597427	13C2-PFHxA	342366	2500	Avg	0.871653				5004.84	5004.84	Yes	5000	100	100.1	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	83989	18O2-PFHxS	257266	2500	Avg	0.184152				4432.03	4432.04	Yes	5000	89	88.6	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	317261	13C2-PFHxA	342366	2500	Avg	0.934444				2479.21	2479.21	Yes	2500	99	99.2	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	320336	18O2-PFHxS	257266	2500	Avg	1.42701				2181.41	2181.41	Yes	2500	87	87.3	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	337773	13C2-PFHxA	342366	2500	Avg	0.255897				9638.48	9638.49	Yes	10000	96	96.4	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	333527	13C2-PFHxA	342366	2500	Avg	0.958996				2539.59	2539.59	Yes	2500	102	101.6	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	106494	18O2-PFHxS	257266	2500	Avg	0.237031				4365.94	4365.94	Yes	5000	87	87.3	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	379039	13C4-PFOA	83360	2500	Avg	4.113993				2763.14	2763.14	Yes	2500	111	110.5	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	247639	18O2-PFHxS	257266	2500	Avg	1.059286				2271.77	2271.77	Yes	2500	91	90.9	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	119261	13C5-PFNA	154839	1250	Avg	0.708475				1358.95	1358.95	Yes	1250	109	108.7	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	105438	18O2-PFHxS	257266	2500	Avg	0.22157				4624.28	4624.28	Yes	5000	92	92.5	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	222431	13C4-PFOS	360977	2500	Avg	0.344978				4465.45	4465.44	Yes	5000	89	89.3	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	155327	13C2-PFDA	162485	1250	Avg	0.946606				1262.33	1262.33	Yes	1250	101	101	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	291156	13C4-PFOS	360977	2500	Avg	0.411975				4894.58	4894.58	Yes	5000	98	97.9	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	323396	13C4-PFOS	360977	2500	Avg	0.970524				2307.75	2307.75	Yes	2500	92	92.3	Yes
101124A159.d	CCB A9	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1229	13C8-PFOS	323396	2500	Avg	0.967431		0.01	9.8206	0.09821	0.0982	Yes				
101124A159.d	CCB A9	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	132381	13C2-PFDA	162485	1250	Avg	0.746662				1363.95	1363.95	Yes	1250	109	109.1	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	99513	13C2-PFDA	162485	1250	Avg	0.682188				1122.21	1122.21	Yes	1250	90	89.8	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	629698	13C4-PFOS	360977	2500	Avg	1.882752				2316.33	2316.33	Yes	2500	93	92.7	Yes
101124A159.d	CCB A9	Instrument_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	960	13C8-PFOSA	629698	2500	Avg	1.081611		0.01	3.5238	0.03524	0.0352	Yes				
101124A159.d	CCB A9	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	86631	13C2-PFDA	162485	1250	Avg	0.517569				1287.66	1287.66	Yes	1250	103	103	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2381835	13C4-PFOS	360977	2500	Avg	0.691275				23863	23862.79	Yes	25000	95	95.5	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	138846	13C4-PFOS	360977	2500	Avg	0.423406				2271.1	2271.1	Yes	2500	91	90.8	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3031204	13C4-PFOS	360977	2500	Avg	0.876774				23944	23943.52	Yes	25000	96	95.8	Yes
101124A159.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	169174	13C4-PFOS	360977	2500	Avg	0.49678				2358.47	2358.47	Yes	2500	94	94.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?

Key

	from quantitation report
	from reported calibration
	from lab report/EDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
ND	not detected
ng/L	nanograms per liter
RF	response factor

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2782344	13C3-PFBA	1228330	5000	Avg	1.14247				9913.36	9913.36	Yes	10000	99	99.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2391649	13C4-PFBA	2782344	10000	Avg	0.846914				10150	10149.56	Yes	10000	101	101.5	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1159260	13C2-PFHxA	744759	2500	Avg	0.796557				4885.27	4885.27	Yes	5000	98	97.7	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1043504	13C5-PFPeA	1159260	5000	Avg	0.874543				5146.38	5146.38	Yes	5000	103	102.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	142421	18O2-PFHxS	480823	2500	Avg	0.169955				4357.08	4357.07	Yes	5000	87	87.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	748836	13C2-PFHxA	744759	2500	Avg	1.046383				2402.26	2402.26	Yes	2500	96	96.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	659930	13C5-PFHxA	748836	2500	Avg	0.9029				2440.12	2440.12	Yes	2500	98	97.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	502149	18O2-PFHxS	480823	2500	Avg	1.319962				1978	1978	Yes	2500	79	79.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	566629	13C3-PFBS	502149	2500	Avg	1.207053				2337.11	2337.11	Yes	2218	105	105.4	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	528577	13C2-PFHxA	744759	2500	Avg	0.186581				9509.66	9509.66	Yes	10000	95	95.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	842839	13C2-PFHxA	744759	2500	Avg	1.170685				2416.73	2416.73	Yes	2500	97	96.7	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	953998	13C4-PFHpA	842839	2500	Avg	1.077361				2626.53	2626.53	Yes	2500	105	105.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	155299	18O2-PFHxS	480823	2500	Avg	0.184115				4385.66	4385.65	Yes	5000	88	87.7	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	662413	13C2-6:2FTS	155299	5000	Avg	2.253868				9462.41	9462.41	Yes	9500	100	99.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1008013	13C4-PFOA	130702	2500	Avg	7.728869				2494.64	2494.64	Yes	2500	100	99.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	852064	13C8-PFOA	1008013	2500	Ln	0.828626	32.8119			2510.68	2510.68	Yes	2500	100	100.4	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	469112	18O2-PFHxS	480823	2500	Avg	1.171154				2082.65	2082.65	Yes	2500	83	83.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	543024	13C3-PFHxS	469112	2500	Avg	1.194012				2423.67	2423.67	Yes	2353	103	103.0	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	440445	13C3-PFHxS	469112	2500	Ln	1.119323	33.81			2066.8	2066.8	Yes	2285	90	90.5	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	427536	13C5-PFNA	497784	1250	Avg	0.935659				1147.42	1147.42	Yes	1250	92	91.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	815456	13C9-PFNA	427536	1250	Avg	0.837317				2847.4	2847.4	Yes	2500	114	113.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	148619	18O2-PFHxS	480823	2500	Avg	0.170753				4525.44	4525.44	Yes	5000	91	90.5	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	645852	13C2-8:2FTS	148619	5000	Ln	1.94256	137			11115	11114.94	Yes	9600	116	115.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	540091	13C4-PFOS	460408	2500	Avg	0.495989				5912.78	5912.78	Yes	5000	118	118.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	214357	D3-NMeFOSAA	540091	5000	Avg	0.795786				2493.7	2493.7	Yes	2500	100	99.7	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	473787	13C2-PFDA	387189	1250	Avg	1.232298				1241.24	1241.24	Yes	1250	99	99.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	780223	13C6-PFDA	473787	1250	Avg	0.819341				2512.36	2512.35	Yes	2500	100	100.5	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	414854	13C4-PFOS	460408	2500	Avg	0.364519				6179.77	6179.77	Yes	5000	124	123.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	220353	D5-NEtFOSAA	414854	5000	Avg	1.162779				2284	2284	Yes	2500	91	91.4	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	416378	13C4-PFOS	460408	2500	Avg	0.970887				2328.72	2328.71	Yes	2500	93	93.1	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	393865	13C8-PFOS	416378	2500	Avg	0.939894				2516.06	2516.06	Yes	2383	106	105.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	447723	13C8-PFOS	416378	2500	Avg	1.054191				2550.01	2550.01	Yes	2320	110	109.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	582559	13C8-PFOS	416378	2500	Avg	1.337317				2615.52	2615.52	Yes	2405	109	108.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	428488	13C2-PFDA	387189	1250	Avg	1.191252				1161.24	1161.24	Yes	1250	93	92.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	689940	13C7-PFUnA	428488	1250	Avg	0.853896				2357.1	2357.1	Yes	2500	94	94.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	385098	13C2-PFDA	387189	1250	Avg	1.01948				1219.49	1219.49	Yes	1250	98	97.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	600539	13C2-PFDoA	385098	1250	Avg	0.772781				2522.46	2522.46	Yes	2500	101	100.9	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	844458	13C4-PFOS	460408	2500	Avg	1.694128				2706.63	2706.63	Yes	2500	108	108.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	810273	13C8-PFOSA	844458	2500	Avg	0.99659				2407	2407	Yes	2500	96	96.3	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	330118	13C2-PFDA	387189	1250	Avg	0.871708				1222.6	1222.6	Yes	1250	98	97.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3809255	13C4-PFOS	460408	2500	Avg	0.708623				29189	29189.18	Yes	25000	117	116.8	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	200089	13C4-PFOS	460408	2500	Avg	0.415479				2615	2615	Yes	2500	105	104.6	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	198778	D3-NMeFOSA	200089	2500	Avg	0.976696				2542.88	2542.88	Yes	2500	102	101.7	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4088645	13C4-PFOS	460408	2500	Avg	0.758997				29251	29250.72	Yes	25000	117	117	Yes
100924129.d	CCV L5H_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	224180	13C4-PFOS	460408	2500	Avg	0.441246				2758.75	2758.76	Yes	2500	110	110.4	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2885915	13C3-PFBA	1287254	5000	Avg	1.14247				9811.71	9811.71	Yes	10000	98	98.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2547120	13C4-PFBA	2885915	10000	Avg	0.846914				10421	10421.41	Yes	10000	104	104.2	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1209792	13C2-PFHxA	775675	2500	Avg	0.796557				4895.02	4895.02	Yes	5000	98	97.9	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1105990	13C5-PFPeA	1209792	5000	Avg	0.874543				5226.72	5226.72	Yes	5000	105	104.5	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	154061	18O2-PFHxS	440017	2500	Avg	0.169955				5150.27	5150.26	Yes	5000	103	103	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	802507	13C2-PFHxA	775675	2500	Avg	1.046383				2471.83	2471.83	Yes	2500	99	98.9	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	693336	13C5-PFHxA	802507	2500	Avg	0.9029				2392.19	2392.19	Yes	2500	96	95.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	529842	18O2-PFHxS	440017	2500	Avg	1.319962				2280.63	2280.63	Yes	2500	91	91.2	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	622997	13C3-PFBS	529842	2500	Avg	1.207053				2435.3	2435.3	Yes	2218	110	109.8	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	603358	13C2-PFHxA	775675	2500	Avg	0.186581				10422	10422.4	Yes	10000	104	104.2	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	927121	13C2-PFHxA	775675	2500	Avg	1.170685				2552.45	2552.45	Yes	2500	102	102.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1045514	13C4-PFHpA	927121	2500	Avg	1.077361				2616.81	2616.81	Yes	2500	105	104.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	187801	18O2-PFHxS	440017	2500	Avg	0.184115				5795.36	5795.34	Yes	5000	116	115.9	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	721780	13C2-6:2FTS	187801	5000	Avg	2.253868				8526.06	8526.06	Yes	9500	90	89.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	1054911	13C4-PFOA	131573	2500	Avg	7.728869				2593.42	2593.42	Yes	2500	104	103.7	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	897312	13C8-PFOA	1054911	2500	Ln	0.828626	32.8119			2526.71	2526.71	Yes	2500	101	101.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	474431	18O2-PFHxS	440017	2500	Avg	1.171154				2301.6	2301.6	Yes	2500	92	92.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	641337	13C3-PFHxS	474431	2500	Avg	1.194012				2830.38	2830.38	Yes	2353	120	120.3	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	528358	13C3-PFHxS	474431	2500	Ln	1.119323	33.81			2457.16	2457.16	Yes	2285	108	107.5	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	508637	13C5-PFNA	518677	1250	Avg	0.935659				1310.1	1310.1	Yes	1250	105	104.8	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	829463	13C9-PFNA	508637	1250	Avg	0.837317				2434.5	2434.5	Yes	2500	97	97.4	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	155258	18O2-PFHxS	440017	2500	Avg	0.170753				5166.02	5166.02	Yes	5000	103	103.3	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	664704	13C2-8:2FTS	155258	5000	Ln	1.94256	137			10949	10949.18	Yes	9600	114	114.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	556777	13C4-PFOS	529446	2500	Avg	0.495989				5300.63	5300.63	Yes	5000	106	106	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	220873	D3-NMeFOSAA	556777	5000	Avg	0.795786				2492.5	2492.5	Yes	2500	100	99.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	474879	13C2-PFDA	435460	1250	Avg	1.232298				1106.19	1106.19	Yes	1250	88	88.5	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	842828	13C6-PFDA	474879	1250	Avg	0.819341				2707.71	2707.7	Yes	2500	108	108.3	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	405005	13C4-PFOS	529446	2500	Avg	0.364519				5246.36	5246.37	Yes	5000	105	104.9	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	240653	D5-NEtFOSAA	405005	5000	Avg	1.162779				2555.08	2555.08	Yes	2500	102	102.2	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	512757	13C4-PFOS	529446	2500	Avg	0.970887				2493.8	2493.8	Yes	2500	100	99.8	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	455837	13C8-PFOS	512757	2500	Avg	0.939894				2364.61	2364.61	Yes	2383	99	99.2	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	458099	13C8-PFOS	512757	2500	Avg	1.054191				2118.69	2118.7	Yes	2320	91	91.3	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	693211	13C8-PFOS	512757	2500	Avg	1.337317				2527.32	2527.32	Yes	2405	105	105.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	433146	13C2-PFDA	435460	1250	Avg	1.191252				1043.74	1043.74	Yes	1250	83	83.5	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	715649	13C7-PFUnA	433146	1250	Avg	0.853896				2418.64	2418.64	Yes	2500	97	96.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	432029	13C2-PFDA	435460	1250	Avg	1.01948				1216.45	1216.45	Yes	1250	97	97.3	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	651301	13C2-PFDoA	432029	1250	Avg	0.772781				2438.5	2438.5	Yes	2500	98	97.5	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	905942	13C4-PFOS	529446	2500	Avg	1.694128				2525.06	2525.06	Yes	2500	101	101	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	876347	13C8-PFOSA	905942	2500	Avg	0.99659				2426.61	2426.61	Yes	2500	97	97.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	351337	13C2-PFDA	435460	1250	Avg	0.871708				1156.95	1156.95	Yes	1250	93	92.6	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	4005152	13C4-PFOS	529446	2500	Avg	0.708623				26688	26688.37	Yes	25000	107	106.8	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	228120	13C4-PFOS	529446	2500	Avg	0.415479				2592.58	2592.58	Yes	2500	104	103.7	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	217966	D3-NMeFOSA	228120	2500	Avg	0.976696				2445.72	2445.72	Yes	2500	98	97.8	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4344806	13C4-PFOS	529446	2500	Avg	0.758997				27030	27030.16	Yes	25000	108	108.1	Yes
100924144.d	CCV L5I_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	243066	13C4-PFOS	529446	2500	Avg	0.441246				2601.13	2601.13	Yes	2500	104	104	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1469082	13C3-PFBA	688225	5000	Avg	1.117176				9553.53	9553.53	Yes	10000	96	95.5	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1387111	13C4-PFBA	1469082	10000	Avg	0.88036				10725	10725.19	Yes	10000	107	107.3	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	585569	13C2-PFHxA	393789	2500	Avg	0.842249				4413.81	4413.81	Yes	5000	88	88.3	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	678025	13C5-PFPeA	585569	5000	Avg	1.152335				5024.11	5024.11	Yes	5000	100	100.5	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	76845	18O2-PFHxS	244423	2500	Avg	0.16257				4834.73	4834.74	Yes	5000	97	96.7	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	332715	13C2-PFHxA	393789	2500	Avg	0.957583				2205.83	2205.83	Yes	2500	88	88.2	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	424691	13C5-PFHxA	332715	2500	Avg	1.266315				2519.99	2519.99	Yes	2500	101	100.8	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	343957	18O2-PFHxS	244423	2500	Avg	1.372263				2563.68	2563.69	Yes	2500	103	102.5	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	533063	13C3-PFBS	343957	2500	Avg	1.799				2153.69	2153.69	Yes	2218	97	97.1	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	350582	13C2-PFHxA	393789	2500	Avg	0.254727				8737.58	8737.58	Yes	10000	87	87.4	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	323409	13C2-PFHxA	393789	2500	Avg	0.9296				2208.68	2208.68	Yes	2500	88	88.3	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	430690	13C4-PFHpA	323409	2500	Avg	1.231389				2703.69	2703.69	Yes	2500	108	108.1	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	104932	18O2-PFHxS	244423	2500	Avg	0.216602				4955.01	4955	Yes	5000	99	99.1	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	440563	13C2-6:2FTS	104932	5000	Avg	2.166797				9688.4	9688.4	Yes	9500	102	102	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	370193	13C4-PFOA	99470	2500	Avg	3.964715				2346.74	2346.74	Yes	2500	94	93.9	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	445359	13C8-PFOA	370193	2500	Avg	1.236771				2431.83	2431.83	Yes	2500	97	97.3	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	230436	18O2-PFHxS	244423	2500	Avg	1.002875				2350.18	2350.18	Yes	2500	94	94	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	280881	13C3-PFHxS	230436	2500	Avg	1.23834				2460.78	2460.78	Yes	2353	105	104.6	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	243057	13C3-PFHxS	230436	2500	Ln	1.045853	20.3871			2501.82	2501.82	Yes	2285	109	109.5	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	113029	13C5-PFNA	182692	1250	Avg	0.659201				1173.17	1173.17	Yes	1250	94	93.9	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	296715	13C9-PFNA	113029	1250	Avg	1.215541				2699.54	2699.54	Yes	2500	108	108	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	94431	18O2-PFHxS	244423	2500	Avg	0.205874				4691.5	4691.49	Yes	5000	94	93.8	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	308829	13C2-8:2FTS	94431	5000	Avg	1.506758				10853	10852.5	Yes	9600	113	113	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	206261	13C4-PFOS	385446	2500	Avg	0.281158				4758.21	4758.2	Yes	5000	95	95.2	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	82716	D3-NMeFOSAA	206261	5000	Avg	0.843191				2378.03	2378.03	Yes	2500	95	95.1	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	139451	13C2-PFDA	144531	1250	Avg	0.924946				1303.93	1303.93	Yes	1250	104	104.3	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	281764	13C6-PFDA	139451	1250	Avg	1.076644				2345.86	2345.86	Yes	2500	94	93.8	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	248497	13C4-PFOS	385446	2500	Avg	0.328751				4902.65	4902.65	Yes	5000	98	98.1	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	114378	D5-NEtFOSAA	248497	5000	Avg	0.952208				2416.91	2416.9	Yes	2500	97	96.7	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	356542	13C4-PFOS	385446	2500	Avg	0.948031				2439.3	2439.3	Yes	2500	98	97.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	258042	13C8-PFOS	356542	2500	Avg	0.82973				2180.64	2180.63	Yes	2383	92	91.5	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	310306	13C8-PFOS	356542	2500	Avg	0.985331				2208.2	2208.19	Yes	2320	95	95.2	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	314058	13C8-PFOS	356542	2500	Avg	0.943409				2334.21	2334.21	Yes	2405	97	97.1	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	133209	13C2-PFDA	144531	1250	Avg	0.932642				1235.29	1235.29	Yes	1250	99	98.8	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	282928	13C7-PFUnA	133209	1250	Avg	1.011058				2625.89	2625.89	Yes	2500	105	105	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	116606	13C2-PFDA	144531	1250	Avg	0.761609				1324.15	1324.15	Yes	1250	106	105.9	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	164780	13C2-PFDoA	116606	1250	Ln	0.718295	33.9774			2411.88	2411.88	Yes	2500	96	96.5	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	82071	13C2-PFDA	144531	1250	Avg	0.582576				1218.39	1218.39	Yes	1250	97	97.5	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	676987	13C4-PFOS	385446	2500	Avg	1.831503				2397.45	2397.45	Yes	2500	96	95.9	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	749782	13C8-PFOSA	676987	2500	Avg	1.090045				2540.1	2540.1	Yes	2500	102	101.6	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2309992	13C4-PFOS	385446	2500	Avg	0.656639				22817	22817.09	Yes	25000	91	91.3	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	142480	13C4-PFOS	385446	2500	Avg	0.403922				2287.88	2287.88	Yes	2500	92	91.5	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	182929	D3-NMeFOSA	142480	2500	Avg	1.222625				2625.28	2625.28	Yes	2500	105	105	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3094071	13C4-PFOS	385446	2500	Avg	0.829443				24195	24194.7	Yes	25000	97	96.8	Yes
100924A033.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	171403	13C4-PFOS	385446	2500	Avg	0.466186				2384.71	2384.71	Yes	2500	95	95.4	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1471741	13C3-PFBA	689502	5000	Avg	1.117176				9553.1	9553.1	Yes	10000	96	95.5	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1413021	13C4-PFBA	1471741	10000	Avg	0.88036				10906	10905.78	Yes	10000	109	109.1	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	623623	13C2-PFHxA	365140	2500	Avg	0.842249				5069.47	5069.47	Yes	5000	101	101.4	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	718080	13C5-PFPeA	623623	5000	Avg	1.152335				4996.23	4996.22	Yes	5000	100	99.9	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	83144	18O2-PFHxS	268636	2500	Avg	0.16257				4759.55	4759.55	Yes	5000	95	95.2	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	348059	13C2-PFHxA	365140	2500	Avg	0.957583				2488.61	2488.61	Yes	2500	100	99.5	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	440484	13C5-PFHxA	348059	2500	Avg	1.266315				2498.48	2498.48	Yes	2500	100	99.9	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	349993	18O2-PFHxS	268636	2500	Avg	1.372263				2373.55	2373.55	Yes	2500	95	94.9	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	555078	13C3-PFBS	349993	2500	Avg	1.799				2203.96	2203.96	Yes	2218	99	99.4	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	370286	13C2-PFHxA	365140	2500	Avg	0.254727				9952.74	9952.75	Yes	10000	100	99.5	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	359800	13C2-PFHxA	365140	2500	Avg	0.9296				2650	2650	Yes	2500	106	106	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	447868	13C4-PFHpA	359800	2500	Avg	1.231389				2527.16	2527.17	Yes	2500	101	101.1	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	109146	18O2-PFHxS	268636	2500	Avg	0.216602				4689.45	4689.44	Yes	5000	94	93.8	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	444034	13C2-6:2FTS	109146	5000	Avg	2.166797				9387.72	9387.72	Yes	9500	99	98.8	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	358531	13C4-PFOA	97632	2500	Avg	3.964715				2315.59	2315.59	Yes	2500	93	92.6	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	443550	13C8-PFOA	358531	2500	Avg	1.236771				2500.73	2500.73	Yes	2500	100	100	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	272072	18O2-PFHxS	268636	2500	Avg	1.002875				2524.72	2524.72	Yes	2500	101	101	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	315062	13C3-PFHxS	272072	2500	Avg	1.23834				2337.83	2337.83	Yes	2353	99	99.4	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	253298	13C3-PFHxS	272072	2500	Ln	1.045853	20.3871			2205.95	2205.95	Yes	2285	97	96.5	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	127119	13C5-PFNA	184318	1250	Avg	0.659201				1307.78	1307.78	Yes	1250	105	104.6	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	310937	13C9-PFNA	127119	1250	Avg	1.215541				2515.37	2515.37	Yes	2500	101	100.6	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	99495	18O2-PFHxS	268636	2500	Avg	0.205874				4497.55	4497.55	Yes	5000	90	90	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	316381	13C2-8:2FTS	99495	5000	Avg	1.506758				10552	10552.02	Yes	9600	110	109.9	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	225390	13C4-PFOS	392026	2500	Avg	0.281158				5112.22	5112.22	Yes	5000	102	102.2	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	95975	D3-NMeFOSAA	225390	5000	Avg	0.843191				2525.04	2525.04	Yes	2500	101	101	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	153644	13C2-PFDA	162332	1250	Avg	0.924946				1279.1	1279.1	Yes	1250	102	102.3	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	315526	13C6-PFDA	153644	1250	Avg	1.076644				2384.28	2384.28	Yes	2500	95	95.4	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	246121	13C4-PFOS	392026	2500	Avg	0.328751				4774.27	4774.27	Yes	5000	95	95.5	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	117281	D5-NEtFOSAA	246121	5000	Avg	0.952208				2502.17	2502.17	Yes	2500	100	100.1	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	379122	13C4-PFOS	392026	2500	Avg	0.948031				2550.24	2550.24	Yes	2500	102	102	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	294979	13C8-PFOS	379122	2500	Avg	0.82973				2344.31	2344.31	Yes	2383	98	98.4	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	357394	13C8-PFOS	379122	2500	Avg	0.985331				2391.81	2391.81	Yes	2320	103	103.1	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	342841	13C8-PFOS	379122	2500	Avg	0.943409				2396.37	2396.37	Yes	2405	100	99.6	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	152062	13C2-PFDA	162332	1250	Avg	0.932642				1255.49	1255.49	Yes	1250	100	100.4	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	294118	13C7-PFUnA	152062	1250	Avg	1.011058				2391.31	2391.3	Yes	2500	96	95.7	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	120135	13C2-PFDA	162332	1250	Avg	0.761609				1214.63	1214.63	Yes	1250	97	97.2	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	183150	13C2-PFDoA	120135	1250	Ln	0.718295	33.9774			2605.74	2605.74	Yes	2500	104	104.2	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	88607	13C2-PFDA	162332	1250	Avg	0.582576				1171.17	1171.17	Yes	1250	94	93.7	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	706623	13C4-PFOS	392026	2500	Avg	1.831503				2460.4	2460.4	Yes	2500	98	98.4	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	769834	13C8-PFOSA	706623	2500	Avg	1.090045				2498.65	2498.65	Yes	2500	100	99.9	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2577912	13C4-PFOS	392026	2500	Avg	0.656639				25036	25036.09	Yes	25000	100	100.1	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	153306	13C4-PFOS	392026	2500	Avg	0.403922				2420.4	2420.4	Yes	2500	97	96.8	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	189405	D3-NMeFOSA	153306	2500	Avg	1.222625				2526.27	2526.27	Yes	2500	101	101.1	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3262719	13C4-PFOS	392026	2500	Avg	0.829443				25085	25085.24	Yes	25000	100	100.3	Yes
100924A050.d	CCV L5B_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	178674	13C4-PFOS	392026	2500	Avg	0.466186				2444.15	2444.15	Yes	2500	98	97.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1493276	13C3-PFBA	685183	5000	Avg	1.117176				9753.98	9753.98	Yes	10000	98	97.5	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1452098	13C4-PFBA	1493276	10000	Avg	0.88036				11046	11045.76	Yes	10000	110	110.5	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	620505	13C2-PFHxA	372144	2500	Avg	0.842249				4949.19	4949.19	Yes	5000	99	99	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	692586	13C5-PFPeA	620505	5000	Avg	1.152335				4843.06	4843.06	Yes	5000	97	96.9	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	82646	18O2-PFHxS	260465	2500	Avg	0.16257				4879.46	4879.46	Yes	5000	98	97.6	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	333515	13C2-PFHxA	372144	2500	Avg	0.957583				2339.74	2339.74	Yes	2500	94	93.6	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	432911	13C5-PFHxA	333515	2500	Avg	1.266315				2562.6	2562.6	Yes	2500	103	102.5	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	362141	18O2-PFHxS	260465	2500	Avg	1.372263				2532.97	2532.98	Yes	2500	101	101.3	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	572244	13C3-PFBS	362141	2500	Avg	1.799				2195.9	2195.9	Yes	2218	99	99	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	375266	13C2-PFHxA	372144	2500	Avg	0.254727				9896.76	9896.76	Yes	10000	99	99	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	335657	13C2-PFHxA	372144	2500	Avg	0.9296				2425.65	2425.65	Yes	2500	97	97	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	453090	13C4-PFHpA	335657	2500	Avg	1.231389				2740.52	2740.52	Yes	2500	110	109.6	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	116288	18O2-PFHxS	260465	2500	Avg	0.216602				5153.05	5153.03	Yes	5000	103	103.1	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	454648	13C2-6:2FTS	116288	5000	Avg	2.166797				9021.78	9021.78	Yes	9500	95	95	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	386189	13C4-PFOA	101685	2500	Avg	3.964715				2394.81	2394.81	Yes	2500	96	95.8	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	460591	13C8-PFOA	386189	2500	Avg	1.236771				2410.83	2410.83	Yes	2500	96	96.4	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	261718	18O2-PFHxS	260465	2500	Avg	1.002875				2504.83	2504.83	Yes	2500	100	100.2	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	295778	13C3-PFHxS	261718	2500	Avg	1.23834				2281.56	2281.56	Yes	2353	97	97	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	266042	13C3-PFHxS	261718	2500	Ln	1.045853	20.3871			2410.39	2410.39	Yes	2285	105	105.5	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	125540	13C5-PFNA	185451	1250	Avg	0.659201				1283.64	1283.65	Yes	1250	103	102.7	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	315808	13C9-PFNA	125540	1250	Avg	1.215541				2586.91	2586.91	Yes	2500	103	103.5	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	104718	18O2-PFHxS	260465	2500	Avg	0.205874				4882.15	4882.14	Yes	5000	98	97.6	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	304891	13C2-8:2FTS	104718	5000	Avg	1.506758				9661.62	9661.62	Yes	9600	101	100.6	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	233756	13C4-PFOS	387063	2500	Avg	0.281158				5369.96	5369.96	Yes	5000	107	107.4	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	89099	D3-NMeFOSAA	233756	5000	Avg	0.843191				2260.24	2260.24	Yes	2500	90	90.4	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	151357	13C2-PFDA	167349	1250	Avg	0.924946				1222.29	1222.29	Yes	1250	98	97.8	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	309401	13C6-PFDA	151357	1250	Avg	1.076644				2373.32	2373.32	Yes	2500	95	94.9	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	233049	13C4-PFOS	387063	2500	Avg	0.328751				4578.67	4578.66	Yes	5000	92	91.6	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	117903	D5-NEtFOSAA	233049	5000	Avg	0.952208				2656.54	2656.54	Yes	2500	106	106.3	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	372936	13C4-PFOS	387063	2500	Avg	0.948031				2540.8	2540.8	Yes	2500	102	101.6	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	308128	13C8-PFOS	372936	2500	Avg	0.82973				2489.43	2489.43	Yes	2383	104	104.5	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	342812	13C8-PFOS	372936	2500	Avg	0.985331				2332.27	2332.27	Yes	2320	101	100.5	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	363152	13C8-PFOS	372936	2500	Avg	0.943409				2580.44	2580.44	Yes	2405	107	107.3	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	152494	13C2-PFDA	167349	1250	Avg	0.932642				1221.31	1221.31	Yes	1250	98	97.7	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	304840	13C7-PFUnA	152494	1250	Avg	1.011058				2471.46	2471.46	Yes	2500	99	98.9	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	127310	13C2-PFDA	167349	1250	Avg	0.761609				1248.58	1248.58	Yes	1250	100	99.9	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	179497	13C2-PFDoA	127310	1250	Ln	0.718295	33.9774			2406.29	2406.29	Yes	2500	96	96.3	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	88217	13C2-PFDA	167349	1250	Avg	0.582576				1131.06	1131.06	Yes	1250	90	90.5	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	703943	13C4-PFOS	387063	2500	Avg	1.831503				2482.49	2482.49	Yes	2500	99	99.3	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	793860	13C8-PFOSA	703943	2500	Avg	1.090045				2586.44	2586.44	Yes	2500	103	103.5	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2660045	13C4-PFOS	387063	2500	Avg	0.656639				26165	26165	Yes	25000	105	104.7	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	153362	13C4-PFOS	387063	2500	Avg	0.403922				2452.33	2452.33	Yes	2500	98	98.1	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	188666	D3-NMeFOSA	153362	2500	Avg	1.222625				2515.49	2515.49	Yes	2500	101	100.6	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3299422	13C4-PFOS	387063	2500	Avg	0.829443				25693	25692.7	Yes	25000	103	102.8	Yes
100924A067.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	186665	13C4-PFOS	387063	2500	Avg	0.466186				2586.2	2586.2	Yes	2500	103	103.4	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1547636	13C3-PFBA	715506	5000	Avg	1.117176				9680.63	9680.64	Yes	10000	97	96.8	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1442608	13C4-PFBA	1547636	10000	Avg	0.88036				10588	10588.13	Yes	10000	106	105.9	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	623778	13C2-PFHxA	369888	2500	Avg	0.842249				5005.64	5005.64	Yes	5000	100	100.1	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	691195	13C5-PFPeA	623778	5000	Avg	1.152335				4807.97	4807.97	Yes	5000	96	96.2	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	80132	18O2-PFHxS	246882	2500	Avg	0.16257				4991.32	4991.33	Yes	5000	100	99.8	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	353462	13C2-PFHxA	369888	2500	Avg	0.957583				2494.8	2494.8	Yes	2500	100	99.8	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	440964	13C5-PFHxA	353462	2500	Avg	1.266315				2462.97	2462.97	Yes	2500	99	98.5	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	343223	18O2-PFHxS	246882	2500	Avg	1.372263				2532.73	2532.73	Yes	2500	101	101.3	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	603204	13C3-PFBS	343223	2500	Avg	1.799				2442.29	2442.29	Yes	2218	110	110.1	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	362118	13C2-PFHxA	369888	2500	Avg	0.254727				9608.26	9608.26	Yes	10000	96	96.1	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	354839	13C2-PFHxA	369888	2500	Avg	0.9296				2579.91	2579.91	Yes	2500	103	103.2	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	425310	13C4-PFHpA	354839	2500	Avg	1.231389				2433.43	2433.43	Yes	2500	97	97.3	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	112792	18O2-PFHxS	246882	2500	Avg	0.216602				5273.12	5273.1	Yes	5000	105	105.5	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	446365	13C2-6:2FTS	112792	5000	Avg	2.166797				9131.95	9131.95	Yes	9500	96	96.1	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	394898	13C4-PFOA	97619	2500	Avg	3.964715				2550.81	2550.81	Yes	2500	102	102	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	455044	13C8-PFOA	394898	2500	Avg	1.236771				2329.27	2329.27	Yes	2500	93	93.2	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	270596	18O2-PFHxS	246882	2500	Avg	1.002875				2732.28	2732.28	Yes	2500	109	109.3	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	312928	13C3-PFHxS	270596	2500	Avg	1.23834				2334.66	2334.66	Yes	2353	99	99.2	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	238846	13C3-PFHxS	270596	2500	Ln	1.045853	20.3871			2090.43	2090.43	Yes	2285	91	91.5	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	126368	13C5-PFNA	202750	1250	Avg	0.659201				1181.87	1181.87	Yes	1250	95	94.5	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	316230	13C9-PFNA	126368	1250	Avg	1.215541				2573.39	2573.39	Yes	2500	103	102.9	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	106578	18O2-PFHxS	246882	2500	Avg	0.205874				5242.24	5242.24	Yes	5000	105	104.8	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	338473	13C2-8:2FTS	106578	5000	Avg	1.506758				10539	10538.6	Yes	9600	110	109.8	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	219744	13C4-PFOS	403805	2500	Avg	0.281158				4838.77	4838.77	Yes	5000	97	96.8	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	91411	D3-NMeFOSAA	219744	5000	Avg	0.843191				2466.75	2466.75	Yes	2500	99	98.7	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	134264	13C2-PFDA	153600	1250	Avg	0.924946				1181.3	1181.3	Yes	1250	95	94.5	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	287375	13C6-PFDA	134264	1250	Avg	1.076644				2485.01	2485.01	Yes	2500	99	99.4	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	242596	13C4-PFOS	403805	2500	Avg	0.328751				4568.62	4568.62	Yes	5000	91	91.4	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	114716	D5-NEtFOSAA	242596	5000	Avg	0.952208				2483.01	2483.01	Yes	2500	99	99.3	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	377152	13C4-PFOS	403805	2500	Avg	0.948031				2462.99	2462.99	Yes	2500	99	98.5	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	284311	13C8-PFOS	377152	2500	Avg	0.82973				2271.33	2271.33	Yes	2383	95	95.3	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	325213	13C8-PFOS	377152	2500	Avg	0.985331				2187.81	2187.81	Yes	2320	94	94.3	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	339892	13C8-PFOS	377152	2500	Avg	0.943409				2388.17	2388.17	Yes	2405	99	99.3	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	145605	13C2-PFDA	153600	1250	Avg	0.932642				1270.52	1270.52	Yes	1250	102	101.6	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	308568	13C7-PFUnA	145605	1250	Avg	1.011058				2620.04	2620.04	Yes	2500	105	104.8	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	115680	13C2-PFDA	153600	1250	Avg	0.761609				1236.08	1236.08	Yes	1250	99	98.9	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	185930	13C2-PFDoA	115680	1250	Ln	0.718295	33.9774			2749.74	2749.74	Yes	2500	110	110	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	91869	13C2-PFDA	153600	1250	Avg	0.582576				1283.32	1283.32	Yes	1250	103	102.7	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	676046	13C4-PFOS	403805	2500	Avg	1.831503				2285.27	2285.27	Yes	2500	91	91.4	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	794783	13C8-PFOSA	676046	2500	Avg	1.090045				2696.3	2696.3	Yes	2500	108	107.9	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2562195	13C4-PFOS	403805	2500	Avg	0.656639				24158	24157.6	Yes	25000	97	96.6	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	157938	13C4-PFOS	403805	2500	Avg	0.403922				2420.79	2420.79	Yes	2500	97	96.8	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	191261	D3-NMeFOSA	157938	2500	Avg	1.222625				2476.2	2476.2	Yes	2500	99	99	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3232049	13C4-PFOS	403805	2500	Avg	0.829443				24125	24124.58	Yes	25000	96	96.5	Yes
100924A077.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	188671	13C4-PFOS	403805	2500	Avg	0.466186				2505.61	2505.61	Yes	2500	100	100.2	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2898034	13C3-PFBA	1227995	5000	Avg	1.14247				10328	10328.38	Yes	10000	103	103.3	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	107782	13C4-PFBA	2898034	10000	Avg	0.846914				439.14	439.14	Yes	400	110	109.8	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1195591	13C2-PFHxA	729415	2500	Avg	0.796557				5144.36	5144.36	Yes	5000	103	102.9	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	45896	13C5-PFPeA	1195591	5000	Avg	0.874543				219.47	219.47	Yes	200	110	109.7	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	144804	18O2-PFHxS	398995	2500	Avg	0.169955				5338.51	5338.5	Yes	5000	107	106.8	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	795176	13C2-PFHxA	729415	2500	Avg	1.046383				2604.58	2604.58	Yes	2500	104	104.2	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	31097	13C5-PFHxA	795176	2500	Avg	0.9029				108.28	108.28	Yes	100	108	108.3	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	539201	18O2-PFHxS	398995	2500	Avg	1.319962				2559.54	2559.54	Yes	2500	102	102.4	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	26894	13C3-PFBS	539201	2500	Avg	1.207053				103.3	103.3	Yes	88.7	116	116.5	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	567201	13C2-PFHxA	729415	2500	Avg	0.186581				10419	10419.21	Yes	10000	104	104.2	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	866753	13C2-PFHxA	729415	2500	Avg	1.170685				2537.59	2537.59	Yes	2500	102	101.5	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	39252	13C4-PFHpA	866753	2500	Avg	1.077361				105.09	105.09	Yes	100	105	105.1	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	168175	18O2-PFHxS	398995	2500	Avg	0.184115				5723.29	5723.28	Yes	5000	114	114.5	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	29007	13C2-6:2FTS	168175	5000	Avg	2.253868				382.63	382.63	Yes	380	101	100.7	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	962641	13C4-PFOA	124950	2500	Avg	7.728869				2492.02	2492.02	Yes	2500	100	99.7	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	38302	13C8-PFOA	962641	2500	Ln	0.828626	32.8119			80.445	80.45	Yes	100	80	80.4	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	457592	18O2-PFHxS	398995	2500	Avg	1.171154				2448.14	2448.14	Yes	2500	98	97.9	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	24658	13C3-PFHxS	457592	2500	Avg	1.194012				112.83	112.83	Yes	94.1	120	119.9	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	24422	13C3-PFHxS	457592	2500	Ln	1.119323	33.81			88.997	89	Yes	91.4	97	97.4	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	475635	13C5-PFNA	516515	1250	Avg	0.935659				1230.22	1230.22	Yes	1250	98	98.4	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	40563	13C9-PFNA	475635	1250	Avg	0.837317				127.31	127.31	Yes	100	127	127.3	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	144261	18O2-PFHxS	398995	2500	Avg	0.170753				5293.62	5293.62	Yes	5000	106	105.9	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	31651	13C2-8:2FTS	144261	5000	Ln	1.94256	137			493.77	494.2	Yes	384	129	128.7	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	568339	13C4-PFOS	462506	2500	Avg	0.495989				6193.81	6193.81	Yes	5000	124	123.9	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	7742	D3-NMeFOSAA	568339	5000	Avg	0.795786				85.589	85.59	Yes	100	86	85.6	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	473415	13C2-PFDA	385280	1250	Avg	1.232298				1246.41	1246.41	Yes	1250	100	99.7	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	37094	13C6-PFDA	473415	1250	Avg	0.819341				119.54	119.54	Yes	100	120	119.5	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	405174	13C4-PFOS	462506	2500	Avg	0.364519				6008.19	6008.2	Yes	5000	120	120.2	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	8007	D5-NEtFOSAA	405174	5000	Avg	1.162779				84.977	84.98	Yes	100	85	85	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	492191	13C4-PFOS	462506	2500	Avg	0.970887				2740.23	2740.23	Yes	2500	110	109.6	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	20167	13C8-PFOS	492191	2500	Avg	0.939894				108.99	108.99	Yes	95.3	114	114.4	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	22582	13C8-PFOS	492191	2500	Avg	1.054191				108.81	108.81	Yes	92.8	117	117.2	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	27843	13C8-PFOS	492191	2500	Avg	1.337317				105.75	105.75	Yes	96.2	110	109.9	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	432779	13C2-PFDA	385280	1250	Avg	1.191252				1178.68	1178.68	Yes	1250	94	94.3	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	28035	13C7-PFUnA	432779	1250	Avg	0.853896				94.829	94.83	Yes	100	95	94.8	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	409410	13C2-PFDA	385280	1250	Avg	1.01948				1302.91	1302.91	Yes	1250	104	104.2	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	24864	13C2-PFDoA	409410	1250	Avg	0.772781				98.235	98.23	Yes	100	98	98.2	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	857340	13C4-PFOS	462506	2500	Avg	1.694128				2735.45	2735.45	Yes	2500	109	109.4	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	34706	13C8-PFOSA	857340	2500	Avg	0.99659				101.55	101.55	Yes	100	102	101.5	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	351061	13C2-PFDA	385280	1250	Avg	0.871708				1306.61	1306.61	Yes	1250	105	104.5	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3884289	13C4-PFOS	462506	2500	Avg	0.708623				29629	29629.13	Yes	25000	119	118.5	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	218972	13C4-PFOS	462506	2500	Avg	0.415479				2848.8	2848.8	Yes	2500	114	114	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	8540	D3-NMeFOSA	218972	2500	Avg	0.976696				99.827	99.83	Yes	100	100	99.8	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4211030	13C4-PFOS	462506	2500	Avg	0.758997				29990	29989.62	Yes	25000	120	120	Yes
101024001.d	CCV L1_SVLC-4100	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	231587	13C4-PFOS	462506	2500	Avg	0.441246				2836.98	2836.98	Yes	2500	113	113.5	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2748228	13C3-PFBA	1262011	5000	Avg	1.14247				9530.48	9530.48	Yes	10000	95	95.3	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2438180	13C4-PFBA	2748228	10000	Avg	0.846914				10475	10475.47	Yes	10000	105	104.8	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1186236	13C2-PFHxA	753549	2500	Avg	0.796557				4940.64	4940.63	Yes	5000	99	98.8	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1051680	13C5-PFPeA	1186236	5000	Avg	0.874543				5068.76	5068.76	Yes	5000	101	101.4	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	137965	18O2-PFHxS	453605	2500	Avg	0.169955				4474.02	4474.01	Yes	5000	89	89.5	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	779123	13C2-PFHxA	753549	2500	Avg	1.046383				2470.27	2470.27	Yes	2500	99	98.8	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	679343	13C5-PFHxA	779123	2500	Avg	0.9029				2414.26	2414.26	Yes	2500	97	96.6	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	494943	18O2-PFHxS	453605	2500	Avg	1.319962				2066.6	2066.6	Yes	2500	83	82.7	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	580007	13C3-PFBS	494943	2500	Avg	1.207053				2427.12	2427.12	Yes	2218	109	109.4	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	567355	13C2-PFHxA	753549	2500	Avg	0.186581				10088	10088.25	Yes	10000	101	100.9	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	798772	13C2-PFHxA	753549	2500	Avg	1.170685				2263.66	2263.66	Yes	2500	91	90.5	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	972538	13C4-PFHpA	798772	2500	Avg	1.077361				2825.29	2825.29	Yes	2500	113	113	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	160950	18O2-PFHxS	453605	2500	Avg	0.184115				4817.98	4817.97	Yes	5000	96	96.4	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	664917	13C2-6:2FTS	160950	5000	Avg	2.253868				9164.69	9164.69	Yes	9500	96	96.5	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	967214	13C4-PFOA	125253	2500	Avg	7.728869				2497.8	2497.8	Yes	2500	100	99.9	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	885501	13C8-PFOA	967214	2500	Ln	0.828626	32.8119			2722.55	2722.56	Yes	2500	109	108.9	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	490878	18O2-PFHxS	453605	2500	Avg	1.171154				2310.05	2310.05	Yes	2500	92	92.4	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	574722	13C3-PFHxS	490878	2500	Avg	1.194012				2451.41	2451.41	Yes	2353	104	104.2	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	568302	13C3-PFHxS	490878	2500	Ln	1.119323	33.81			2555.57	2555.57	Yes	2285	112	111.8	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	482706	13C5-PFNA	512608	1250	Avg	0.935659				1258.03	1258.03	Yes	1250	101	100.6	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	803239	13C9-PFNA	482706	1250	Avg	0.837317				2484.18	2484.18	Yes	2500	99	99.4	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	145780	18O2-PFHxS	453605	2500	Avg	0.170753				4705.35	4705.35	Yes	5000	94	94.1	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	604659	13C2-8:2FTS	145780	5000	Ln	1.94256	137			10605	10605.46	Yes	9600	110	110.5	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	577074	13C4-PFOS	471577	2500	Avg	0.495989				6168.03	6168.04	Yes	5000	123	123.4	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	195136	D3-NMeFOSAA	577074	5000	Avg	0.795786				2124.61	2124.61	Yes	2500	85	85	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	532760	13C2-PFDA	391682	1250	Avg	1.232298				1379.72	1379.72	Yes	1250	110	110.4	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	787426	13C6-PFDA	532760	1250	Avg	0.819341				2254.88	2254.88	Yes	2500	90	90.2	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	372255	13C4-PFOS	471577	2500	Avg	0.364519				5413.87	5413.87	Yes	5000	108	108.3	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	269624	D5-NEtFOSAA	372255	5000	Avg	1.162779				3114.52	3114.52	Yes	2500	125	124.6	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	483682	13C4-PFOS	471577	2500	Avg	0.970887				2641.06	2641.06	Yes	2500	106	105.6	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	399943	13C8-PFOS	483682	2500	Avg	0.939894				2199.38	2199.38	Yes	2383	92	92.3	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	452451	13C8-PFOS	483682	2500	Avg	1.054191				2218.36	2218.36	Yes	2320	96	95.6	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	663803	13C8-PFOS	483682	2500	Avg	1.337317				2565.58	2565.58	Yes	2405	107	106.7	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	423106	13C2-PFDA	391682	1250	Avg	1.191252				1133.5	1133.5	Yes	1250	91	90.7	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	672092	13C7-PFUnA	423106	1250	Avg	0.853896				2325.33	2325.33	Yes	2500	93	93	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	401359	13C2-PFDA	391682	1250	Avg	1.01948				1256.41	1256.41	Yes	1250	101	100.5	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	617745	13C2-PFDoA	401359	1250	Avg	0.772781				2489.6	2489.6	Yes	2500	100	99.6	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	852825	13C4-PFOS	471577	2500	Avg	1.694128				2668.71	2668.71	Yes	2500	107	106.7	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	823033	13C8-PFOSA	852825	2500	Avg	0.99659				2420.92	2420.92	Yes	2500	97	96.8	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	331688	13C2-PFDA	391682	1250	Avg	0.871708				1214.32	1214.33	Yes	1250	97	97.1	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3699132	13C4-PFOS	471577	2500	Avg	0.708623				27674	27674	Yes	25000	111	110.7	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	209624	13C4-PFOS	471577	2500	Avg	0.415479				2674.73	2674.73	Yes	2500	107	107	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	206002	D3-NMeFOSA	209624	2500	Avg	0.976696				2515.42	2515.42	Yes	2500	101	100.6	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3990517	13C4-PFOS	471577	2500	Avg	0.758997				27873	27872.54	Yes	25000	111	111.5	Yes
101024013.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	223522	13C4-PFOS	471577	2500	Avg	0.441246				2685.51	2685.51	Yes	2500	107	107.4	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2871500	13C3-PFBA	1285241	5000	Avg	1.14247				9777.99	9777.99	Yes	10000	98	97.8	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2521194	13C4-PFBA	2871500	10000	Avg	0.846914				10367	10367.12	Yes	10000	104	103.7	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1225016	13C2-PFHxA	759896	2500	Avg	0.796557				5059.54	5059.54	Yes	5000	101	101.2	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1092157	13C5-PFPeA	1225016	5000	Avg	0.874543				5097.21	5097.21	Yes	5000	102	101.9	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	152680	18O2-PFHxS	457135	2500	Avg	0.169955				4912.97	4912.97	Yes	5000	98	98.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	801626	13C2-PFHxA	759896	2500	Avg	1.046383				2520.39	2520.39	Yes	2500	101	100.8	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	711218	13C5-PFHxA	801626	2500	Avg	0.9029				2456.58	2456.58	Yes	2500	98	98.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	551528	18O2-PFHxS	457135	2500	Avg	1.319962				2285.08	2285.08	Yes	2500	91	91.4	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	609901	13C3-PFBS	551528	2500	Avg	1.207053				2290.37	2290.37	Yes	2218	103	103.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	565223	13C2-PFHxA	759896	2500	Avg	0.186581				9966.4	9966.4	Yes	10000	100	99.7	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	922720	13C2-PFHxA	759896	2500	Avg	1.170685				2593.08	2593.08	Yes	2500	104	103.7	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1016951	13C4-PFHpA	922720	2500	Avg	1.077361				2557.46	2557.46	Yes	2500	102	102.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	179744	18O2-PFHxS	457135	2500	Avg	0.184115				5339.02	5339.01	Yes	5000	107	106.8	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	727597	13C2-6:2FTS	179744	5000	Avg	2.253868				8980.03	8980.03	Yes	9500	95	94.5	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	958994	13C4-PFOA	128785	2500	Avg	7.728869				2408.66	2408.66	Yes	2500	96	96.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	898844	13C8-PFOA	958994	2500	Ln	0.828626	32.8119			2788.21	2788.21	Yes	2500	112	111.5	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	485764	18O2-PFHxS	457135	2500	Avg	1.171154				2268.33	2268.33	Yes	2500	91	90.7	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	563929	13C3-PFHxS	485764	2500	Avg	1.194012				2430.7	2430.69	Yes	2353	103	103.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	509053	13C3-PFHxS	485764	2500	Ln	1.119323	33.81			2310.37	2310.37	Yes	2285	101	101.1	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	511493	13C5-PFNA	537886	1250	Avg	0.935659				1270.4	1270.4	Yes	1250	102	101.6	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	834931	13C9-PFNA	511493	1250	Avg	0.837317				2436.86	2436.86	Yes	2500	97	97.5	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	150950	18O2-PFHxS	457135	2500	Avg	0.170753				4834.59	4834.6	Yes	5000	97	96.7	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	720744	13C2-8:2FTS	150950	5000	Ln	1.94256	137			12219	12219.24	Yes	9600	127	127.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	660363	13C4-PFOS	458247	2500	Avg	0.495989				7263.58	7263.59	Yes	5000	145	145.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	232134	D3-NMeFOSAA	660363	5000	Avg	0.795786				2208.66	2208.66	Yes	2500	88	88.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	487389	13C2-PFDA	395783	1250	Avg	1.232298				1249.15	1249.15	Yes	1250	100	99.9	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	813934	13C6-PFDA	487389	1250	Avg	0.819341				2547.76	2547.76	Yes	2500	102	101.9	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	434578	13C4-PFOS	458247	2500	Avg	0.364519				6504.11	6504.11	Yes	5000	130	130.1	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	272366	D5-NEtFOSAA	434578	5000	Avg	1.162779				2695	2695	Yes	2500	108	107.8	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	492118	13C4-PFOS	458247	2500	Avg	0.970887				2765.29	2765.29	Yes	2500	111	110.6	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	445504	13C8-PFOS	492118	2500	Avg	0.939894				2407.93	2407.93	Yes	2383	101	101	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	464568	13C8-PFOS	492118	2500	Avg	1.054191				2238.72	2238.72	Yes	2320	96	96.5	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	641528	13C8-PFOS	492118	2500	Avg	1.337317				2436.98	2436.98	Yes	2405	101	101.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	380011	13C2-PFDA	395783	1250	Avg	1.191252				1007.5	1007.5	Yes	1250	81	80.6	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	896711	13C7-PFUnA	380011	1250	Avg	0.853896				3454.31	3454.31	Yes	2500	138	138.2	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	439435	13C2-PFDA	395783	1250	Avg	1.01948				1361.35	1361.35	Yes	1250	109	108.9	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	672276	13C2-PFDoA	439435	1250	Avg	0.772781				2474.61	2474.61	Yes	2500	99	99	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	880674	13C4-PFOS	458247	2500	Avg	1.694128				2836.02	2836.02	Yes	2500	113	113.4	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	885288	13C8-PFOSA	880674	2500	Avg	0.99659				2521.7	2521.7	Yes	2500	101	100.9	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	368768	13C2-PFDA	395783	1250	Avg	0.871708				1336.09	1336.09	Yes	1250	107	106.9	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3910902	13C4-PFOS	458247	2500	Avg	0.708623				30109	30109.4	Yes	25000	120	120.4	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	220548	13C4-PFOS	458247	2500	Avg	0.415479				2895.97	2895.97	Yes	2500	116	115.8	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	209029	D3-NMeFOSA	220548	2500	Avg	0.976696				2425.96	2425.96	Yes	2500	97	97	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4219849	13C4-PFOS	458247	2500	Avg	0.758997				30332	30331.73	Yes	25000	121	121.3	Yes
101024031.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	235820	13C4-PFOS	458247	2500	Avg	0.441246				2915.68	2915.68	Yes	2500	117	116.6	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2727390	13C3-PFBA	1229173	5000	Avg	1.14247				9710.9	9710.9	Yes	10000	97	97.1	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2433851	13C4-PFBA	2727390	10000	Avg	0.846914				10537	10536.77	Yes	10000	105	105.4	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1179599	13C2-PFHxA	732605	2500	Avg	0.796557				5053.45	5053.45	Yes	5000	101	101.1	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1031967	13C5-PFPeA	1179599	5000	Avg	0.874543				5001.73	5001.73	Yes	5000	100	100	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	155592	18O2-PFHxS	397353	2500	Avg	0.169955				5759.93	5759.93	Yes	5000	115	115.2	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	770746	13C2-PFHxA	732605	2500	Avg	1.046383				2513.57	2513.57	Yes	2500	101	100.5	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	664199	13C5-PFHxA	770746	2500	Avg	0.9029				2386.09	2386.09	Yes	2500	95	95.4	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	519141	18O2-PFHxS	397353	2500	Avg	1.319962				2474.5	2474.5	Yes	2500	99	99	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	596210	13C3-PFBS	519141	2500	Avg	1.207053				2378.63	2378.63	Yes	2218	107	107.2	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	532016	13C2-PFHxA	732605	2500	Avg	0.186581				9730.33	9730.33	Yes	10000	97	97.3	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	886489	13C2-PFHxA	732605	2500	Avg	1.170685				2584.07	2584.06	Yes	2500	103	103.4	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	960638	13C4-PFHpA	886489	2500	Avg	1.077361				2514.58	2514.58	Yes	2500	101	100.6	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	161885	18O2-PFHxS	397353	2500	Avg	0.184115				5531.99	5531.98	Yes	5000	111	110.6	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	709793	13C2-6:2FTS	161885	5000	Avg	2.253868				9726.72	9726.72	Yes	9500	102	102.4	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	891651	13C4-PFOA	131392	2500	Avg	7.728869				2195.08	2195.08	Yes	2500	88	87.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	898618	13C8-PFOA	891651	2500	Ln	0.828626	32.8119			3001.02	3001.02	Yes	2500	120	120	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	489939	18O2-PFHxS	397353	2500	Avg	1.171154				2632.03	2632.03	Yes	2500	105	105.3	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	530400	13C3-PFHxS	489939	2500	Avg	1.194012				2266.69	2266.69	Yes	2353	96	96.3	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	490963	13C3-PFHxS	489939	2500	Ln	1.119323	33.81			2207.96	2207.96	Yes	2285	97	96.6	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	486806	13C5-PFNA	498563	1250	Avg	0.935659				1304.45	1304.45	Yes	1250	104	104.4	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	740521	13C9-PFNA	486806	1250	Avg	0.837317				2270.92	2270.92	Yes	2500	91	90.8	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	144090	18O2-PFHxS	397353	2500	Avg	0.170753				5309.2	5309.2	Yes	5000	106	106.2	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	613745	13C2-8:2FTS	144090	5000	Ln	1.94256	137			10893	10892.99	Yes	9600	113	113.5	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	565469	13C4-PFOS	463865	2500	Avg	0.495989				6144.48	6144.48	Yes	5000	123	122.9	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	216492	D3-NMeFOSAA	565469	5000	Avg	0.795786				2405.51	2405.51	Yes	2500	96	96.2	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	495877	13C2-PFDA	389180	1250	Avg	1.232298				1292.46	1292.46	Yes	1250	103	103.4	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	785345	13C6-PFDA	495877	1250	Avg	0.819341				2416.19	2416.19	Yes	2500	97	96.6	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	419820	13C4-PFOS	463865	2500	Avg	0.364519				6207.13	6207.14	Yes	5000	124	124.1	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	246502	D5-NEtFOSAA	419820	5000	Avg	1.162779				2524.82	2524.82	Yes	2500	101	101	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	501097	13C4-PFOS	463865	2500	Avg	0.970887				2781.64	2781.64	Yes	2500	111	111.3	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	417258	13C8-PFOS	501097	2500	Avg	0.939894				2214.85	2214.85	Yes	2383	93	92.9	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	433390	13C8-PFOS	501097	2500	Avg	1.054191				2051.06	2051.06	Yes	2320	88	88.4	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	661833	13C8-PFOS	501097	2500	Avg	1.337317				2469.06	2469.06	Yes	2405	103	102.7	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	404041	13C2-PFDA	389180	1250	Avg	1.191252				1089.39	1089.38	Yes	1250	87	87.2	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	724360	13C7-PFUnA	404041	1250	Avg	0.853896				2624.42	2624.42	Yes	2500	105	105	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	435680	13C2-PFDA	389180	1250	Avg	1.01948				1372.61	1372.61	Yes	1250	110	109.8	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	631806	13C2-PFDoA	435680	1250	Avg	0.772781				2345.69	2345.69	Yes	2500	94	93.8	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	850400	13C4-PFOS	463865	2500	Avg	1.694128				2705.36	2705.36	Yes	2500	108	108.2	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	838062	13C8-PFOSA	850400	2500	Avg	0.99659				2472.16	2472.16	Yes	2500	99	98.9	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	331406	13C2-PFDA	389180	1250	Avg	0.871708				1221.09	1221.09	Yes	1250	98	97.7	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3698737	13C4-PFOS	463865	2500	Avg	0.708623				28131	28131.09	Yes	25000	113	112.5	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	207448	13C4-PFOS	463865	2500	Avg	0.415479				2690.97	2690.97	Yes	2500	108	107.6	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	205458	D3-NMeFOSA	207448	2500	Avg	0.976696				2535.1	2535.1	Yes	2500	101	101.4	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4079544	13C4-PFOS	463865	2500	Avg	0.758997				28968	28968.1	Yes	25000	116	115.9	Yes
101024052.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	219970	13C4-PFOS	463865	2500	Avg	0.441246				2686.77	2686.77	Yes	2500	107	107.5	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1503509	13C3-PFBA	686224	5000	Avg	1.117208				9805.64	9805.64	Yes	10000	98	98.1	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1392484	13C4-PFBA	1503509	10000	Avg	0.88639				10449	10448.63	Yes	10000	104	104.5	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	588726	13C2-PFHxA	334041	2500	Avg	0.877344				5022.08	5022.08	Yes	5000	100	100.4	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	668505	13C5-PFPeA	588726	5000	Avg	1.115612				5089.19	5089.19	Yes	5000	102	101.8	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	88755	18O2-PFHxS	283275	2500	Avg	0.180297				4344.47	4344.46	Yes	5000	87	86.9	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	318256	13C2-PFHxA	334041	2500	Avg	0.966846				2463.54	2463.54	Yes	2500	99	98.5	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	401522	13C5-PFHxA	318256	2500	Avg	1.270837				2481.89	2481.89	Yes	2500	99	99.3	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	355747	18O2-PFHxS	283275	2500	Avg	1.392729				2254.27	2254.27	Yes	2500	90	90.2	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	572752	13C3-PFBS	355747	2500	Avg	1.888315				2131.53	2131.53	Yes	2218	96	96.1	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	365983	13C2-PFHxA	334041	2500	Avg	0.261722				10466	10465.52	Yes	10000	105	104.7	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	319154	13C2-PFHxA	334041	2500	Avg	0.967581				2468.61	2468.61	Yes	2500	99	98.7	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	444572	13C4-PFHpA	319154	2500	Avg	1.249606				2786.82	2786.82	Yes	2500	111	111.5	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	105177	18O2-PFHxS	283275	2500	Avg	0.230272				4030.98	4030.99	Yes	5000	81	80.6	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	463652	13C2-6:2FTS	105177	5000	Avg	1.993525				11057	11056.55	Yes	9500	116	116.4	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	383899	13C4-PFOA	94503	2500	Avg	3.983884				2549.2	2549.2	Yes	2500	102	102	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	437943	13C8-PFOA	383899	2500	Avg	1.136187				2510.1	2510.1	Yes	2500	100	100.4	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	267962	18O2-PFHxS	283275	2500	Avg	1.039477				2275.04	2275.05	Yes	2500	91	91	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	277147	13C3-PFHxS	267962	2500	Avg	1.186677				2178.94	2178.94	Yes	2353	93	92.6	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	266206	13C3-PFHxS	267962	2500	Avg	1.062503				2337.51	2337.52	Yes	2285	102	102.3	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	111993	13C5-PFNA	160934	1250	Avg	0.703994				1235.62	1235.62	Yes	1250	99	98.8	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	331700	13C9-PFNA	111993	1250	Avg	1.297596				2853.15	2853.15	Yes	2500	114	114.1	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	102157	18O2-PFHxS	283275	2500	Avg	0.22013				4095.63	4095.63	Yes	5000	82	81.9	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	318799	13C2-8:2FTS	102157	5000	Avg	1.554884				10035	10035.08	Yes	9600	105	104.5	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	240920	13C4-PFOS	400082	2500	Avg	0.311922				4826.34	4826.34	Yes	5000	97	96.5	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	93952	D3-NMeFOSAA	240920	5000	Avg	0.757822				2572.98	2572.98	Yes	2500	103	102.9	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	142643	13C2-PFDA	160730	1250	Avg	0.918284				1208.05	1208.05	Yes	1250	97	96.6	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	309457	13C6-PFDA	142643	1250	Avg	1.042575				2601.07	2601.07	Yes	2500	104	104	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	286414	13C4-PFOS	400082	2500	Avg	0.390921				4578.21	4578.22	Yes	5000	92	91.6	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	133535	D5-NEtFOSAA	286414	5000	Avg	0.982019				2373.84	2373.84	Yes	2500	95	95	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	371388	13C4-PFOS	400082	2500	Avg	0.935894				2479.66	2479.66	Yes	2500	99	99.2	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	295774	13C8-PFOS	371388	2500	Avg	0.890926				2234.76	2234.76	Yes	2383	94	93.8	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	340663	13C8-PFOS	371388	2500	Avg	0.971825				2359.66	2359.66	Yes	2320	102	101.7	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	344493	13C8-PFOS	371388	2500	Avg	1.039184				2231.52	2231.52	Yes	2405	93	92.8	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	139635	13C2-PFDA	160730	1250	Avg	0.837816				1296.16	1296.16	Yes	1250	104	103.7	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	272509	13C7-PFUnA	139635	1250	Avg	0.968109				2519.84	2519.84	Yes	2500	101	100.8	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	127649	13C2-PFDA	160730	1250	Avg	0.786151				1262.77	1262.77	Yes	1250	101	101	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	158952	13C2-PFDoA	127649	1250	Avg	0.645409				2411.7	2411.7	Yes	2500	96	96.5	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	96120	13C2-PFDA	160730	1250	Avg	0.587286				1272.85	1272.85	Yes	1250	102	101.8	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	703246	13C4-PFOS	400082	2500	Avg	1.82193				2411.94	2411.94	Yes	2500	96	96.5	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	735343	13C8-PFOSA	703246	2500	Avg	1.082718				2414.39	2414.39	Yes	2500	97	96.6	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2529398	13C4-PFOS	400082	2500	Avg	0.665118				23763	23763.45	Yes	25000	95	95.1	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	149909	13C4-PFOS	400082	2500	Avg	0.401684				2332.03	2332.03	Yes	2500	93	93.3	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	189794	D3-NMeFOSA	149909	2500	Avg	1.231179				2570.83	2570.83	Yes	2500	103	102.8	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3346438	13C4-PFOS	400082	2500	Avg	0.841004				24864	24864.27	Yes	25000	99	99.5	Yes
101724A106.d	CCV L5F_SVLC-4141	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	177101	13C4-PFOS	400082	2500	Avg	0.472781				2340.73	2340.73	Yes	2500	94	93.6	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1482242	13C3-PFBA	670083	5000	Avg	1.117208				9899.8	9899.8	Yes	10000	99	99	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1352247	13C4-PFBA	1482242	10000	Avg	0.88639				10292	10292.29	Yes	10000	103	102.9	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	572966	13C2-PFHxA	337513	2500	Avg	0.877344				4837.36	4837.36	Yes	5000	97	96.7	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	649876	13C5-PFPeA	572966	5000	Avg	1.115612				5083.45	5083.45	Yes	5000	102	101.7	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	86448	18O2-PFHxS	259176	2500	Avg	0.180297				4625	4625	Yes	5000	93	92.5	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	325289	13C2-PFHxA	337513	2500	Avg	0.966846				2492.08	2492.08	Yes	2500	100	99.7	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	400939	13C5-PFHxA	325289	2500	Avg	1.270837				2424.71	2424.71	Yes	2500	97	97	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	338713	18O2-PFHxS	259176	2500	Avg	1.392729				2345.91	2345.91	Yes	2500	94	93.8	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	566998	13C3-PFBS	338713	2500	Avg	1.888315				2216.23	2216.23	Yes	2218	100	99.9	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	361300	13C2-PFHxA	337513	2500	Avg	0.261722				10225	10225.33	Yes	10000	102	102.3	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	319023	13C2-PFHxA	337513	2500	Avg	0.967581				2442.22	2442.22	Yes	2500	98	97.7	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	414971	13C4-PFHpA	319023	2500	Avg	1.249606				2602.33	2602.33	Yes	2500	104	104.1	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	109594	18O2-PFHxS	259176	2500	Avg	0.230272				4590.82	4590.83	Yes	5000	92	91.8	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	421267	13C2-6:2FTS	109594	5000	Avg	1.993525				9640.93	9640.93	Yes	9500	101	101.5	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	352804	13C4-PFOA	86193	2500	Avg	3.983884				2568.59	2568.59	Yes	2500	103	102.7	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	428864	13C8-PFOA	352804	2500	Avg	1.136187				2674.71	2674.71	Yes	2500	107	107	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	238567	18O2-PFHxS	259176	2500	Avg	1.039477				2213.81	2213.81	Yes	2500	89	88.6	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	285584	13C3-PFHxS	238567	2500	Avg	1.186677				2521.92	2521.92	Yes	2353	107	107.2	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	258260	13C3-PFHxS	238567	2500	Avg	1.062503				2547.16	2547.16	Yes	2285	111	111.5	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	114206	13C5-PFNA	177918	1250	Avg	0.703994				1139.75	1139.75	Yes	1250	91	91.2	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	283266	13C9-PFNA	114206	1250	Avg	1.297596				2389.33	2389.33	Yes	2500	96	95.6	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	98880	18O2-PFHxS	259176	2500	Avg	0.22013				4332.86	4332.86	Yes	5000	87	86.7	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	322326	13C2-8:2FTS	98880	5000	Avg	1.554884				10482	10482.36	Yes	9600	109	109.2	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	237678	13C4-PFOS	369549	2500	Avg	0.311922				5154.79	5154.79	Yes	5000	103	103.1	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	90416	D3-NMeFOSAA	237678	5000	Avg	0.757822				2509.92	2509.92	Yes	2500	100	100.4	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	142407	13C2-PFDA	162956	1250	Avg	0.918284				1189.58	1189.58	Yes	1250	95	95.2	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	288037	13C6-PFDA	142407	1250	Avg	1.042575				2425.04	2425.04	Yes	2500	97	97	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	317871	13C4-PFOS	369549	2500	Avg	0.390921				5500.85	5500.85	Yes	5000	110	110	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	142453	D5-NEtFOSAA	317871	5000	Avg	0.982019				2281.76	2281.76	Yes	2500	91	91.3	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	346469	13C4-PFOS	369549	2500	Avg	0.935894				2504.41	2504.41	Yes	2500	100	100.2	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	284420	13C8-PFOS	346469	2500	Avg	0.890926				2303.53	2303.53	Yes	2383	97	96.7	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	337960	13C8-PFOS	346469	2500	Avg	0.971825				2509.3	2509.3	Yes	2320	108	108.2	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	331233	13C8-PFOS	346469	2500	Avg	1.039184				2299.94	2299.94	Yes	2405	96	95.6	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	134518	13C2-PFDA	162956	1250	Avg	0.837816				1231.6	1231.6	Yes	1250	99	98.5	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	273320	13C7-PFUnA	134518	1250	Avg	0.968109				2623.47	2623.47	Yes	2500	105	104.9	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	122685	13C2-PFDA	162956	1250	Avg	0.786151				1197.09	1197.09	Yes	1250	96	95.8	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	170440	13C2-PFDoA	122685	1250	Avg	0.645409				2690.64	2690.64	Yes	2500	108	107.6	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	93501	13C2-PFDA	162956	1250	Avg	0.587286				1221.25	1221.25	Yes	1250	98	97.7	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	659413	13C4-PFOS	369549	2500	Avg	1.82193				2448.46	2448.46	Yes	2500	98	97.9	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	739241	13C8-PFOSA	659413	2500	Avg	1.082718				2588.53	2588.53	Yes	2500	104	103.5	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2475920	13C4-PFOS	369549	2500	Avg	0.665118				25183	25182.91	Yes	25000	101	100.7	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	152248	13C4-PFOS	369549	2500	Avg	0.401684				2564.1	2564.1	Yes	2500	103	102.6	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	182435	D3-NMeFOSA	152248	2500	Avg	1.231179				2433.19	2433.19	Yes	2500	97	97.3	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3134770	13C4-PFOS	369549	2500	Avg	0.841004				25216	25215.97	Yes	25000	101	100.9	Yes
101724A120.d	CCV L5G_SVLC-4141	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	178110	13C4-PFOS	369549	2500	Avg	0.472781				2548.57	2548.57	Yes	2500	102	101.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1879018	13C3-PFBA	827990	5000	Avg	1.129814				10043	10043.13	Yes	10000	100	100.4	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1626013	13C4-PFBA	1879018	10000	Avg	0.885929				9767.74	9767.74	Yes	10000	98	97.7	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	916257	13C2-PFHxA	523776	2500	Avg	0.857148				5102.18	5102.18	Yes	5000	102	102	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	815165	13C5-PFPeA	916257	5000	Avg	0.938323				4740.74	4740.74	Yes	5000	95	94.8	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	111505	18O2-PFHxS	371948	2500	Avg	0.153383				4886.24	4886.24	Yes	5000	98	97.7	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	579678	13C2-PFHxA	523776	2500	Avg	1.049515				2636.29	2636.29	Yes	2500	105	105.5	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	518277	13C5-PFHxA	579678	2500	Avg	0.953706				2343.69	2343.69	Yes	2500	94	93.7	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	459762	18O2-PFHxS	371948	2500	Avg	1.230963				2510.42	2510.42	Yes	2500	100	100.4	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	492210	13C3-PFBS	459762	2500	Avg	1.179075				2269.95	2269.95	Yes	2218	102	102.3	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	425013	13C2-PFHxA	523776	2500	Avg	0.198761				10206	10206.23	Yes	10000	102	102.1	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	666833	13C2-PFHxA	523776	2500	Avg	1.180421				2696.34	2696.34	Yes	2500	108	107.9	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	630175	13C4-PFHpA	666833	2500	Avg	1.075282				2197.16	2197.16	Yes	2500	88	87.9	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	128502	18O2-PFHxS	371948	2500	Avg	0.174243				4956.91	4956.92	Yes	5000	99	99.1	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	422756	13C2-6:2FTS	128502	5000	Avg	1.871351				8790.11	8790.12	Yes	9500	93	92.5	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	716075	13C4-PFOA	100125	2500	Avg	5.565963				3212.3	3212.3	Yes	2500	128	128.5	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	651768	13C8-PFOA	716075	2500	Avg	0.936494				2429.79	2429.79	Yes	2500	97	97.2	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	398207	18O2-PFHxS	371948	2500	Avg	1.152086				2323.17	2323.17	Yes	2500	93	92.9	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	424520	13C3-PFHxS	398207	2500	Avg	1.033758				2578.16	2578.16	Yes	2353	110	109.6	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	392434	13C3-PFHxS	398207	2500	Avg	1.088072				2264.33	2264.33	Yes	2285	99	99.1	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	389330	13C5-PFNA	403771	1250	Avg	0.879621				1370.24	1370.24	Yes	1250	110	109.6	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	721477	13C9-PFNA	389330	1250	Avg	0.878014				2638.23	2638.23	Yes	2500	106	105.5	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	125655	18O2-PFHxS	371948	2500	Avg	0.179078				4716.24	4716.23	Yes	5000	94	94.3	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	387198	13C2-8:2FTS	125655	5000	Avg	1.848705				8334.04	8334.04	Yes	9600	87	86.8	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	389539	13C4-PFOS	483566	2500	Avg	0.403496				4991.1	4991.1	Yes	5000	100	99.8	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	159091	D3-NMeFOSAA	389539	5000	Avg	0.75711				2697.15	2697.15	Yes	2500	108	107.9	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	374014	13C2-PFDA	329106	1250	Avg	1.059721				1340.51	1340.51	Yes	1250	107	107.2	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	637010	13C6-PFDA	374014	1250	Ln	0.909309	11.7852			2328.34	2328.34	Yes	2500	93	93.1	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	322358	13C4-PFOS	483566	2500	Avg	0.306761				5432.79	5432.79	Yes	5000	109	108.7	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	164628	D5-NEtFOSAA	322358	5000	Avg	1.032095				2474.09	2474.09	Yes	2500	99	99	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	493667	13C4-PFOS	483566	2500	Avg	1.00392				2542.25	2542.26	Yes	2500	102	101.7	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	370666	13C8-PFOS	493667	2500	Avg	0.712934				2632.93	2632.93	Yes	2383	110	110.5	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	423920	13C8-PFOS	493667	2500	Avg	0.965687				2223.07	2223.07	Yes	2320	96	95.8	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	393662	13C8-PFOS	493667	2500	Avg	0.985293				2023.32	2023.32	Yes	2405	84	84.1	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	308197	13C2-PFDA	329106	1250	Avg	1.028459				1138.19	1138.19	Yes	1250	91	91.1	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	569015	13C7-PFUnA	308197	1250	Ln	0.909251	3.384569			2534.45	2534.45	Yes	2500	101	101.4	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	276078	13C2-PFDA	329106	1250	Avg	0.929658				1127.93	1127.93	Yes	1250	90	90.2	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	379880	13C2-PFDoA	276078	1250	Avg	0.670344				2565.82	2565.82	Yes	2500	103	102.6	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	749318	13C4-PFOS	483566	2500	Avg	1.575197				2459.32	2459.32	Yes	2500	98	98.4	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	744287	13C8-PFOSA	749318	2500	Avg	1.018821				2437.34	2437.34	Yes	2500	97	97.5	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	242556	13C2-PFDA	329106	1250	Avg	0.817886				1126.4	1126.4	Yes	1250	90	90.1	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2783549	13C4-PFOS	483566	2500	Avg	0.538815				26708	26708.13	Yes	25000	107	106.8	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	194185	13C4-PFOS	483566	2500	Avg	0.392108				2560.32	2560.32	Yes	2500	102	102.4	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	181797	D3-NMeFOSA	194185	2500	Avg	0.957649				2444.02	2444.02	Yes	2500	98	97.8	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3437090	13C4-PFOS	483566	2500	Avg	0.666639				26655	26655.35	Yes	25000	107	106.6	Yes
102324083.d	CCV L5F_SVLC-4165	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	211462	13C4-PFOS	483566	2500	Avg	0.416058				2627.62	2627.62	Yes	2500	105	105.1	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2070149	13C3-PFBA	893203	5000	Avg	1.129814				10257	10256.86	Yes	10000	103	102.6	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1779225	13C4-PFBA	2070149	10000	Avg	0.885929				9701.31	9701.31	Yes	10000	97	97	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	959919	13C2-PFHxA	575841	2500	Avg	0.857148				4862.02	4862.01	Yes	5000	97	97.2	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	867728	13C5-PFPeA	959919	5000	Avg	0.938323				4816.89	4816.89	Yes	5000	96	96.3	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	110860	18O2-PFHxS	379884	2500	Avg	0.153383				4756.49	4756.49	Yes	5000	95	95.1	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	600791	13C2-PFHxA	575841	2500	Avg	1.049515				2485.26	2485.26	Yes	2500	99	99.4	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	551088	13C5-PFHxA	600791	2500	Avg	0.953706				2404.49	2404.49	Yes	2500	96	96.2	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	461205	18O2-PFHxS	379884	2500	Avg	1.230963				2465.69	2465.69	Yes	2500	99	98.6	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	493093	13C3-PFBS	461205	2500	Avg	1.179075				2266.91	2266.91	Yes	2218	102	102.2	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	435137	13C2-PFHxA	575841	2500	Avg	0.198761				9504.59	9504.57	Yes	10000	95	95	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	700356	13C2-PFHxA	575841	2500	Avg	1.180421				2575.84	2575.84	Yes	2500	103	103	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	728543	13C4-PFHpA	700356	2500	Avg	1.075282				2418.54	2418.54	Yes	2500	97	96.7	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	129817	18O2-PFHxS	379884	2500	Avg	0.174243				4903.03	4903.04	Yes	5000	98	98.1	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	450187	13C2-6:2FTS	129817	5000	Avg	1.871351				9265.65	9265.66	Yes	9500	98	97.5	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	769578	13C4-PFOA	104217	2500	Avg	5.565963				3316.76	3316.76	Yes	2500	133	132.7	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	701542	13C8-PFOA	769578	2500	Avg	0.936494				2433.53	2433.53	Yes	2500	97	97.3	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	446671	18O2-PFHxS	379884	2500	Avg	1.152086				2551.48	2551.48	Yes	2500	102	102.1	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	462792	13C3-PFHxS	446671	2500	Avg	1.033758				2505.64	2505.64	Yes	2353	106	106.5	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	350361	13C3-PFHxS	446671	2500	Avg	1.088072				1802.23	1802.23	Yes	2285	79	78.9	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	389107	13C5-PFNA	462093	1250	Avg	0.879621				1196.61	1196.61	Yes	1250	96	95.7	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	676225	13C9-PFNA	389107	1250	Avg	0.878014				2474.18	2474.18	Yes	2500	99	99	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	138506	18O2-PFHxS	379884	2500	Avg	0.179078				5089.98	5089.97	Yes	5000	102	101.8	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	443821	13C2-8:2FTS	138506	5000	Avg	1.848705				8666.46	8666.46	Yes	9600	90	90.3	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	417102	13C4-PFOS	514115	2500	Avg	0.403496				5026.7	5026.7	Yes	5000	101	100.5	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	151049	D3-NMeFOSAA	417102	5000	Avg	0.75711				2391.59	2391.59	Yes	2500	96	95.7	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	393078	13C2-PFDA	333138	1250	Avg	1.059721				1391.79	1391.79	Yes	1250	111	111.3	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	673054	13C6-PFDA	393078	1250	Ln	0.909309	11.7852			2340.84	2340.84	Yes	2500	94	93.6	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	343795	13C4-PFOS	514115	2500	Avg	0.306761				5449.79	5449.78	Yes	5000	109	109	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	172822	D5-NEtFOSAA	343795	5000	Avg	1.032095				2435.29	2435.29	Yes	2500	97	97.4	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	539494	13C4-PFOS	514115	2500	Avg	1.00392				2613.17	2613.17	Yes	2500	105	104.5	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	401561	13C8-PFOS	539494	2500	Avg	0.712934				2610.09	2610.09	Yes	2383	110	109.5	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	470309	13C8-PFOS	539494	2500	Avg	0.965687				2256.84	2256.84	Yes	2320	97	97.3	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	498519	13C8-PFOS	539494	2500	Avg	0.985293				2344.61	2344.61	Yes	2405	97	97.5	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	347475	13C2-PFDA	333138	1250	Avg	1.028459				1267.72	1267.72	Yes	1250	101	101.4	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	605886	13C7-PFUnA	347475	1250	Ln	0.909251	3.384569			2393.42	2393.42	Yes	2500	96	95.7	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	279812	13C2-PFDA	333138	1250	Avg	0.929658				1129.35	1129.35	Yes	1250	90	90.3	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	402047	13C2-PFDoA	279812	1250	Avg	0.670344				2679.31	2679.31	Yes	2500	107	107.2	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	796281	13C4-PFOS	514115	2500	Avg	1.575197				2458.17	2458.17	Yes	2500	98	98.3	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	771579	13C8-PFOSA	796281	2500	Avg	1.018821				2377.7	2377.7	Yes	2500	95	95.1	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	262459	13C2-PFDA	333138	1250	Avg	0.817886				1204.08	1204.08	Yes	1250	96	96.3	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2984083	13C4-PFOS	514115	2500	Avg	0.538815				26931	26930.91	Yes	25000	108	107.7	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	202727	13C4-PFOS	514115	2500	Avg	0.392108				2514.12	2514.12	Yes	2500	101	100.6	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	197809	D3-NMeFOSA	202727	2500	Avg	0.957649				2547.23	2547.23	Yes	2500	102	101.9	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3634868	13C4-PFOS	514115	2500	Avg	0.666639				26514	26514.15	Yes	25000	106	106.1	Yes
102324104.d	CCV L5G_SVLC-4165	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	220617	13C4-PFOS	514115	2500	Avg	0.416058				2578.49	2578.49	Yes	2500	103	103.1	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3120021	13C3-PFBA	1397558	5000	Avg	1.14247				9770.41	9770.41	Yes	10000	98	97.7	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1303125	13C2-PFHxA	813645	2500	Avg	0.796557				5026.6	5026.6	Yes	5000	101	100.5	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	156151	18O2-PFHxS	451335	2500	Avg	0.169955				5089.23	5089.23	Yes	5000	102	101.8	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	852748	13C2-PFHxA	813645	2500	Avg	1.046383				2504	2504	Yes	2500	100	100.2	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	568844	18O2-PFHxS	451335	2500	Avg	1.319962				2387.11	2387.11	Yes	2500	95	95.5	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	594825	13C2-PFHxA	813645	2500	Avg	0.186581				9795.5	9795.51	Yes	10000	98	98	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	972966	13C2-PFHxA	813645	2500	Avg	1.170685				2553.66	2553.66	Yes	2500	102	102.1	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	169026	18O2-PFHxS	451335	2500	Avg	0.184115				5085.18	5085.17	Yes	5000	102	101.7	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1076431	13C4-PFOA	132821	2500	Avg	7.728869				2621.46	2621.46	Yes	2500	105	104.9	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	550692	18O2-PFHxS	451335	2500	Avg	1.171154				2604.57	2604.57	Yes	2500	104	104.2	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	480036	13C5-PFNA	554028	1250	Avg	0.935659				1157.54	1157.54	Yes	1250	93	92.6	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	159171	18O2-PFHxS	451335	2500	Avg	0.170753				5163.41	5163.41	Yes	5000	103	103.3	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	614204	13C4-PFOS	545435	2500	Avg	0.495989				5675.94	5675.94	Yes	5000	114	113.5	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	545018	13C2-PFDA	435479	1250	Avg	1.232298				1269.52	1269.52	Yes	1250	102	101.6	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	433645	13C4-PFOS	545435	2500	Avg	0.364519				5452.69	5452.69	Yes	5000	109	109.1	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	520158	13C4-PFOS	545435	2500	Avg	0.970887				2455.63	2455.63	Yes	2500	98	98.2	Yes
100924130.d	CCB A8	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3548	13C8-PFOS	520158	2500	Avg	1.054191		0.01	16.176	0.16176	0.1618	Yes				
100924130.d	CCB A8	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	450584	13C2-PFDA	435479	1250	Avg	1.191252				1085.71	1085.71	Yes	1250	87	86.9	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	433867	13C2-PFDA	435479	1250	Avg	1.01948				1221.58	1221.58	Yes	1250	98	97.7	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	945059	13C4-PFOS	545435	2500	Avg	1.694128				2556.88	2556.88	Yes	2500	102	102.3	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	369576	13C2-PFDA	435479	1250	Avg	0.871708				1216.96	1216.96	Yes	1250	97	97.4	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4206097	13C4-PFOS	545435	2500	Avg	0.708623				27206	27205.77	Yes	25000	109	108.8	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	238747	13C4-PFOS	545435	2500	Avg	0.415479				2633.82	2633.82	Yes	2500	105	105.4	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4579185	13C4-PFOS	545435	2500	Avg	0.758997				27653	27653.18	Yes	25000	111	110.6	Yes
100924130.d	CCB A8	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	252035	13C4-PFOS	545435	2500	Avg	0.441246				2618.04	2618.04	Yes	2500	105	104.7	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3105292	13C3-PFBA	1375255	5000	Avg	1.14247				9881.99	9881.99	Yes	10000	99	98.8	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1291950	13C2-PFHxA	807337	2500	Avg	0.796557				5022.43	5022.43	Yes	5000	100	100.4	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	151837	18O2-PFHxS	433635	2500	Avg	0.169955				5150.63	5150.62	Yes	5000	103	103	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	852879	13C2-PFHxA	807337	2500	Avg	1.046383				2523.96	2523.96	Yes	2500	101	101	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	568224	18O2-PFHxS	433635	2500	Avg	1.319962				2481.84	2481.84	Yes	2500	99	99.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100924145.d	CCB A9	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	604981	13C2-PFHxA	807337	2500	Avg	0.186581				10041	10040.6	Yes	10000	100	100.4	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	939550	13C2-PFHxA	807337	2500	Avg	1.170685				2485.22	2485.22	Yes	2500	99	99.4	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	154498	18O2-PFHxS	433635	2500	Avg	0.184115				4837.83	4837.82	Yes	5000	97	96.8	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1091863	13C4-PFOA	115902	2500	Avg	7.728869				3047.2	3047.2	Yes	2500	122	121.9	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	507275	18O2-PFHxS	433635	2500	Avg	1.171154				2497.15	2497.15	Yes	2500	100	99.9	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	537463	13C5-PFNA	531564	1250	Avg	0.935659				1350.78	1350.78	Yes	1250	108	108.1	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	165249	18O2-PFHxS	433635	2500	Avg	0.170753				5579.38	5579.38	Yes	5000	112	111.6	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	583352	13C4-PFOS	529630	2500	Avg	0.495989				5551.7	5551.7	Yes	5000	111	111	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	540779	13C2-PFDA	429644	1250	Avg	1.232298				1276.75	1276.75	Yes	1250	102	102.1	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	457852	13C4-PFOS	529630	2500	Avg	0.364519				5928.87	5928.88	Yes	5000	119	118.6	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	519929	13C4-PFOS	529630	2500	Avg	0.970887				2527.8	2527.8	Yes	2500	101	101.1	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	491151	13C2-PFDA	429644	1250	Avg	1.191252				1199.53	1199.53	Yes	1250	96	96	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	413462	13C2-PFDA	429644	1250	Avg	1.01948				1179.94	1179.94	Yes	1250	94	94.4	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	987367	13C4-PFOS	529630	2500	Avg	1.694128				2751.06	2751.06	Yes	2500	110	110	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	373710	13C2-PFDA	429644	1250	Avg	0.871708				1247.28	1247.28	Yes	1250	100	99.8	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4286355	13C4-PFOS	529630	2500	Avg	0.708623				28552	28552.25	Yes	25000	114	114.2	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	232737	13C4-PFOS	529630	2500	Avg	0.415479				2644.14	2644.14	Yes	2500	106	105.8	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4644680	13C4-PFOS	529630	2500	Avg	0.758997				28886	28885.72	Yes	25000	116	115.5	Yes
100924145.d	CCB A9	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	254177	13C4-PFOS	529630	2500	Avg	0.441246				2719.08	2719.09	Yes	2500	109	108.8	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1434255	13C3-PFBA	648741	5000	Avg	1.117176				9894.71	9894.72	Yes	10000	99	98.9	Yes
100924A034.d	CCB A1	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1206	13C4-PFBA	1434255	10000	Avg	0.88036		0.01	9.5513	0.09551	0.0955	Yes				
100924A034.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	587790	13C2-PFHxA	348436	2500	Avg	0.842249				5007.24	5007.24	Yes	5000	100	100.1	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	75041	18O2-PFHxS	249486	2500	Avg	0.16257				4625.42	4625.43	Yes	5000	93	92.5	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	329041	13C2-PFHxA	348436	2500	Avg	0.957583				2465.42	2465.42	Yes	2500	99	98.6	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	333286	18O2-PFHxS	249486	2500	Avg	1.372263				2433.74	2433.74	Yes	2500	97	97.3	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	359406	13C2-PFHxA	348436	2500	Avg	0.254727				10123	10123.42	Yes	10000	101	101.2	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	304004	13C2-PFHxA	348436	2500	Avg	0.9296				2346.39	2346.39	Yes	2500	94	93.9	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	103689	18O2-PFHxS	249486	2500	Avg	0.216602				4796.95	4796.94	Yes	5000	96	95.9	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	374919	13C4-PFOA	92448	2500	Avg	3.964715				2557.22	2557.22	Yes	2500	102	102.3	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	232862	18O2-PFHxS	249486	2500	Avg	1.002875				2326.73	2326.73	Yes	2500	93	93.1	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	117722	13C5-PFNA	181186	1250	Avg	0.659201				1232.04	1232.04	Yes	1250	99	98.6	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	88874	18O2-PFHxS	249486	2500	Avg	0.205874				4325.81	4325.81	Yes	5000	87	86.5	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	202695	13C4-PFOS	371962	2500	Avg	0.281158				4845.45	4845.45	Yes	5000	97	96.9	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	124251	13C2-PFDA	151322	1250	Avg	0.924946				1109.66	1109.66	Yes	1250	89	88.8	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	266261	13C4-PFOS	371962	2500	Avg	0.328751				5443.55	5443.55	Yes	5000	109	108.9	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	341776	13C4-PFOS	371962	2500	Avg	0.948031				2423.04	2423.04	Yes	2500	97	96.9	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	125538	13C2-PFDA	151322	1250	Avg	0.932642				1111.91	1111.91	Yes	1250	89	89	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	109910	13C2-PFDA	151322	1250	Avg	0.761609				1192.1	1192.1	Yes	1250	95	95.4	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	78787	13C2-PFDA	151322	1250	Avg	0.582576				1117.15	1117.15	Yes	1250	89	89.4	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	673270	13C4-PFOS	371962	2500	Avg	1.831503				2470.72	2470.72	Yes	2500	99	98.8	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2308182	13C4-PFOS	371962	2500	Avg	0.656639				23626	23625.71	Yes	25000	95	94.5	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	143530	13C4-PFOS	371962	2500	Avg	0.403922				2388.28	2388.29	Yes	2500	96	95.5	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	2937806	13C4-PFOS	371962	2500	Avg	0.829443				23806	23805.54	Yes	25000	95	95.2	Yes
100924A034.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	167445	13C4-PFOS	371962	2500	Avg	0.466186				2414.09	2414.1	Yes	2500	97	96.6	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1526882	13C3-PFBA	685972	5000	Avg	1.117176				9962.02	9962.02	Yes	10000	100	99.6	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	597036	13C2-PFHxA	351706	2500	Avg	0.842249				5038.72	5038.72	Yes	5000	101	100.8	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	81463	18O2-PFHxS	251165	2500	Avg	0.16257				4987.7	4987.71	Yes	5000	100	99.8	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	354354	13C2-PFHxA	351706	2500	Avg	0.957583				2630.4	2630.4	Yes	2500	105	105.2	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	356180	18O2-PFHxS	251165	2500	Avg	1.372263				2583.53	2583.53	Yes	2500	103	103.3	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	356440	13C2-PFHxA	351706	2500	Avg	0.254727				9946.53	9946.53	Yes	10000	99	99.5	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	339851	13C2-PFHxA	351706	2500	Avg	0.9296				2598.68	2598.68	Yes	2500	104	103.9	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	107778	18O2-PFHxS	251165	2500	Avg	0.216602				4952.79	4952.77	Yes	5000	99	99.1	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	357360	13C4-PFOA	85564	2500	Avg	3.964715				2633.56	2633.56	Yes	2500	105	105.3	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	242922	18O2-PFHxS	251165	2500	Avg	1.002875				2411.02	2411.02	Yes	2500	96	96.4	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	121281	13C5-PFNA	189397	1250	Avg	0.659201				1214.26	1214.26	Yes	1250	97	97.1	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	95675	18O2-PFHxS	251165	2500	Avg	0.205874				4625.71	4625.7	Yes	5000	93	92.5	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	222418	13C4-PFOS	385383	2500	Avg	0.281158				5131.77	5131.77	Yes	5000	103	102.6	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	129969	13C2-PFDA	160846	1250	Avg	0.924946				1092	1092	Yes	1250	87	87.4	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	221021	13C4-PFOS	385383	2500	Avg	0.328751				4361.29	4361.28	Yes	5000	87	87.2	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	342652	13C4-PFOS	385383	2500	Avg	0.948031				2344.65	2344.65	Yes	2500	94	93.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
100924A051.d	CCB A2	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2891	13C8-PFOS	342652	2500	Avg	0.985331		0.01	21.407	0.21407	0.2141	Yes				
100924A051.d	CCB A2	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	143145	13C2-PFDA	160846	1250	Avg	0.932642				1192.78	1192.78	Yes	1250	95	95.4	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	121987	13C2-PFDA	160846	1250	Avg	0.761609				1244.75	1244.75	Yes	1250	100	99.6	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	84436	13C2-PFDA	160846	1250	Avg	0.582576				1126.35	1126.35	Yes	1250	90	90.1	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	644310	13C4-PFOS	385383	2500	Avg	1.831503				2282.1	2282.1	Yes	2500	91	91.3	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2501111	13C4-PFOS	385383	2500	Avg	0.656639				24709	24708.92	Yes	25000	99	98.8	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	150361	13C4-PFOS	385383	2500	Avg	0.403922				2414.82	2414.82	Yes	2500	97	96.6	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3135671	13C4-PFOS	385383	2500	Avg	0.829443				24524	24524.01	Yes	25000	98	98.1	Yes
100924A051.d	CCB A2	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	176636	13C4-PFOS	385383	2500	Avg	0.466186				2457.92	2457.92	Yes	2500	98	98.3	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1503133	13C3-PFBA	702597	5000	Avg	1.117176				9575.01	9575.02	Yes	10000	96	95.8	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	600384	13C2-PFHxA	368669	2500	Avg	0.842249				4833.84	4833.84	Yes	5000	97	96.7	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	76437	18O2-PFHxS	264950	2500	Avg	0.16257				4436.48	4436.49	Yes	5000	89	88.7	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	336670	13C2-PFHxA	368669	2500	Avg	0.957583				2384.14	2384.14	Yes	2500	95	95.4	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	349893	18O2-PFHxS	264950	2500	Avg	1.372263				2405.88	2405.88	Yes	2500	96	96.2	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	373624	13C2-PFHxA	368669	2500	Avg	0.254727				9946.33	9946.34	Yes	10000	99	99.5	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	331521	13C2-PFHxA	368669	2500	Avg	0.9296				2418.34	2418.35	Yes	2500	97	96.7	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	107714	18O2-PFHxS	264950	2500	Avg	0.216602				4692.31	4692.3	Yes	5000	94	93.8	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	378620	13C4-PFOA	91594	2500	Avg	3.964715				2606.54	2606.54	Yes	2500	104	104.3	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	248655	18O2-PFHxS	264950	2500	Avg	1.002875				2339.52	2339.52	Yes	2500	94	93.6	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	126967	13C5-PFNA	199807	1250	Avg	0.659201				1204.96	1204.96	Yes	1250	96	96.4	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	100695	18O2-PFHxS	264950	2500	Avg	0.205874				4615.12	4615.11	Yes	5000	92	92.3	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	224477	13C4-PFOS	388886	2500	Avg	0.281158				5132.62	5132.62	Yes	5000	103	102.7	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	142508	13C2-PFDA	148217	1250	Avg	0.924946				1299.38	1299.38	Yes	1250	104	104	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	241046	13C4-PFOS	388886	2500	Avg	0.328751				4713.58	4713.58	Yes	5000	94	94.3	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	345686	13C4-PFOS	388886	2500	Avg	0.948031				2344.1	2344.1	Yes	2500	94	93.8	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	150087	13C2-PFDA	148217	1250	Avg	0.932642				1357.19	1357.19	Yes	1250	109	108.6	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	122337	13C2-PFDA	148217	1250	Avg	0.761609				1354.68	1354.68	Yes	1250	108	108.4	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	88528	13C2-PFDA	148217	1250	Avg	0.582576				1281.56	1281.56	Yes	1250	103	102.5	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	691007	13C4-PFOS	388886	2500	Avg	1.831503				2425.45	2425.45	Yes	2500	97	97	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2588945	13C4-PFOS	388886	2500	Avg	0.656639				25346	25346.26	Yes	25000	101	101.4	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	150556	13C4-PFOS	388886	2500	Avg	0.403922				2396.17	2396.17	Yes	2500	96	95.8	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3240118	13C4-PFOS	388886	2500	Avg	0.829443				25113	25112.62	Yes	25000	100	100.5	Yes
100924A068.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	177836	13C4-PFOS	388886	2500	Avg	0.466186				2452.32	2452.33	Yes	2500	98	98.1	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1521173	13C3-PFBA	694267	5000	Avg	1.117176				9806.19	9806.19	Yes	10000	98	98.1	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	599102	13C2-PFHxA	368554	2500	Avg	0.842249				4825.02	4825.02	Yes	5000	97	96.5	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	79191	18O2-PFHxS	248334	2500	Avg	0.16257				4903.87	4903.87	Yes	5000	98	98.1	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	338711	13C2-PFHxA	368554	2500	Avg	0.957583				2399.34	2399.34	Yes	2500	96	96	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	346517	18O2-PFHxS	248334	2500	Avg	1.372263				2542.09	2542.09	Yes	2500	102	101.7	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	382005	13C2-PFHxA	368554	2500	Avg	0.254727				10173	10172.62	Yes	10000	102	101.7	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	335004	13C2-PFHxA	368554	2500	Avg	0.9296				2444.51	2444.52	Yes	2500	98	97.8	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	103667	18O2-PFHxS	248334	2500	Avg	0.216602				4818.18	4818.17	Yes	5000	96	96.4	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	363887	13C4-PFOA	92479	2500	Avg	3.964715				2481.14	2481.14	Yes	2500	99	99.2	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	232947	18O2-PFHxS	248334	2500	Avg	1.002875				2338.37	2338.37	Yes	2500	94	93.5	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	128294	13C5-PFNA	193156	1250	Avg	0.659201				1259.48	1259.48	Yes	1250	101	100.8	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	105058	18O2-PFHxS	248334	2500	Avg	0.205874				5137.27	5137.26	Yes	5000	103	102.7	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	218193	13C4-PFOS	396490	2500	Avg	0.281158				4893.26	4893.26	Yes	5000	98	97.9	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	125524	13C2-PFDA	161124	1250	Avg	0.924946				1052.83	1052.83	Yes	1250	84	84.2	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	236312	13C4-PFOS	396490	2500	Avg	0.328751				4532.39	4532.38	Yes	5000	91	90.6	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	357597	13C4-PFOS	396490	2500	Avg	0.948031				2378.37	2378.37	Yes	2500	95	95.1	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	151342	13C2-PFDA	161124	1250	Avg	0.932642				1258.91	1258.91	Yes	1250	101	100.7	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	122754	13C2-PFDA	161124	1250	Avg	0.761609				1250.41	1250.41	Yes	1250	100	100	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	84371	13C2-PFDA	161124	1250	Avg	0.582576				1123.54	1123.54	Yes	1250	90	89.9	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	691518	13C4-PFOS	396490	2500	Avg	1.831503				2380.69	2380.69	Yes	2500	95	95.2	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2582254	13C4-PFOS	396490	2500	Avg	0.656639				24796	24795.91	Yes	25000	99	99.2	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	148508	13C4-PFOS	396490	2500	Avg	0.403922				2318.25	2318.25	Yes	2500	93	92.7	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3291465	13C4-PFOS	396490	2500	Avg	0.829443				25021	25021.33	Yes	25000	100	100.1	Yes
100924A078.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	182287	13C4-PFOS	396490	2500	Avg	0.466186				2465.49	2465.5	Yes	2500	99	98.6	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2979092	13C3-PFBA	1294554	5000	Avg	1.14247				10071	10071.38	Yes	10000	101	100.7	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1269347	13C2-PFHxA	801427	2500	Avg	0.796557				4970.95	4970.95	Yes	5000	99	99.4	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	160318	18O2-PFHxS	431549	2500	Avg	0.169955				5464.61	5464.6	Yes	5000	109	109.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	829589	13C2-PFHxA	801427	2500	Avg	1.046383				2473.14	2473.14	Yes	2500	99	98.9	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	550843	18O2-PFHxS	431549	2500	Avg	1.319962				2417.55	2417.55	Yes	2500	97	96.7	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	594364	13C2-PFHxA	801427	2500	Avg	0.186581				9937.13	9937.13	Yes	10000	99	99.4	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	899106	13C2-PFHxA	801427	2500	Avg	1.170685				2395.78	2395.78	Yes	2500	96	95.8	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	166009	18O2-PFHxS	431549	2500	Avg	0.184115				5223.4	5223.39	Yes	5000	104	104.5	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1094257	13C4-PFOA	128804	2500	Avg	7.728869				2747.98	2747.98	Yes	2500	110	109.9	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	540075	18O2-PFHxS	431549	2500	Avg	1.171154				2671.47	2671.47	Yes	2500	107	106.9	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	497584	13C5-PFNA	550222	1250	Avg	0.935659				1208.15	1208.15	Yes	1250	97	96.7	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	144669	18O2-PFHxS	431549	2500	Avg	0.170753				4908.14	4908.14	Yes	5000	98	98.2	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	596138	13C4-PFOS	558267	2500	Avg	0.495989				5382.36	5382.36	Yes	5000	108	107.6	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	535831	13C2-PFDA	383789	1250	Avg	1.232298				1416.22	1416.22	Yes	1250	113	113.3	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	458009	13C4-PFOS	558267	2500	Avg	0.364519				5626.67	5626.68	Yes	5000	113	112.5	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	524179	13C4-PFOS	558267	2500	Avg	0.970887				2417.74	2417.74	Yes	2500	97	96.7	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	450288	13C2-PFDA	383789	1250	Avg	1.191252				1231.13	1231.13	Yes	1250	98	98.5	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	439344	13C2-PFDA	383789	1250	Avg	1.01948				1403.6	1403.6	Yes	1250	112	112.3	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	916386	13C4-PFOS	558267	2500	Avg	1.694128				2422.31	2422.31	Yes	2500	97	96.9	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	365574	13C2-PFDA	383789	1250	Avg	0.871708				1365.91	1365.91	Yes	1250	109	109.3	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4170843	13C4-PFOS	558267	2500	Avg	0.708623				26358	26357.65	Yes	25000	105	105.4	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	229554	13C4-PFOS	558267	2500	Avg	0.415479				2474.2	2474.19	Yes	2500	99	99	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4424090	13C4-PFOS	558267	2500	Avg	0.758997				26103	26102.49	Yes	25000	104	104.4	Yes
101024002.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	248852	13C4-PFOS	558267	2500	Avg	0.441246				2525.56	2525.56	Yes	2500	101	101	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3086040	13C3-PFBA	1343463	5000	Avg	1.14247				10053	10053.12	Yes	10000	101	100.5	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1293222	13C2-PFHxA	756395	2500	Avg	0.796557				5365.97	5365.96	Yes	5000	107	107.3	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	158143	18O2-PFHxS	435254	2500	Avg	0.169955				5344.58	5344.58	Yes	5000	107	106.9	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	827095	13C2-PFHxA	756395	2500	Avg	1.046383				2612.5	2612.5	Yes	2500	104	104.5	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	581807	18O2-PFHxS	435254	2500	Avg	1.319962				2531.71	2531.71	Yes	2500	101	101.3	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	608467	13C2-PFHxA	756395	2500	Avg	0.186581				10779	10778.57	Yes	10000	108	107.8	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	958160	13C2-PFHxA	756395	2500	Avg	1.170685				2705.14	2705.14	Yes	2500	108	108.2	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	149749	18O2-PFHxS	435254	2500	Avg	0.184115				4671.68	4671.67	Yes	5000	93	93.4	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1104423	13C4-PFOA	150052	2500	Avg	7.728869				2380.77	2380.77	Yes	2500	95	95.2	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	527560	18O2-PFHxS	435254	2500	Avg	1.171154				2587.35	2587.35	Yes	2500	103	103.5	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	523132	13C5-PFNA	552373	1250	Avg	0.935659				1265.23	1265.24	Yes	1250	101	101.2	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	153542	18O2-PFHxS	435254	2500	Avg	0.170753				5164.83	5164.83	Yes	5000	103	103.3	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	575435	13C4-PFOS	490998	2500	Avg	0.495989				5907.24	5907.24	Yes	5000	118	118.1	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	530185	13C2-PFDA	406826	1250	Avg	1.232298				1321.94	1321.94	Yes	1250	106	105.8	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	429047	13C4-PFOS	490998	2500	Avg	0.364519				5993.01	5993.01	Yes	5000	120	119.9	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	519076	13C4-PFOS	490998	2500	Avg	0.970887				2722.22	2722.22	Yes	2500	109	108.9	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	452782	13C2-PFDA	406826	1250	Avg	1.191252				1167.85	1167.85	Yes	1250	93	93.4	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	409879	13C2-PFDA	406826	1250	Avg	1.01948				1235.32	1235.32	Yes	1250	99	98.8	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	933542	13C4-PFOS	490998	2500	Avg	1.694128				2805.74	2805.74	Yes	2500	112	112.2	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	347825	13C2-PFDA	406826	1250	Avg	0.871708				1226	1226	Yes	1250	98	98.1	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4138189	13C4-PFOS	490998	2500	Avg	0.708623				29734	29734.14	Yes	25000	119	118.9	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	233237	13C4-PFOS	490998	2500	Avg	0.415479				2858.31	2858.31	Yes	2500	114	114.3	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4599309	13C4-PFOS	490998	2500	Avg	0.758997				30854	30854.1	Yes	25000	123	123.4	Yes
101024014.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	248535	13C4-PFOS	490998	2500	Avg	0.441246				2867.92	2867.92	Yes	2500	115	114.7	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3176016	13C3-PFBA	1402562	5000	Avg	1.14247				9910.28	9910.28	Yes	10000	99	99.1	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1315374	13C2-PFHxA	854174	2500	Avg	0.796557				4833.11	4833.1	Yes	5000	97	96.7	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	173648	18O2-PFHxS	501827	2500	Avg	0.169955				5090.05	5090.05	Yes	5000	102	101.8	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	889053	13C2-PFHxA	854174	2500	Avg	1.046383				2486.74	2486.74	Yes	2500	99	99.5	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	620916	18O2-PFHxS	501827	2500	Avg	1.319962				2343.46	2343.46	Yes	2500	94	93.7	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	607109	13C2-PFHxA	854174	2500	Avg	0.186581				9523.42	9523.42	Yes	10000	95	95.2	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	934505	13C2-PFHxA	854174	2500	Avg	1.170685				2336.34	2336.34	Yes	2500	93	93.5	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	188473	18O2-PFHxS	501827	2500	Avg	0.184115				5099.72	5099.72	Yes	5000	102	102	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1124881	13C4-PFOA	165588	2500	Avg	7.728869				2197.36	2197.36	Yes	2500	88	87.9	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	526919	18O2-PFHxS	501827	2500	Avg	1.171154				2241.38	2241.38	Yes	2500	90	89.7	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	500448	13C5-PFNA	579585	1250	Avg	0.935659				1153.54	1153.54	Yes	1250	92	92.3	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	171295	18O2-PFHxS	501827	2500	Avg	0.170753				4997.61	4997.61	Yes	5000	100	100	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	637164	13C4-PFOS	518090	2500	Avg	0.495989				6198.89	6198.89	Yes	5000	124	124	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	550180	13C2-PFDA	488760	1250	Avg	1.232298				1141.84	1141.84	Yes	1250	91	91.3	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	445206	13C4-PFOS	518090	2500	Avg	0.364519				5893.53	5893.53	Yes	5000	118	117.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101024032.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	536351	13C4-PFOS	518090	2500	Avg	0.970887				2665.72	2665.72	Yes	2500	107	106.6	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	477637	13C2-PFDA	488760	1250	Avg	1.191252				1025.44	1025.44	Yes	1250	82	82	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	429648	13C2-PFDA	488760	1250	Avg	1.01948				1077.83	1077.83	Yes	1250	86	86.2	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	951187	13C4-PFOS	518090	2500	Avg	1.694128				2709.28	2709.28	Yes	2500	108	108.4	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	378577	13C2-PFDA	488760	1250	Avg	0.871708				1110.7	1110.7	Yes	1250	89	88.9	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4328976	13C4-PFOS	518090	2500	Avg	0.708623				29478	29478.46	Yes	25000	118	117.9	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	244119	13C4-PFOS	518090	2500	Avg	0.415479				2835.23	2835.22	Yes	2500	113	113.4	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4736382	13C4-PFOS	518090	2500	Avg	0.758997				30112	30112.13	Yes	25000	120	120.4	Yes
101024032.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	248614	13C4-PFOS	518090	2500	Avg	0.441246				2718.81	2718.81	Yes	2500	109	108.8	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3143851	13C3-PFBA	1384818	5000	Avg	1.14247				9935.61	9935.61	Yes	10000	99	99.4	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1334801	13C2-PFHxA	802242	2500	Avg	0.796557				5221.97	5221.97	Yes	5000	104	104.4	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	165856	18O2-PFHxS	483291	2500	Avg	0.169955				5048.11	5048.11	Yes	5000	101	101	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	883307	13C2-PFHxA	802242	2500	Avg	1.046383				2630.6	2630.6	Yes	2500	105	105.2	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	591794	18O2-PFHxS	483291	2500	Avg	1.319962				2319.21	2319.21	Yes	2500	93	92.8	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	608973	13C2-PFHxA	802242	2500	Avg	0.186581				10171	10171.04	Yes	10000	102	101.7	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	1048467	13C2-PFHxA	802242	2500	Avg	1.170685				2790.93	2790.93	Yes	2500	112	111.6	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	183167	18O2-PFHxS	483291	2500	Avg	0.184115				5146.24	5146.23	Yes	5000	103	102.9	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	985739	13C4-PFOA	166833	2500	Avg	7.728869				1911.19	1911.19	Yes	2500	76	76.4	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	559210	18O2-PFHxS	483291	2500	Avg	1.171154				2469.97	2469.97	Yes	2500	99	98.8	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	565715	13C5-PFNA	575680	1250	Avg	0.935659				1312.83	1312.83	Yes	1250	105	105	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	159595	18O2-PFHxS	483291	2500	Avg	0.170753				4834.84	4834.84	Yes	5000	97	96.7	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	610618	13C4-PFOS	523086	2500	Avg	0.495989				5883.89	5883.89	Yes	5000	118	117.7	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	533140	13C2-PFDA	429179	1250	Avg	1.232298				1260.08	1260.08	Yes	1250	101	100.8	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	492245	13C4-PFOS	523086	2500	Avg	0.364519				6453.98	6453.99	Yes	5000	129	129.1	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	566646	13C4-PFOS	523086	2500	Avg	0.970887				2789.4	2789.4	Yes	2500	112	111.6	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	461719	13C2-PFDA	429179	1250	Avg	1.191252				1128.87	1128.87	Yes	1250	90	90.3	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	460973	13C2-PFDA	429179	1250	Avg	1.01948				1316.95	1316.95	Yes	1250	105	105.4	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	986188	13C4-PFOS	523086	2500	Avg	1.694128				2782.15	2782.15	Yes	2500	111	111.3	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	392474	13C2-PFDA	429179	1250	Avg	0.871708				1311.33	1311.33	Yes	1250	105	104.9	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4283740	13C4-PFOS	523086	2500	Avg	0.708623				28892	28891.81	Yes	25000	116	115.6	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	236314	13C4-PFOS	523086	2500	Avg	0.415479				2718.36	2718.36	Yes	2500	109	108.7	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4604649	13C4-PFOS	523086	2500	Avg	0.758997				28995	28995.02	Yes	25000	116	116	Yes
101024053.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	255642	13C4-PFOS	523086	2500	Avg	0.441246				2768.97	2768.97	Yes	2500	111	110.8	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1552918	13C3-PFBA	688658	5000	Avg	1.117208				10092	10092.08	Yes	10000	101	100.9	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	604889	13C2-PFHxA	339612	2500	Avg	0.877344				5075.31	5075.31	Yes	5000	102	101.5	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	89389	18O2-PFHxS	240171	2500	Avg	0.180297				5160.78	5160.78	Yes	5000	103	103.2	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	349800	13C2-PFHxA	339612	2500	Avg	0.966846				2663.3	2663.3	Yes	2500	107	106.5	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	367545	18O2-PFHxS	240171	2500	Avg	1.392729				2747.03	2747.03	Yes	2500	110	109.9	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	366323	13C2-PFHxA	339612	2500	Avg	0.261722				10303	10303.41	Yes	10000	103	103	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	350698	13C2-PFHxA	339612	2500	Avg	0.967581				2668.11	2668.11	Yes	2500	107	106.7	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	113844	18O2-PFHxS	240171	2500	Avg	0.230272				5146.21	5146.22	Yes	5000	103	102.9	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	366970	13C4-PFOA	98254	2500	Avg	3.983884				2343.76	2343.76	Yes	2500	94	93.8	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	285420	18O2-PFHxS	240171	2500	Avg	1.039477				2858.17	2858.18	Yes	2500	114	114.3	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	123313	13C5-PFNA	175410	1250	Avg	0.703994				1248.23	1248.23	Yes	1250	100	99.9	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	110045	18O2-PFHxS	240171	2500	Avg	0.22013				5203.68	5203.68	Yes	5000	104	104.1	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	265581	13C4-PFOS	393963	2500	Avg	0.311922				5403	5403.01	Yes	5000	108	108.1	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	160535	13C2-PFDA	161831	1250	Avg	0.918284				1350.33	1350.33	Yes	1250	108	108	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	311109	13C4-PFOS	393963	2500	Avg	0.390921				5050.19	5050.19	Yes	5000	101	101	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	352537	13C4-PFOS	393963	2500	Avg	0.935894				2390.36	2390.36	Yes	2500	96	95.6	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	142096	13C2-PFDA	161831	1250	Avg	0.837816				1310.03	1310.03	Yes	1250	105	104.8	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	131040	13C2-PFDA	161831	1250	Avg	0.786151				1287.5	1287.5	Yes	1250	103	103	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	100921	13C2-PFDA	161831	1250	Avg	0.587286				1327.33	1327.33	Yes	1250	106	106.2	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	715648	13C4-PFOS	393963	2500	Avg	1.82193				2492.6	2492.6	Yes	2500	100	99.7	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2615959	13C4-PFOS	393963	2500	Avg	0.665118				24958	24958.4	Yes	25000	100	99.8	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	153485	13C4-PFOS	393963	2500	Avg	0.401684				2424.74	2424.74	Yes	2500	97	97	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3215765	13C4-PFOS	393963	2500	Avg	0.841004				24264	24264.47	Yes	25000	97	97.1	Yes
101724A107.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	195167	13C4-PFOS	393963	2500	Avg	0.472781				2619.58	2619.58	Yes	2500	105	104.8	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1562103	13C3-PFBA	689791	5000	Avg	1.117208				10135	10135.1	Yes	10000	101	101.4	Yes
101724A121.d	CCB A7	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1712	13C4-PFBA	1562103	10000	Avg	0.88639		0.01	12.364	0.12364	0.1236	Yes				
101724A121.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	609760	13C2-PFHxA	351846	2500	Avg	0.877344				4938.29	4938.29	Yes	5000	99	98.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101724A121.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	88032	18O2-PFHxS	250000	2500	Avg	0.180297				4882.61	4882.61	Yes	5000	98	97.7	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	342046	13C2-PFHxA	351846	2500	Avg	0.966846				2513.71	2513.71	Yes	2500	101	100.5	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	337640	18O2-PFHxS	250000	2500	Avg	1.392729				2424.31	2424.31	Yes	2500	97	97	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	371682	13C2-PFHxA	351846	2500	Avg	0.261722				10091	10090.64	Yes	10000	101	100.9	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	347192	13C2-PFHxA	351846	2500	Avg	0.967581				2549.59	2549.59	Yes	2500	102	102	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	112926	18O2-PFHxS	250000	2500	Avg	0.230272				4904.02	4904.03	Yes	5000	98	98.1	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	393510	13C4-PFOA	86130	2500	Avg	3.983884				2867.05	2867.05	Yes	2500	115	114.7	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	271668	18O2-PFHxS	250000	2500	Avg	1.039477				2613.51	2613.51	Yes	2500	105	104.5	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	123536	13C5-PFNA	171675	1250	Avg	0.703994				1277.7	1277.7	Yes	1250	102	102.2	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	96219	18O2-PFHxS	250000	2500	Avg	0.22013				4371.01	4371.01	Yes	5000	87	87.4	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	244213	13C4-PFOS	387581	2500	Avg	0.311922				5050.1	5050.1	Yes	5000	101	101	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	143454	13C2-PFDA	164458	1250	Avg	0.918284				1187.38	1187.38	Yes	1250	95	95	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	316125	13C4-PFOS	387581	2500	Avg	0.390921				5216.12	5216.12	Yes	5000	104	104.3	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	365635	13C4-PFOS	387581	2500	Avg	0.935894				2519.99	2519.99	Yes	2500	101	100.8	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	138384	13C2-PFDA	164458	1250	Avg	0.837816				1255.43	1255.43	Yes	1250	100	100.4	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	128328	13C2-PFDA	164458	1250	Avg	0.786151				1240.71	1240.71	Yes	1250	99	99.3	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	101777	13C2-PFDA	164458	1250	Avg	0.587286				1317.21	1317.21	Yes	1250	105	105.4	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	685324	13C4-PFOS	387581	2500	Avg	1.82193				2426.28	2426.28	Yes	2500	97	97.1	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2581212	13C4-PFOS	387581	2500	Avg	0.665118				25032	25032.4	Yes	25000	100	100.1	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	157624	13C4-PFOS	387581	2500	Avg	0.401684				2531.13	2531.14	Yes	2500	101	101.2	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3295717	13C4-PFOS	387581	2500	Avg	0.841004				25277	25277.22	Yes	25000	101	101.1	Yes
101724A121.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	186759	13C4-PFOS	387581	2500	Avg	0.472781				2548	2548	Yes	2500	102	101.9	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1851712	13C3-PFBA	767896	5000	Avg	1.129814				10672	10671.71	Yes	10000	107	106.7	Yes
102324084.d	CCB A6	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2419	13C4-PFBA	1851712	10000	Avg	0.885929		0.01	14.746	0.14746	0.1475	Yes				
102324084.d	CCB A6	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	878578	13C2-PFHxA	490710	2500	Avg	0.857148				5222.04	5222.03	Yes	5000	104	104.4	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	100123	18O2-PFHxS	337855	2500	Avg	0.153383				4830.21	4830.21	Yes	5000	97	96.6	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	541431	13C2-PFHxA	490710	2500	Avg	1.049515				2628.27	2628.27	Yes	2500	105	105.1	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	434796	18O2-PFHxS	337855	2500	Avg	1.230963				2613.67	2613.67	Yes	2500	105	104.5	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	433526	13C2-PFHxA	490710	2500	Avg	0.198761				11112	11112.18	Yes	10000	111	111.1	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	639222	13C2-PFHxA	490710	2500	Avg	1.180421				2758.86	2758.86	Yes	2500	110	110.4	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	120321	18O2-PFHxS	337855	2500	Avg	0.174243				5109.69	5109.7	Yes	5000	102	102.2	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	678373	13C4-PFOA	95410	2500	Avg	5.565963				3193.55	3193.55	Yes	2500	128	127.7	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	320577	18O2-PFHxS	337855	2500	Avg	1.152086				2059	2059	Yes	2500	82	82.4	Yes
102324084.d	CCB A6	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2773	13C3-PFHxS	320577	2500	Avg	1.088072		0.01	19.875	0.19875	0.1987	Yes				
102324084.d	CCB A6	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	355511	13C5-PFNA	373790	1250	Avg	0.879621				1351.57	1351.57	Yes	1250	108	108.1	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	123085	18O2-PFHxS	337855	2500	Avg	0.179078				5085.97	5085.96	Yes	5000	102	101.7	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	390100	13C4-PFOS	441992	2500	Avg	0.403496				5468.42	5468.43	Yes	5000	109	109.4	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	334279	13C2-PFDA	289199	1250	Avg	1.059721				1363.42	1363.42	Yes	1250	109	109.1	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	299306	13C4-PFOS	441992	2500	Avg	0.306761				5518.76	5518.75	Yes	5000	110	110.4	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	464088	13C4-PFOS	441992	2500	Avg	1.00392				2614.73	2614.73	Yes	2500	105	104.6	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	289297	13C2-PFDA	289199	1250	Avg	1.028459				1215.82	1215.82	Yes	1250	97	97.3	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	287144	13C2-PFDA	289199	1250	Avg	0.929658				1335.03	1335.03	Yes	1250	107	106.8	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	733719	13C4-PFOS	441992	2500	Avg	1.575197				2634.64	2634.64	Yes	2500	105	105.4	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	235484	13C2-PFDA	289199	1250	Avg	0.817886				1244.46	1244.46	Yes	1250	100	99.6	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2819443	13C4-PFOS	441992	2500	Avg	0.538815				29597	29597.11	Yes	25000	118	118.4	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	192436	13C4-PFOS	441992	2500	Avg	0.392108				2775.92	2775.92	Yes	2500	111	111	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3441672	13C4-PFOS	441992	2500	Avg	0.666639				29201	29201.45	Yes	25000	117	116.8	Yes
102324084.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	214122	13C4-PFOS	441992	2500	Avg	0.416058				2910.94	2910.94	Yes	2500	116	116.4	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1968499	13C3-PFBA	813131	5000	Avg	1.129814				10714	10713.66	Yes	10000	107	107.1	Yes
102324105.d	CCB A7	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2390	13C4-PFBA	1968499	10000	Avg	0.885929		0.01	13.705	0.13705	0.137	Yes				
102324105.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	910078	13C2-PFHxA	506713	2500	Avg	0.857148				5238.43	5238.43	Yes	5000	105	104.8	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	108703	18O2-PFHxS	362255	2500	Avg	0.153383				4890.91	4890.91	Yes	5000	98	97.8	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	579047	13C2-PFHxA	506713	2500	Avg	1.049515				2722.09	2722.09	Yes	2500	109	108.9	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	470233	18O2-PFHxS	362255	2500	Avg	1.230963				2636.29	2636.29	Yes	2500	105	105.5	Yes
102324105.d	CCB A7	Instrument_Blank	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	648	13C3-PFBS	470233	2500	Avg	1.179075		0.01	2.9219	0.02922	0.0292	Yes				
102324105.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	438153	13C2-PFHxA	506713	2500	Avg	0.198761				10876	10876.08	Yes	10000	109	108.8	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	676832	13C2-PFHxA	506713	2500	Avg	1.180421				2828.93	2828.93	Yes	2500	113	113.2	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	122377	18O2-PFHxS	362255	2500	Avg	0.174243				4846.96	4846.97	Yes	5000	97	96.9	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	695173	13C4-PFOA	107240	2500	Avg	5.565963				2911.63	2911.63	Yes	2500	116	116.5	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	444972	18O2-PFHxS	362255	2500	Avg	1.152086				2665.47	2665.47	Yes	2500	107	106.6	Yes

Table 4d – Recalculation Summary: ZI12016 Instrument QC Samples

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
102324105.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	430398	13C5-PFNA	407941	1250	Avg	0.879621				1499.3	1499.3	Yes	1250	120	119.9	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	120941	18O2-PFHxS	362255	2500	Avg	0.179078				4660.77	4660.76	Yes	5000	93	93.2	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	454927	13C4-PFOS	461270	2500	Avg	0.403496				6110.65	6110.65	Yes	5000	122	122.2	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	367456	13C2-PFDA	305305	1250	Avg	1.059721				1419.68	1419.68	Yes	1250	114	113.6	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	424691	13C4-PFOS	461270	2500	Avg	0.306761				7503.4	7503.39	Yes	5000		150.1	
102324105.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	520241	13C4-PFOS	461270	2500	Avg	1.00392				2808.6	2808.6	Yes	2500	112	112.3	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	326177	13C2-PFDA	305305	1250	Avg	1.028459				1298.5	1298.5	Yes	1250	104	103.9	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	269864	13C2-PFDA	305305	1250	Avg	0.929658				1188.5	1188.5	Yes	1250	95	95.1	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	754553	13C4-PFOS	461270	2500	Avg	1.575197				2596.21	2596.21	Yes	2500	104	103.8	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	253985	13C2-PFDA	305305	1250	Avg	0.817886				1271.43	1271.43	Yes	1250	102	101.7	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2772578	13C4-PFOS	461270	2500	Avg	0.538815				27889	27888.74	Yes	25000	112	111.6	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	193411	13C4-PFOS	461270	2500	Avg	0.392108				2673.38	2673.38	Yes	2500	107	106.9	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3366899	13C4-PFOS	461270	2500	Avg	0.666639				27373	27373.11	Yes	25000	109	109.5	Yes
102324105.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	214128	13C4-PFOS	461270	2500	Avg	0.416058				2789.36	2789.36	Yes	2500	112	111.6	Yes

Key

	from quantitation report
	from reported calibration
	from lab report/EDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
ND	not detected
ng/L	nanograms per liter
RF	response factor

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2570761	13C3-PFBA	1095411	5000	Avg	1.139492				10298	10297.77	Yes	10000	103	103.0	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	226544	13C4-PFBA	2570761	10000	Avg	0.862417				1021.82	1021.82	Yes	1000	102	102.2	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1117596	13C2-PFHxA	581450	2500	Avg	0.8747				5493.55	5493.55	Yes	5000	110	109.9	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	215136	13C5-PFPeA	1117596	5000	Avg	0.923358				1042.39	1042.38	Yes	1000	104	104.2	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	126370	18O2-PFHxS	407198	2500	Avg	0.171095				4534.61	4534.62	Yes	5000	91	90.7	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	648931	13C2-PFHxA	581450	2500	Avg	1.027817				2714.63	2714.63	Yes	2500	109	108.6	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	266849	13C5-PFHxA	648931	2500	Avg	0.967877				1062.15	1062.15	Yes	1000	106	106.2	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	507113	18O2-PFHxS	407198	2500	Avg	1.337567				2327.68	2327.68	Yes	2500	93	93.1	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	232113	13C3-PFBS	507113	2500	Avg	1.164193				982.9	982.9	Yes	887	111	110.8	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	453922	13C2-PFHxA	581450	2500	Avg	0.187386				10415	10415.3	Yes	10000	104	104.2	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	779947	13C2-PFHxA	581450	2500	Avg	1.233488				2718.68	2718.68	Yes	2500	109	108.7	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	296274	13C4-PFHpA	779947	2500	Avg	1.05664				898.76	898.76	Yes	1000	90	89.9	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	140802	18O2-PFHxS	407198	2500	Avg	0.189449				4563	4563	Yes	5000	91	91.3	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	64870	13C2-6:2FTS	140802	5000	Avg	2.317932				993.81	993.81	Yes	950	105	104.6	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	833240	13C4-PFOA	120419	2500	Avg	6.935343				2494.29	2494.29	Yes	2500	100	99.8	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	240596	13C8-PFOA	833240	2500	Avg	0.942233				766.13	766.13	Yes	1000	77	76.6	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	409197	18O2-PFHxS	407198	2500	Avg	1.223059				2054.09	2054.09	Yes	2500	82	82.2	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	233206	13C3-PFHxS	409197	2500	Avg	1.170077				1217.68	1217.68	Yes	941	129	129.4	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	208914	13C3-PFHxS	409197	2500	Avg	1.134147				1125.4	1125.4	Yes	914	123	123.1	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	426229	13C5-PFNA	405895	1250	Avg	0.970593				1352.39	1352.39	Yes	1250	108	108.2	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	325092	13C9-PFNA	426229	1250	Avg	0.897503				1062.28	1062.28	Yes	1000	106	106.2	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	133725	18O2-PFHxS	407198	2500	Avg	0.188821				4348.08	4348.07	Yes	5000	87	87.0	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	70945	13C2-8:2FTS	133725	5000	Ln	2.07718	85.9208			1235.68	1235.68	Yes	960	129	128.7	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	389671	13C2-PFDA	336243	1250	Avg	1.158659				1250.26	1250.26	Yes	1250	100	100	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	313352	13C6-PFDA	389671	1250	Avg	0.88065				1141.41	1141.41	Yes	1000	114	114.1	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	491117	13C4-PFOS	412427	2500	Avg	0.604638				4923.6	4923.6	Yes	5000	98	98.5	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	88474	D3-NMeFOSAA	491117	5000	Avg	0.811858				1109.48	1109.48	Yes	1000	111	110.9	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	398392	13C4-PFOS	412427	2500	Avg	0.464185				5202.5	5202.5	Yes	5000	104	104.1	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	79293	D5-NEtFOSAA	398392	5000	Avg	1.016358				979.15	979.15	Yes	1000	98	97.9	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	436714	13C4-PFOS	412427	2500	Avg	1.031655				2565.99	2565.99	Yes	2500	103	102.6	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	175547	13C8-PFOS	436714	2500	Avg	0.936233				1073.38	1073.38	Yes	953	113	112.6	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	174673	13C8-PFOS	436714	2500	Avg	1.036752				964.48	964.48	Yes	928	104	103.9	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	245184	13C8-PFOS	436714	2500	Avg	1.397808				1004.12	1004.12	Yes	962	104	104.4	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	389894	13C2-PFDA	336243	1250	Avg	1.110582				1305.13	1305.13	Yes	1250	104	104.4	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	275290	13C7-PFUnA	389894	1250	Ln	0.890162	24.9046			963.5	963.5	Yes	1000	96	96.4	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	384560	13C2-PFDA	336243	1250	Avg	1.123999				1271.91	1271.91	Yes	1250	102	101.8	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	217938	13C2-PFDoA	384560	1250	Avg	0.728459				972.47	972.46	Yes	1000	97	97.2	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	801185	13C4-PFOS	412427	2500	Avg	1.903232				2551.73	2551.73	Yes	2500	102	102.1	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	306550	13C8-PFOSA	801185	2500	Ln	0.972205	16.879			966.54	966.54	Yes	1000	97	96.7	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	338194	13C2-PFDA	336243	1250	Avg	0.979484				1283.59	1283.59	Yes	1250	103	102.7	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3328137	13C4-PFOS	412427	2500	Avg	0.787621				25614	25613.97	Yes	25000	102	102.5	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	192704	13C4-PFOS	412427	2500	Avg	0.473429				2467.34	2467.34	Yes	2500	99	98.7	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3731906	13C4-PFOS	412427	2500	Avg	0.875607				25835	25835.35	Yes	25000	103	103.3	Yes
101124A022.d	ICV_SVLC-4116	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	221310	13C4-PFOS	412427	2500	Avg	0.517751				2591.03	2591.03	Yes	2500	104	103.6	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2776031	13C3-PFBA	1270700	5000	Avg	1.14247				9561.07	9561.07	Yes	10000	96	95.6	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2441166	13C4-PFBA	2776031	10000	Avg	0.846914				10383	10383.26	Yes	10000	104	103.8	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1181960	13C2-PFHxA	732272	2500	Avg	0.796557				5065.87	5065.86	Yes	5000	101	101.3	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1045604	13C5-PFPeA	1181960	5000	Avg	0.874543				5057.7	5057.7	Yes	5000	101	101.2	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	153544	18O2-PFHxS	426991	2500	Avg	0.169955				5289.58	5289.57	Yes	5000	106	105.8	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	784194	13C2-PFHxA	732272	2500	Avg	1.046383				2558.59	2558.59	Yes	2500	102	102.3	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	667820	13C5-PFHxA	784194	2500	Avg	0.9029				2357.96	2357.96	Yes	2500	94	94.3	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	543343	18O2-PFHxS	426991	2500	Avg	1.319962				2410.09	2410.09	Yes	2500	96	96.4	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	600730	13C3-PFBS	543343	2500	Avg	1.207053				2289.91	2289.91	Yes	2218	103	103.2	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	539234	13C2-PFHxA	732272	2500	Avg	0.186581				9866.82	9866.83	Yes	10000	99	98.7	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	942196	13C2-PFHxA	732272	2500	Avg	1.170685				2747.7	2747.7	Yes	2500	110	109.9	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	971920	13C4-PFHpA	942196	2500	Avg	1.077361				2393.69	2393.69	Yes	2500	96	95.7	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	192909	18O2-PFHxS	426991	2500	Avg	0.184115				6134.59	6134.58	Yes	5000	123	122.7	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	678895	13C2-6:2FTS	192909	5000	Avg	2.253868				7807.13	7807.13	Yes	9500	82	82.2	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	926815	13C4-PFOA	141466	2500	Avg	7.728869				2119.17	2119.17	Yes	2500	85	84.8	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	863050	13C8-PFOA	926815	2500	Ln	0.828626	32.8119			2769.87	2769.87	Yes	2500	111	110.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	494716	18O2-PFHxS	426991	2500	Avg	1.171154				2473.22	2473.22	Yes	2500	99	98.9	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	553653	13C3-PFHxS	494716	2500	Avg	1.194012				2343.22	2343.22	Yes	2353	100	99.6	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	470543	13C3-PFHxS	494716	2500	Ln	1.119323	33.81			2094.15	2094.15	Yes	2285	92	91.6	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	504769	13C5-PFNA	534113	1250	Avg	0.935659				1262.56	1262.56	Yes	1250	101	101	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	861382	13C9-PFNA	504769	1250	Avg	0.837317				2547.55	2547.55	Yes	2500	102	101.9	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	149471	18O2-PFHxS	426991	2500	Avg	0.170753				5125.19	5125.19	Yes	5000	103	102.5	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	657919	13C2-8:2FTS	149471	5000	Ln	1.94256	137			11259	11258.98	Yes	9600	117	117.3	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	522646	13C4-PFOS	503590	2500	Avg	0.495989				5231.16	5231.17	Yes	5000	105	104.6	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	235481	D3-NMeFOSAA	522646	5000	Avg	0.795786				2830.88	2830.88	Yes	2500	113	113.2	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	475613	13C2-PFDA	400449	1250	Avg	1.232298				1204.76	1204.76	Yes	1250	96	96.4	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	728620	13C6-PFDA	475613	1250	Avg	0.819341				2337.18	2337.18	Yes	2500	93	93.5	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	414499	13C4-PFOS	503590	2500	Avg	0.364519				5645.03	5645.03	Yes	5000	113	112.9	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	241399	D5-NEtFOSAA	414499	5000	Avg	1.162779				2504.29	2504.29	Yes	2500	100	100.2	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	486611	13C4-PFOS	503590	2500	Avg	0.970887				2488.15	2488.15	Yes	2500	100	99.5	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	433496	13C8-PFOS	486611	2500	Avg	0.939894				2369.54	2369.54	Yes	2383	99	99.4	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	483911	13C8-PFOS	486611	2500	Avg	1.054191				2358.33	2358.33	Yes	2320	102	101.7	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	666057	13C8-PFOS	486611	2500	Avg	1.337317				2558.79	2558.79	Yes	2405	106	106.4	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	442053	13C2-PFDA	400449	1250	Avg	1.191252				1158.33	1158.33	Yes	1250	93	92.7	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	780780	13C7-PFUnA	442053	1250	Avg	0.853896				2585.59	2585.59	Yes	2500	103	103.4	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	395912	13C2-PFDA	400449	1250	Avg	1.01948				1212.22	1212.22	Yes	1250	97	97	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	615176	13C2-PFDoA	395912	1250	Avg	0.772781				2513.36	2513.36	Yes	2500	101	100.5	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	839358	13C4-PFOS	503590	2500	Avg	1.694128				2459.6	2459.6	Yes	2500	98	98.4	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	874707	13C8-PFOSA	839358	2500	Avg	0.99659				2614.2	2614.2	Yes	2500	105	104.6	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	345792	13C2-PFDA	400449	1250	Avg	0.871708				1238.24	1238.25	Yes	1250	99	99.1	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3710755	13C4-PFOS	503590	2500	Avg	0.708623				25996	25996.2	Yes	25000	104	104	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	207519	13C4-PFOS	503590	2500	Avg	0.415479				2479.54	2479.54	Yes	2500	99	99.2	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4174401	13C4-PFOS	503590	2500	Avg	0.758997				27303	27303.42	Yes	25000	109	109.2	Yes
101024064.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	230454	13C4-PFOS	503590	2500	Avg	0.441246				2592.78	2592.78	Yes	2500	104	103.7	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2164300	13C3-PFBA	959613	5000	Avg	1.14247				9870.67	9870.67	Yes	10000	99	98.7	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1890244	13C4-PFBA	2164300	10000	Avg	0.846914				10312	10312.43	Yes	10000	103	103.1	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	993840	13C2-PFHxA	582336	2500	Avg	0.796557				5356.32	5356.31	Yes	5000	107	107.1	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	925635	13C5-PFPeA	993840	5000	Avg	0.874543				5324.91	5324.91	Yes	5000	106	106.5	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	120341	18O2-PFHxS	353908	2500	Avg	0.169955				5001.84	5001.83	Yes	5000	100	100	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	572937	13C2-PFHxA	582336	2500	Avg	1.046383				2350.62	2350.62	Yes	2500	94	94	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	594701	13C5-PFHxA	572937	2500	Avg	0.9029				2874.04	2874.04	Yes	2500	115	115	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	469871	18O2-PFHxS	353908	2500	Avg	1.319962				2514.59	2514.59	Yes	2500	101	100.6	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	462980	13C3-PFBS	469871	2500	Avg	1.207053				2040.78	2040.79	Yes	2218	92	92	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	450388	13C2-PFHxA	582336	2500	Avg	0.186581				10363	10363.01	Yes	10000	104	103.6	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	692604	13C2-PFHxA	582336	2500	Avg	1.170685				2539.87	2539.87	Yes	2500	102	101.6	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	692257	13C4-PFHpA	692604	2500	Avg	1.077361				2319.32	2319.32	Yes	2500	93	92.8	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	140113	18O2-PFHxS	353908	2500	Avg	0.184115				5375.76	5375.75	Yes	5000	108	107.5	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	603718	13C2-6:2FTS	140113	5000	Avg	2.253868				9558.66	9558.66	Yes	9500	101	100.6	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	786346	13C4-PFOA	121847	2500	Avg	7.728869				2087.48	2087.48	Yes	2500	83	83.5	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	835190	13C8-PFOA	786346	2500	Ln	0.828626	32.8119			3164.85	3164.85	Yes	2500	127	126.6	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	445700	18O2-PFHxS	353908	2500	Avg	1.171154				2688.3	2688.3	Yes	2500	108	107.5	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	434571	13C3-PFHxS	445700	2500	Avg	1.194012				2041.5	2041.5	Yes	2353	87	86.8	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	461768	13C3-PFHxS	445700	2500	Ln	1.119323	33.81			2283.81	2283.81	Yes	2285	100	99.9	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	387009	13C5-PFNA	429397	1250	Avg	0.935659				1204.08	1204.08	Yes	1250	96	96.3	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	681100	13C9-PFNA	387009	1250	Avg	0.837317				2627.3	2627.3	Yes	2500	105	105.1	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	123104	18O2-PFHxS	353908	2500	Avg	0.170753				5092.76	5092.76	Yes	5000	102	101.9	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	536045	13C2-8:2FTS	123104	5000	Ln	1.94256	137			11137	11137.38	Yes	9600	116	116	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	496187	13C4-PFOS	407372	2500	Avg	0.495989				6139.35	6139.35	Yes	5000	123	122.8	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	217697	D3-NMeFOSAA	496187	5000	Avg	0.795786				2756.65	2756.64	Yes	2500	110	110.3	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	370548	13C2-PFDA	350280	1250	Avg	1.232298				1073.06	1073.06	Yes	1250	86	85.8	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	651833	13C6-PFDA	370548	1250	Avg	0.819341				2683.72	2683.72	Yes	2500	107	107.3	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	380442	13C4-PFOS	407372	2500	Avg	0.364519				6404.97	6404.97	Yes	5000	128	128.1	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	198905	D5-NEtFOSAA	380442	5000	Avg	1.162779				2248.18	2248.17	Yes	2500	90	89.9	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	407581	13C4-PFOS	407372	2500	Avg	0.970887				2576.29	2576.29	Yes	2500	103	103.1	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	380844	13C8-PFOS	407581	2500	Avg	0.939894				2485.39	2485.39	Yes	2383	104	104.3	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	384774	13C8-PFOS	407581	2500	Avg	1.054191				2238.79	2238.79	Yes	2320	96	96.5	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	545974	13C8-PFOS	407581	2500	Avg	1.337317				2504.17	2504.17	Yes	2405	104	104.1	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	314599	13C2-PFDA	350280	1250	Avg	1.191252				942.43	942.43	Yes	1250	75	75.4	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	663143	13C7-PFUnA	314599	1250	Avg	0.853896				3085.71	3085.71	Yes	2500	123	123.4	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	350871	13C2-PFDA	350280	1250	Avg	1.01948				1228.18	1228.18	Yes	1250	98	98.3	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	532378	13C2-PFDoA	350871	1250	Avg	0.772781				2454.29	2454.29	Yes	2500	98	98.2	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	707816	13C4-PFOS	407372	2500	Avg	1.694128				2564.03	2564.03	Yes	2500	103	102.6	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	743595	13C8-PFOSA	707816	2500	Avg	0.99659				2635.36	2635.36	Yes	2500	105	105.4	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	312564	13C2-PFDA	350280	1250	Avg	0.871708				1279.57	1279.57	Yes	1250	102	102.4	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2990510	13C4-PFOS	407372	2500	Avg	0.708623				25899	25898.75	Yes	25000	104	103.6	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	190749	13C4-PFOS	407372	2500	Avg	0.415479				2817.49	2817.49	Yes	2500	113	112.7	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3442495	13C4-PFOS	407372	2500	Avg	0.758997				27834	27834.41	Yes	25000	111	111.3	Yes
101124008.d	CCV L5A_SVLC-4037	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	213965	13C4-PFOS	407372	2500	Avg	0.441246				2975.85	2975.85	Yes	2500	119	119	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2339577	13C3-PFBA	1043484	5000	Avg	1.139492				9838.08	9838.08	Yes	10000	98	98.4	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2011762	13C4-PFBA	2339577	10000	Avg	0.862417				9970.62	9970.62	Yes	10000	100	99.7	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1021947	13C2-PFHxA	588516	2500	Avg	0.8747				4963.08	4963.08	Yes	5000	99	99.3	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	954604	13C5-PFPeA	1021947	5000	Avg	0.923358				5058.19	5058.19	Yes	5000	101	101.2	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	119154	18O2-PFHxS	354091	2500	Avg	0.171095				4916.95	4916.96	Yes	5000	98	98.3	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	626857	13C2-PFHxA	588516	2500	Avg	1.027817				2590.8	2590.8	Yes	2500	104	103.6	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	600554	13C5-PFHxA	626857	2500	Avg	0.967877				2474.59	2474.59	Yes	2500	99	99	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	480034	18O2-PFHxS	354091	2500	Avg	1.337567				2533.85	2533.85	Yes	2500	101	101.4	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	510200	13C3-PFBS	480034	2500	Avg	1.164193				2282.36	2282.36	Yes	2218	103	102.9	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	415014	13C2-PFHxA	588516	2500	Avg	0.187386				9408.24	9408.22	Yes	10000	94	94.1	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	746226	13C2-PFHxA	588516	2500	Avg	1.233488				2569.91	2569.91	Yes	2500	103	102.8	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	782201	13C4-PFHpA	746226	2500	Avg	1.05664				2480.05	2480.05	Yes	2500	99	99.2	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	128580	18O2-PFHxS	354091	2500	Avg	0.189449				4791.88	4791.88	Yes	5000	96	95.8	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	561889	13C2-6:2FTS	128580	5000	Avg	2.317932				9426.41	9426.41	Yes	9500	99	99.2	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	946389	13C4-PFOA	108835	2500	Avg	6.935343				3134.54	3134.54	Yes	2500	125	125.4	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	862116	13C8-PFOA	946389	2500	Avg	0.942233				2417.01	2417.01	Yes	2500	97	96.7	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	426196	18O2-PFHxS	354091	2500	Avg	1.223059				2460.29	2460.29	Yes	2500	98	98.4	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	494818	13C3-PFHxS	426196	2500	Avg	1.170077				2480.63	2480.63	Yes	2353	105	105.4	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	444333	13C3-PFHxS	426196	2500	Avg	1.134147				2298.11	2298.1	Yes	2285	101	100.6	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	374781	13C5-PFNA	411736	1250	Avg	0.970593				1172.28	1172.28	Yes	1250	94	93.8	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	724768	13C9-PFNA	374781	1250	Avg	0.897503				2693.37	2693.37	Yes	2500	108	107.7	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	124104	18O2-PFHxS	354091	2500	Avg	0.188821				4640.46	4640.46	Yes	5000	93	92.8	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	550580	13C2-8:2FTS	124104	5000	Ln	2.07718	85.9208			10638	10637.63	Yes	9600	111	110.8	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	371428	13C2-PFDA	341532	1250	Avg	1.158659				1173.27	1173.27	Yes	1250	94	93.9	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	648335	13C6-PFDA	371428	1250	Avg	0.88065				2477.6	2477.6	Yes	2500	99	99.1	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	470263	13C4-PFOS	436834	2500	Avg	0.604638				4451.12	4451.12	Yes	5000	89	89	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	192005	D3-NMeFOSAA	470263	5000	Avg	0.811858				2514.56	2514.56	Yes	2500	101	100.6	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	388864	13C4-PFOS	436834	2500	Avg	0.464185				4794.35	4794.36	Yes	5000	96	95.9	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	186808	D5-NEtFOSAA	388864	5000	Avg	1.016358				2363.31	2363.31	Yes	2500	95	94.5	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	413874	13C4-PFOS	436834	2500	Avg	1.031655				2295.92	2295.92	Yes	2500	92	91.8	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	373127	13C8-PFOS	413874	2500	Avg	0.936233				2407.38	2407.38	Yes	2383	101	101	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	392472	13C8-PFOS	413874	2500	Avg	1.036752				2286.68	2286.68	Yes	2320	99	98.6	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	551226	13C8-PFOS	413874	2500	Avg	1.397808				2382.07	2382.07	Yes	2405	99	99	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	365863	13C2-PFDA	341532	1250	Avg	1.110582				1205.72	1205.72	Yes	1250	96	96.5	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	670767	13C7-PFUnA	365863	1250	Ln	0.890162	24.9046			2546.53	2546.53	Yes	2500	102	101.9	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	361724	13C2-PFDA	341532	1250	Avg	1.123999				1177.85	1177.85	Yes	1250	94	94.2	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	570669	13C2-PFDoA	361724	1250	Avg	0.728459				2707.15	2707.15	Yes	2500	108	108.3	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	770905	13C4-PFOS	436834	2500	Avg	1.903232				2318.1	2318.1	Yes	2500	93	92.7	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	754154	13C8-PFOSA	770905	2500	Ln	0.972205	16.879			2498.24	2498.24	Yes	2500	100	99.9	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	328701	13C2-PFDA	341532	1250	Avg	0.979484				1228.24	1228.24	Yes	1250	98	98.3	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3121280	13C4-PFOS	436834	2500	Avg	0.787621				22680	22679.79	Yes	25000	91	90.7	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	188499	13C4-PFOS	436834	2500	Avg	0.473429				2278.65	2278.65	Yes	2500	91	91.1	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3468998	13C4-PFOS	436834	2500	Avg	0.875607				22673	22673.49	Yes	25000	91	90.7	Yes
101124A039.d	CCV L5A_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	208145	13C4-PFOS	436834	2500	Avg	0.517751				2300.74	2300.75	Yes	2500	92	92	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2557408	13C3-PFBA	1160711	5000	Avg	1.139492				9667.96	9667.96	Yes	10000	97	96.7	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2225356	13C4-PFBA	2557408	10000	Avg	0.862417				10090	10089.79	Yes	10000	101	100.9	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1068631	13C2-PFHxA	598923	2500	Avg	0.8747				5099.62	5099.62	Yes	5000	102	102	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	999882	13C5-PFPeA	1068631	5000	Avg	0.923358				5066.65	5066.65	Yes	5000	101	101.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	124407	18O2-PFHxS	389027	2500	Avg	0.171095				4672.69	4672.7	Yes	5000	93	93.5	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	661020	13C2-PFHxA	598923	2500	Avg	1.027817				2684.53	2684.53	Yes	2500	107	107.4	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	600871	13C5-PFHxA	661020	2500	Avg	0.967877				2347.94	2347.94	Yes	2500	94	93.9	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	447640	18O2-PFHxS	389027	2500	Avg	1.337567				2150.67	2150.67	Yes	2500	86	86	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	503310	13C3-PFBS	447640	2500	Avg	1.164193				2414.47	2414.47	Yes	2218	109	108.9	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	455075	13C2-PFHxA	598923	2500	Avg	0.187386				10137	10137.13	Yes	10000	101	101.4	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	763545	13C2-PFHxA	598923	2500	Avg	1.233488				2583.86	2583.86	Yes	2500	103	103.4	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	798101	13C4-PFHpA	763545	2500	Avg	1.05664				2473.07	2473.07	Yes	2500	99	98.9	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	132854	18O2-PFHxS	389027	2500	Avg	0.189449				4506.53	4506.53	Yes	5000	90	90.1	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	571339	13C2-6:2FTS	132854	5000	Avg	2.317932				9276.6	9276.59	Yes	9500	98	97.6	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	843310	13C4-PFOA	124736	2500	Avg	6.935343				2437.07	2437.07	Yes	2500	97	97.5	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	804744	13C8-PFOA	843310	2500	Avg	0.942233				2531.93	2531.93	Yes	2500	101	101.3	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	429367	18O2-PFHxS	389027	2500	Avg	1.223059				2256.01	2256.01	Yes	2500	90	90.2	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	511024	13C3-PFHxS	429367	2500	Avg	1.170077				2542.95	2542.95	Yes	2353	108	108.1	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	449264	13C3-PFHxS	429367	2500	Avg	1.134147				2306.45	2306.45	Yes	2285	101	100.9	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	357212	13C5-PFNA	447067	1250	Avg	0.970593				1029.03	1029.03	Yes	1250	82	82.3	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	722990	13C9-PFNA	357212	1250	Avg	0.897503				2818.9	2818.9	Yes	2500	113	112.8	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	130591	18O2-PFHxS	389027	2500	Avg	0.188821				4444.51	4444.5	Yes	5000	89	88.9	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	535537	13C2-8:2FTS	130591	5000	Ln	2.07718	85.9208			9829.88	9829.88	Yes	9600	102	102.4	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	410564	13C2-PFDA	332313	1250	Avg	1.158659				1332.87	1332.87	Yes	1250	107	106.6	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	674777	13C6-PFDA	410564	1250	Avg	0.88065				2332.85	2332.85	Yes	2500	93	93.3	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	483532	13C4-PFOS	408900	2500	Avg	0.604638				4889.37	4889.37	Yes	5000	98	97.8	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	200834	D3-NMeFOSAA	483532	5000	Avg	0.811858				2558.01	2558.01	Yes	2500	102	102.3	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	369955	13C4-PFOS	408900	2500	Avg	0.464185				4872.82	4872.82	Yes	5000	97	97.5	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	188114	D5-NEtFOSAA	369955	5000	Avg	1.016358				2501.47	2501.47	Yes	2500	100	100.1	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	435129	13C4-PFOS	408900	2500	Avg	1.031655				2578.73	2578.73	Yes	2500	103	103.1	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	363962	13C8-PFOS	435129	2500	Avg	0.936233				2233.54	2233.54	Yes	2383	94	93.7	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	404004	13C8-PFOS	435129	2500	Avg	1.036752				2238.89	2238.89	Yes	2320	97	96.5	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	588042	13C8-PFOS	435129	2500	Avg	1.397808				2417.03	2417.03	Yes	2405	101	100.5	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	372552	13C2-PFDA	332313	1250	Avg	1.110582				1261.82	1261.82	Yes	1250	101	100.9	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	677795	13C7-PFUnA	372552	1250	Ln	0.890162	24.9046			2526.8	2526.8	Yes	2500	101	101.1	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	367139	13C2-PFDA	332313	1250	Avg	1.123999				1228.65	1228.65	Yes	1250	98	98.3	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	562396	13C2-PFDoA	367139	1250	Avg	0.728459				2628.55	2628.55	Yes	2500	105	105.1	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	753221	13C4-PFOS	408900	2500	Avg	1.903232				2419.66	2419.66	Yes	2500	97	96.8	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	765728	13C8-PFOSA	753221	2500	Ln	0.972205	16.879			2596.81	2596.81	Yes	2500	104	103.9	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	310479	13C2-PFDA	332313	1250	Avg	0.979484				1192.33	1192.33	Yes	1250	95	95.4	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3479726	13C4-PFOS	408900	2500	Avg	0.787621				27012	27011.62	Yes	25000	108	108	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	190284	13C4-PFOS	408900	2500	Avg	0.473429				2457.37	2457.37	Yes	2500	98	98.3	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3820012	13C4-PFOS	408900	2500	Avg	0.875607				26673	26673.4	Yes	25000	107	106.7	Yes
101124A114.d	CCV L5F_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	211317	13C4-PFOS	408900	2500	Avg	0.517751				2495.38	2495.38	Yes	2500	100	99.8	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	2656641	13C3-PFBA	1210171	5000	Avg	1.139492				9632.63	9632.63	Yes	10000	96	96.3	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2305362	13C4-PFBA	2656641	10000	Avg	0.862417				10062	10062.11	Yes	10000	101	100.6	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	1099358	13C2-PFHxA	664820	2500	Avg	0.8747				4726.24	4726.24	Yes	5000	95	94.5	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1046849	13C5-PFPeA	1099358	5000	Avg	0.923358				5156.38	5156.38	Yes	5000	103	103.1	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	130264	18O2-PFHxS	385758	2500	Avg	0.171095				4934.14	4934.15	Yes	5000	99	98.7	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	694420	13C2-PFHxA	664820	2500	Avg	1.027817				2540.63	2540.64	Yes	2500	102	101.6	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	607849	13C5-PFHxA	694420	2500	Avg	0.967877				2260.96	2260.96	Yes	2500	90	90.4	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	490818	18O2-PFHxS	385758	2500	Avg	1.337567				2378.1	2378.1	Yes	2500	95	95.1	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	513443	13C3-PFBS	490818	2500	Avg	1.164193				2246.4	2246.4	Yes	2218	101	101.3	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	505325	13C2-PFHxA	664820	2500	Avg	0.187386				10141	10140.74	Yes	10000	101	101.4	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	868794	13C2-PFHxA	664820	2500	Avg	1.233488				2648.61	2648.61	Yes	2500	106	105.9	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	862245	13C4-PFHpA	868794	2500	Avg	1.05664				2348.16	2348.16	Yes	2500	94	93.9	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	138706	18O2-PFHxS	385758	2500	Avg	0.189449				4744.91	4744.91	Yes	5000	95	94.9	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	598120	13C2-6:2FTS	138706	5000	Avg	2.317932				9301.7	9301.7	Yes	9500	98	97.9	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	928636	13C4-PFOA	138647	2500	Avg	6.935343				2414.39	2414.39	Yes	2500	97	96.6	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	855143	13C8-PFOA	928636	2500	Avg	0.942233				2443.29	2443.29	Yes	2500	98	97.7	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	470327	18O2-PFHxS	385758	2500	Avg	1.223059				2492.17	2492.17	Yes	2500	100	99.7	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	535986	13C3-PFHxS	470327	2500	Avg	1.170077				2434.89	2434.89	Yes	2353	103	103.5	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	470136	13C3-PFHxS	470327	2500	Avg	1.134147				2203.41	2203.4	Yes	2285	96	96.4	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	459791	13C5-PFNA	494476	1250	Avg	0.970593				1197.53	1197.53	Yes	1250	96	95.8	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	739723	13C9-PFNA	459791	1250	Avg	0.897503				2240.69	2240.7	Yes	2500	90	89.6	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	128400	18O2-PFHxS	385758	2500	Avg	0.188821				4406.97	4406.97	Yes	5000	88	88.1	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	571522	13C2-8:2FTS	128400	5000	Ln	2.07718	85.9208			10673	10672.94	Yes	9600	111	111.2	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	434458	13C2-PFDA	354372	1250	Avg	1.158659				1322.64	1322.64	Yes	1250	106	105.8	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	702239	13C6-PFDA	434458	1250	Avg	0.88065				2294.27	2294.27	Yes	2500	92	91.8	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	512778	13C4-PFOS	455312	2500	Avg	0.604638				4656.56	4656.56	Yes	5000	93	93.1	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	189515	D3-NMeFOSAA	512778	5000	Avg	0.811858				2276.17	2276.17	Yes	2500	91	91	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	403451	13C4-PFOS	455312	2500	Avg	0.464185				4772.33	4772.33	Yes	5000	95	95.4	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	187925	D5-NEtFOSAA	403451	5000	Avg	1.016358				2291.49	2291.49	Yes	2500	92	91.7	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	451564	13C4-PFOS	455312	2500	Avg	1.031655				2403.34	2403.34	Yes	2500	96	96.1	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	407115	13C8-PFOS	451564	2500	Avg	0.936233				2407.43	2407.43	Yes	2383	101	101	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	452181	13C8-PFOS	451564	2500	Avg	1.036752				2414.67	2414.67	Yes	2320	104	104.1	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	601074	13C8-PFOS	451564	2500	Avg	1.397808				2380.68	2380.68	Yes	2405	99	99	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	382915	13C2-PFDA	354372	1250	Avg	1.110582				1216.19	1216.19	Yes	1250	97	97.3	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	733265	13C7-PFUnA	382915	1250	Ln	0.890162	24.9046			2661.08	2661.08	Yes	2500	106	106.4	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	388194	13C2-PFDA	354372	1250	Avg	1.123999				1218.24	1218.24	Yes	1250	97	97.5	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	566163	13C2-PFDoA	388194	1250	Avg	0.728459				2502.64	2502.64	Yes	2500	100	100.1	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	814068	13C4-PFOS	455312	2500	Avg	1.903232				2348.55	2348.55	Yes	2500	94	93.9	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	817818	13C8-PFOSA	814068	2500	Ln	0.972205	16.879			2565.96	2565.96	Yes	2500	103	102.6	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	347104	13C2-PFDA	354372	1250	Avg	0.979484				1250.01	1250.01	Yes	1250	100	100	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	3599397	13C4-PFOS	455312	2500	Avg	0.787621				25092	25092.47	Yes	25000	100	100.4	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	201071	13C4-PFOS	455312	2500	Avg	0.473429				2331.98	2331.98	Yes	2500	93	93.3	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	4001825	13C4-PFOS	455312	2500	Avg	0.875607				25095	25094.57	Yes	25000	100	100.4	Yes
101124A126.d	CCV L5G_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	219870	13C4-PFOS	455312	2500	Avg	0.517751				2331.72	2331.72	Yes	2500	93	93.3	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1495153	13C3-PFBA	679077	5000	Avg	1.116788				9857.48	9857.48	Yes	10000	99	98.6	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1393441	13C4-PFBA	1495153	10000	Avg	0.877545				10620	10620.22	Yes	10000	106	106.2	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	586481	13C2-PFHxA	349664	2500	Avg	0.887028				4727.22	4727.22	Yes	5000	95	94.5	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	670340	13C5-PFPeA	586481	5000	Avg	1.112976				5134.82	5134.82	Yes	5000	103	102.7	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	85858	18O2-PFHxS	215532	2500	Avg	0.179213				5556.98	5556.99	Yes	5000	111	111.1	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	322259	13C2-PFHxA	349664	2500	Avg	0.975375				2362.23	2362.23	Yes	2500	94	94.5	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	398883	13C5-PFHxA	322259	2500	Avg	1.223615				2528.92	2528.92	Yes	2500	101	101.2	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	316082	18O2-PFHxS	215532	2500	Avg	1.367759				2680.52	2680.52	Yes	2500	107	107.2	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	568230	13C3-PFBS	316082	2500	Avg	1.891566				2375.98	2375.98	Yes	2218	107	107.1	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	334712	13C2-PFHxA	349664	2500	Avg	0.257147				9306.33	9306.34	Yes	10000	93	93.1	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	320932	13C2-PFHxA	349664	2500	Avg	0.967611				2371.38	2371.38	Yes	2500	95	94.9	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	373720	13C4-PFHpA	320932	2500	Avg	1.212737				2400.53	2400.53	Yes	2500	96	96	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	96049	18O2-PFHxS	215532	2500	Avg	0.232206				4797.87	4797.86	Yes	5000	96	96	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	442047	13C2-6:2FTS	96049	5000	Avg	2.171498				10597	10597.08	Yes	9500	112	111.5	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	352905	13C4-PFOA	83725	2500	Avg	4.201779				2507.9	2507.9	Yes	2500	100	100.3	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	388663	13C8-PFOA	352905	2500	Avg	1.215147				2265.83	2265.83	Yes	2500	91	90.6	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	236914	18O2-PFHxS	215532	2500	Avg	1.040797				2640.3	2640.3	Yes	2500	106	105.6	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	263772	13C3-PFHxS	236914	2500	Avg	1.180174				2358.48	2358.48	Yes	2353	100	100.2	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	225841	13C3-PFHxS	236914	2500	Avg	1.06197				2244.09	2244.09	Yes	2285	98	98.2	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	132663	13C5-PFNA	160023	1250	Avg	0.748168				1385.09	1385.09	Yes	1250	111	110.8	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	303286	13C9-PFNA	132663	1250	Avg	1.295141				2206.46	2206.46	Yes	2500	88	88.3	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	102701	18O2-PFHxS	215532	2500	Avg	0.224161				5314.27	5314.26	Yes	5000	106	106.3	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	332978	13C2-8:2FTS	102701	5000	Avg	1.610689				10065	10064.66	Yes	9600	105	104.8	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	225030	13C4-PFOS	330564	2500	Avg	0.338626				5025.8	5025.79	Yes	5000	101	100.5	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	81004	D3-NMeFOSAA	225030	5000	Ln	0.742503	-20.953			2452.25	2452.25	Yes	2500	98	98.1	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	150395	13C2-PFDA	148465	1250	Avg	0.911902				1388.58	1388.58	Yes	1250	111	111.1	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	288921	13C6-PFDA	150395	1250	Avg	1.073967				2235.96	2235.96	Yes	2500	89	89.4	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	273173	13C4-PFOS	330564	2500	Avg	0.420737				4910.34	4910.34	Yes	5000	98	98.2	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	131409	D5-NEtFOSAA	273173	5000	Avg	0.923684				2603.96	2603.96	Yes	2500	104	104.2	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	307633	13C4-PFOS	330564	2500	Avg	0.946037				2459.29	2459.29	Yes	2500	98	98.4	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	255339	13C8-PFOS	307633	2500	Avg	0.891049				2328.75	2328.75	Yes	2383	98	97.7	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	281764	13C8-PFOS	307633	2500	Avg	1.020053				2244.76	2244.76	Yes	2320	97	96.8	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	309527	13C8-PFOS	307633	2500	Avg	0.988234				2545.34	2545.34	Yes	2405	106	105.8	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	129313	13C2-PFDA	148465	1250	Avg	0.794666				1370.07	1370.07	Yes	1250	110	109.6	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	236762	13C7-PFUnA	129313	1250	Avg	0.98673				2319.43	2319.43	Yes	2500	93	92.8	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	115056	13C2-PFDA	148465	1250	Avg	0.68959				1404.77	1404.77	Yes	1250	112	112.4	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	155138	13C2-PFDoA	115056	1250	Avg	0.69735				2416.95	2416.95	Yes	2500	97	96.7	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	619610	13C4-PFOS	330564	2500	Avg	1.895178				2472.59	2472.59	Yes	2500	99	98.9	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	685716	13C8-PFOSA	619610	2500	Avg	1.081003				2559.4	2559.4	Yes	2500	102	102.4	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	81606	13C2-PFDA	148465	1250	Avg	0.529413				1297.82	1297.82	Yes	1250	104	103.8	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2340604	13C4-PFOS	330564	2500	Avg	0.681735				25965	25965.51	Yes	25000	104	103.9	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	145753	13C4-PFOS	330564	2500	Avg	0.427819				2576.57	2576.57	Yes	2500	103	103.1	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	2940754	13C4-PFOS	330564	2500	Avg	0.859105				25888	25887.9	Yes	25000	104	103.6	Yes
101424A062.d	CCV L5C_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	163433	13C4-PFOS	330564	2500	Avg	0.492801				2508.14	2508.14	Yes	2500	100	100.3	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1478645	13C3-PFBA	679781	5000	Avg	1.116788				9738.54	9738.55	Yes	10000	97	97.4	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1397789	13C4-PFBA	1478645	10000	Avg	0.877545				10772	10772.3	Yes	10000	108	107.7	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	583061	13C2-PFHxA	342719	2500	Avg	0.887028				4794.89	4794.89	Yes	5000	96	95.9	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	662159	13C5-PFPeA	583061	5000	Avg	1.112976				5101.9	5101.91	Yes	5000	102	102	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	88006	18O2-PFHxS	248671	2500	Avg	0.179213				4936.93	4936.94	Yes	5000	99	98.7	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	324702	13C2-PFHxA	342719	2500	Avg	0.975375				2428.37	2428.37	Yes	2500	97	97.1	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	421208	13C5-PFHxA	324702	2500	Avg	1.223615				2650.37	2650.37	Yes	2500	106	106	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	334354	18O2-PFHxS	248671	2500	Avg	1.367759				2457.6	2457.6	Yes	2500	98	98.3	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	535078	13C3-PFBS	334354	2500	Avg	1.891566				2115.09	2115.09	Yes	2218	95	95.4	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	351837	13C2-PFHxA	342719	2500	Avg	0.257147				9980.71	9980.72	Yes	10000	100	99.8	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	343805	13C2-PFHxA	342719	2500	Avg	0.967611				2591.87	2591.87	Yes	2500	104	103.7	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	397942	13C4-PFHpA	343805	2500	Avg	1.212737				2386.06	2386.06	Yes	2500	95	95.4	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	107282	18O2-PFHxS	248671	2500	Avg	0.232206				4644.82	4644.81	Yes	5000	93	92.9	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	442093	13C2-6:2FTS	107282	5000	Avg	2.171498				9488.49	9488.5	Yes	9500	100	99.9	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	353796	13C4-PFOA	94942	2500	Avg	4.201779				2217.18	2217.18	Yes	2500	89	88.7	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	407733	13C8-PFOA	353796	2500	Avg	1.215147				2371.01	2371.01	Yes	2500	95	94.8	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	270519	18O2-PFHxS	248671	2500	Avg	1.040797				2613.04	2613.04	Yes	2500	105	104.5	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	272529	13C3-PFHxS	270519	2500	Avg	1.180174				2134.07	2134.07	Yes	2353	91	90.7	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	232290	13C3-PFHxS	270519	2500	Avg	1.06197				2021.44	2021.44	Yes	2285	88	88.5	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	120090	13C5-PFNA	155173	1250	Avg	0.748168				1293.01	1293.01	Yes	1250	103	103.4	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	322534	13C9-PFNA	120090	1250	Avg	1.295141				2592.16	2592.16	Yes	2500	104	103.7	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	91675	18O2-PFHxS	248671	2500	Avg	0.224161				4111.56	4111.55	Yes	5000	82	82.2	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	349928	13C2-8:2FTS	91675	5000	Avg	1.610689				11849	11849.12	Yes	9600	123	123.4	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	231965	13C4-PFOS	334296	2500	Avg	0.338626				5122.85	5122.84	Yes	5000	102	102.5	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	103946	D3-NMeFOSAA	231965	5000	Ln	0.742503	-20.953			3045.79	3045.79	Yes	2500	122	121.8	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	145492	13C2-PFDA	155576	1250	Avg	0.911902				1281.91	1281.91	Yes	1250	103	102.6	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	289273	13C6-PFDA	145492	1250	Avg	1.073967				2314.13	2314.13	Yes	2500	93	92.6	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	316880	13C4-PFOS	334296	2500	Avg	0.420737				5632.39	5632.39	Yes	5000	113	112.6	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	153948	D5-NEtFOSAA	316880	5000	Avg	0.923684				2629.82	2629.82	Yes	2500	105	105.2	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	324380	13C4-PFOS	334296	2500	Avg	0.946037				2564.22	2564.22	Yes	2500	103	102.6	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	288021	13C8-PFOS	324380	2500	Avg	0.891049				2491.2	2491.2	Yes	2383	105	104.5	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	291531	13C8-PFOS	324380	2500	Avg	1.020053				2202.66	2202.66	Yes	2320	95	94.9	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	332604	13C8-PFOS	324380	2500	Avg	0.988234				2593.9	2593.9	Yes	2405	108	107.9	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	137987	13C2-PFDA	155576	1250	Avg	0.794666				1395.15	1395.15	Yes	1250	112	111.6	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	252460	13C7-PFUnA	137987	1250	Avg	0.98673				2317.75	2317.75	Yes	2500	93	92.7	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	117900	13C2-PFDA	155576	1250	Avg	0.68959				1373.7	1373.69	Yes	1250	110	109.9	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	166944	13C2-PFDoA	117900	1250	Avg	0.69735				2538.14	2538.14	Yes	2500	102	101.5	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	674252	13C4-PFOS	334296	2500	Avg	1.895178				2660.61	2660.61	Yes	2500	106	106.4	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	721078	13C8-PFOSA	674252	2500	Avg	1.081003				2473.28	2473.28	Yes	2500	99	98.9	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	87144	13C2-PFDA	155576	1250	Avg	0.529413				1322.55	1322.54	Yes	1250	106	105.8	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2392121	13C4-PFOS	334296	2500	Avg	0.681735				26241	26240.76	Yes	25000	105	105	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	145628	13C4-PFOS	334296	2500	Avg	0.427819				2545.62	2545.62	Yes	2500	102	101.8	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	3073048	13C4-PFOS	334296	2500	Avg	0.859105				26750	26750.5	Yes	25000	107	107	Yes
101424A076.d	CCV L5D_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	167520	13C4-PFOS	334296	2500	Avg	0.492801				2542.17	2542.17	Yes	2500	102	101.7	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C4-PFBA	SESI-0111	1439730	13C3-PFBA	658172	5000	Avg	1.116788				9793.57	9793.57	Yes	10000	98	97.9	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1354611	13C4-PFBA	1439730	10000	Avg	0.877545				10722	10721.71	Yes	10000	107	107.2	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C5-PFPeA	SESI-0112	559111	13C2-PFHxA	326941	2500	Avg	0.887028				4819.83	4819.83	Yes	5000	96	96.4	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	636650	13C5-PFPeA	559111	5000	Avg	1.112976				5115.48	5115.49	Yes	5000	102	102.3	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C2-4:2FTS	SESI-0104	80688	18O2-PFHxS	241520	2500	Avg	0.179213				4660.43	4660.43	Yes	5000	93	93.2	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C5-PFHxA	SESI-0113	330432	13C2-PFHxA	326941	2500	Avg	0.975375				2590.48	2590.49	Yes	2500	104	103.6	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	395278	13C5-PFHxA	330432	2500	Avg	1.223615				2444.08	2444.08	Yes	2500	98	97.8	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C3-PFBS	SESI-0116	326645	18O2-PFHxS	241520	2500	Avg	1.367759				2472.03	2472.03	Yes	2500	99	98.9	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	537382	13C3-PFBS	326645	2500	Avg	1.891566				2174.33	2174.33	Yes	2218	98	98	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C3-HFPO-DA	SESI-0121	322504	13C2-PFHxA	326941	2500	Avg	0.257147				9590.12	9590.12	Yes	10000	96	95.9	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C4-PFHpA	SESI-0114	304900	13C2-PFHxA	326941	2500	Avg	0.967611				2409.5	2409.5	Yes	2500	96	96.4	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	396122	13C4-PFHpA	304900	2500	Avg	1.212737				2678.21	2678.21	Yes	2500	107	107.1	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C2-6:2FTS	SESI-0105	104130	18O2-PFHxS	241520	2500	Avg	0.232206				4641.84	4641.83	Yes	5000	93	92.8	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	448861	13C2-6:2FTS	104130	5000	Avg	2.171498				9925.37	9925.37	Yes	9500	104	104.5	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C8-PFOA	SESI-0097	343103	13C4-PFOA	88948	2500	Avg	4.201779				2295.07	2295.07	Yes	2500	92	91.8	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorooctanoic acid (PFOA)	335-67-1	370210	13C8-PFOA	343103	2500	Avg	1.215147				2219.91	2219.91	Yes	2500	89	88.8	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C3-PFHxS	SESI-0096	244645	18O2-PFHxS	241520	2500	Avg	1.040797				2433.09	2433.08	Yes	2500	97	97.3	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	266060	13C3-PFHxS	244645	2500	Avg	1.180174				2303.76	2303.76	Yes	2353	98	97.9	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	233331	13C3-PFHxS	244645	2500	Avg	1.06197				2245.25	2245.25	Yes	2285	98	98.3	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C9-PFNA	SESI-0099	111546	13C5-PFNA	140839	1250	Avg	0.748168				1323.25	1323.25	Yes	1250	106	105.9	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorononanoic acid (PFNA)	375-95-1	267113	13C9-PFNA	111546	1250	Avg	1.295141				2311.18	2311.18	Yes	2500	92	92.4	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C2-8:2FTS	SESI-0106	99843	18O2-PFHxS	241520	2500	Avg	0.224161				4610.47	4610.46	Yes	5000	92	92.2	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	316588	13C2-8:2FTS	99843	5000	Avg	1.610689				9843.17	9843.17	Yes	9600	103	102.5	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSAA	SESI-0102	237942	13C4-PFOS	330086	2500	Avg	0.338626				5321.87	5321.86	Yes	5000	106	106.4	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	92898	D3-NMeFOSAA	237942	5000	Ln	0.742503	-20.953			2657.32	2657.32	Yes	2500	106	106.3	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C6-PFDA	SESI-0115	144421	13C2-PFDA	152675	1250	Avg	0.911902				1296.65	1296.65	Yes	1250	104	103.7	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorodecanoic acid (PFDA)	335-76-2	283332	13C6-PFDA	144421	1250	Avg	1.073967				2283.41	2283.41	Yes	2500	91	91.3	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSAA	SESI-0110	264340	13C4-PFOS	330086	2500	Avg	0.420737				4758.44	4758.45	Yes	5000	95	95.2	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	123741	D5-NEtFOSAA	264340	5000	Avg	0.923684				2533.94	2533.95	Yes	2500	101	101.4	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C8-PFOS	SESI-0098	295623	13C4-PFOS	330086	2500	Avg	0.946037				2366.7	2366.7	Yes	2500	95	94.7	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	255798	13C8-PFOS	295623	2500	Avg	0.891049				2427.71	2427.71	Yes	2383	102	101.9	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	273422	13C8-PFOS	295623	2500	Avg	1.020053				2266.8	2266.8	Yes	2320	98	97.7	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	298539	13C8-PFOS	295623	2500	Avg	0.988234				2554.72	2554.72	Yes	2405	106	106.2	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C7-PFUnA	SESI-0117	126801	13C2-PFDA	152675	1250	Avg	0.794666				1306.41	1306.41	Yes	1250	105	104.5	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	228575	13C7-PFUnA	126801	1250	Avg	0.98673				2283.59	2283.59	Yes	2500	91	91.3	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C2-PFDoA	SESI-0118	111093	13C2-PFDA	152675	1250	Avg	0.68959				1318.98	1318.98	Yes	1250	106	105.5	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	147820	13C2-PFDoA	111093	1250	Avg	0.69735				2385.09	2385.1	Yes	2500	95	95.4	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C8-PFOSA	SESI-0107	625873	13C4-PFOS	330086	2500	Avg	1.895178				2501.2	2501.2	Yes	2500	100	100	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	677664	13C8-PFOSA	625873	2500	Avg	1.081003				2504.04	2504.04	Yes	2500	100	100.2	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	13C2-PFTeDA	SESI-0119	85778	13C2-PFDA	152675	1250	Avg	0.529413				1326.55	1326.55	Yes	1250	106	106.1	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D7-NMeFOSE	SESI-0129	2213980	13C4-PFOS	330086	2500	Avg	0.681735				24596	24596.37	Yes	25000	98	98.4	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D3-NMeFOSA	SESI-0109	131785	13C4-PFOS	330086	2500	Avg	0.427819				2333.02	2333.02	Yes	2500	93	93.3	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D9-NEtFOSE	SESI-0130	2847446	13C4-PFOS	330086	2500	Avg	0.859105				25103	25102.8	Yes	25000	100	100.4	Yes
101424A096.d	CCV L5E_SVLC-4137	Calibration_Verification	EIS	D5-NEtFOSA	SESI-0108	157682	13C4-PFOS	330086	2500	Avg	0.492801				2423.39	2423.39	Yes	2500	97	96.9	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	3122991	13C3-PFBA	1378185	5000	Avg	1.14247				9917.19	9917.18	Yes	10000	99	99.2	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1348296	13C2-PFHxA	806287	2500	Avg	0.796557				5248.3	5248.3	Yes	5000	105	105	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	162162	18O2-PFHxS	450900	2500	Avg	0.169955				5290.24	5290.23	Yes	5000	106	105.8	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	899555	13C2-PFHxA	806287	2500	Avg	1.046383				2665.55	2665.55	Yes	2500	107	106.6	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	571756	18O2-PFHxS	450900	2500	Avg	1.319962				2401.65	2401.65	Yes	2500	96	96.1	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	628046	13C2-PFHxA	806287	2500	Avg	0.186581				10437	10436.97	Yes	10000	104	104.4	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	976752	13C2-PFHxA	806287	2500	Avg	1.170685				2586.99	2586.99	Yes	2500	103	103.5	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	170327	18O2-PFHxS	450900	2500	Avg	0.184115				5129.26	5129.25	Yes	5000	103	102.6	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	1059452	13C4-PFOA	144624	2500	Avg	7.728869				2369.55	2369.55	Yes	2500	95	94.8	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	549718	18O2-PFHxS	450900	2500	Avg	1.171154				2602.47	2602.47	Yes	2500	104	104.1	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	536997	13C5-PFNA	584997	1250	Avg	0.935659				1226.34	1226.34	Yes	1250	98	98.1	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	160881	18O2-PFHxS	450900	2500	Avg	0.170753				5223.91	5223.92	Yes	5000	104	104.5	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	624426	13C4-PFOS	544073	2500	Avg	0.495989				5784.84	5784.85	Yes	5000	116	115.7	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	575602	13C2-PFDA	455464	1250	Avg	1.232298				1281.92	1281.92	Yes	1250	103	102.6	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	449509	13C4-PFOS	544073	2500	Avg	0.364519				5666.32	5666.32	Yes	5000	113	113.3	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	524593	13C4-PFOS	544073	2500	Avg	0.970887				2482.77	2482.77	Yes	2500	99	99.3	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	483919	13C2-PFDA	455464	1250	Avg	1.191252				1114.87	1114.87	Yes	1250	89	89.2	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	451262	13C2-PFDA	455464	1250	Avg	1.01948				1214.8	1214.8	Yes	1250	97	97.2	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	946350	13C4-PFOS	544073	2500	Avg	1.694128				2566.78	2566.78	Yes	2500	103	102.7	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	395286	13C2-PFDA	455464	1250	Avg	0.871708				1244.5	1244.5	Yes	1250	100	99.6	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	4281764	13C4-PFOS	544073	2500	Avg	0.708623				27765	27764.53	Yes	25000	111	111.1	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	244284	13C4-PFOS	544073	2500	Avg	0.415479				2701.65	2701.65	Yes	2500	108	108.1	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4720277	13C4-PFOS	544073	2500	Avg	0.758997				28577	28576.58	Yes	25000	114	114.3	Yes
101024065.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	254495	13C4-PFOS	544073	2500	Avg	0.441246				2650.21	2650.22	Yes	2500	106	106	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124009.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2277007	13C3-PFBA	1227284	5000	Avg	1.14247				8119.79	8119.78	Yes	10000	81	81.2	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1056710	13C2-PFHxA	734857	2500	Avg	0.796557				4513.11	4513.11	Yes	5000	90	90.3	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	127106	18O2-PFHxS	450965	2500	Avg	0.169955				4146.01	4146	Yes	5000	83	82.9	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	645222	13C2-PFHxA	734857	2500	Avg	1.046383				2097.76	2097.76	Yes	2500	84	83.9	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	462634	18O2-PFHxS	450965	2500	Avg	1.319962				1943	1943	Yes	2500	78	77.7	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	456911	13C2-PFHxA	734857	2500	Avg	0.186581				8331.08	8331.08	Yes	10000	83	83.3	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	727554	13C2-PFHxA	734857	2500	Avg	1.170685				2114.28	2114.28	Yes	2500	85	84.6	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	137836	18O2-PFHxS	450965	2500	Avg	0.184115				4150.22	4150.22	Yes	5000	83	83	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	728875	13C4-PFOA	140897	2500	Avg	7.728869				1673.31	1673.31	Yes	2500	67	66.9	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	442580	18O2-PFHxS	450965	2500	Avg	1.171154				2094.96	2094.96	Yes	2500	84	83.8	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	395371	13C5-PFNA	493282	1250	Avg	0.935659				1070.78	1070.78	Yes	1250	86	85.7	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	131552	18O2-PFHxS	450965	2500	Avg	0.170753				4270.97	4270.97	Yes	5000	85	85.4	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	485475	13C4-PFOS	502211	2500	Avg	0.495989				4872.46	4872.46	Yes	5000	97	97.4	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	371185	13C2-PFDA	426950	1250	Avg	1.232298				881.88	881.88	Yes	1250	71	70.6	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	378622	13C4-PFOS	502211	2500	Avg	0.364519				5170.58	5170.58	Yes	5000	103	103.4	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	431248	13C4-PFOS	502211	2500	Avg	0.970887				2211.12	2211.12	Yes	2500	88	88.4	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	357088	13C2-PFDA	426950	1250	Avg	1.191252				877.62	877.62	Yes	1250	70	70.2	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	352975	13C2-PFDA	426950	1250	Avg	1.01948				1013.67	1013.67	Yes	1250	81	81.1	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	734494	13C4-PFOS	502211	2500	Avg	1.694128				2158.22	2158.22	Yes	2500	86	86.3	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	303585	13C2-PFDA	426950	1250	Avg	0.871708				1019.63	1019.63	Yes	1250	82	81.6	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3194433	13C4-PFOS	502211	2500	Avg	0.708623				22441	22440.49	Yes	25000	90	89.8	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	178845	13C4-PFOS	502211	2500	Avg	0.415479				2142.8	2142.8	Yes	2500	86	85.7	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3572069	13C4-PFOS	502211	2500	Avg	0.758997				23428	23427.91	Yes	25000	94	93.7	Yes
101124009.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	214502	13C4-PFOS	502211	2500	Avg	0.441246				2419.94	2419.94	Yes	2500	97	96.8	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2642205	13C3-PFBA	1089014	5000	Avg	1.139492				10646	10646.13	Yes	10000	106	106.5	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1151585	13C2-PFHxA	620194	2500	Avg	0.8747				5307	5307	Yes	5000	106	106.1	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	136773	18O2-PFHxS	377422	2500	Avg	0.171095				5295.11	5295.12	Yes	5000	106	105.9	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	702585	13C2-PFHxA	620194	2500	Avg	1.027817				2755.47	2755.47	Yes	2500	110	110.2	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	507870	18O2-PFHxS	377422	2500	Avg	1.337567				2515.07	2515.07	Yes	2500	101	100.6	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	501795	13C2-PFHxA	620194	2500	Avg	0.187386				10795	10794.48	Yes	10000	108	107.9	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	798687	13C2-PFHxA	620194	2500	Avg	1.233488				2610.08	2610.08	Yes	2500	104	104.4	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	148877	18O2-PFHxS	377422	2500	Avg	0.189449				5205.32	5205.33	Yes	5000	104	104.1	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	896095	13C4-PFOA	123737	2500	Avg	6.935343				2610.52	2610.52	Yes	2500	104	104.4	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	493853	18O2-PFHxS	377422	2500	Avg	1.223059				2674.63	2674.63	Yes	2500	107	107	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2682	13C3-PFHxS	493853	2500	Avg	1.134147		0.01	11.971	0.11971	0.1197	Yes				
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	423503	13C5-PFNA	412126	1250	Avg	0.970593				1323.42	1323.43	Yes	1250	106	105.9	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	136902	18O2-PFHxS	377422	2500	Avg	0.188821				4802.56	4802.55	Yes	5000	96	96.1	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	410288	13C2-PFDA	355003	1250	Avg	1.158659				1246.84	1246.84	Yes	1250	100	99.7	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	521868	13C4-PFOS	406806	2500	Avg	0.604638				5304.18	5304.18	Yes	5000	106	106.1	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	376374	13C4-PFOS	406806	2500	Avg	0.464185				4982.89	4982.89	Yes	5000	100	99.7	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	439135	13C4-PFOS	406806	2500	Avg	1.031655				2615.87	2615.87	Yes	2500	105	104.6	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	405093	13C2-PFDA	355003	1250	Avg	1.110582				1284.35	1284.35	Yes	1250	103	102.7	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	384352	13C2-PFDA	355003	1250	Avg	1.123999				1204.04	1204.04	Yes	1250	96	96.3	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	815991	13C4-PFOS	406806	2500	Avg	1.903232				2634.79	2634.79	Yes	2500	105	105.4	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	340128	13C2-PFDA	355003	1250	Avg	0.979484				1222.71	1222.71	Yes	1250	98	97.8	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3397799	13C4-PFOS	406806	2500	Avg	0.787621				26511	26511.42	Yes	25000	106	106	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	198910	13C4-PFOS	406806	2500	Avg	0.473429				2581.99	2581.99	Yes	2500	103	103.3	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3816705	13C4-PFOS	406806	2500	Avg	0.875607				26787	26787.49	Yes	25000	107	107.1	Yes
101124A025.d	1633 IBLK A	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	223346	13C4-PFOS	406806	2500	Avg	0.517751				2651	2651	Yes	2500	106	106	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2597820	13C3-PFBA	1066134	5000	Avg	1.139492				10692	10691.93	Yes	10000	107	106.9	Yes
101124A040.d	CCB A1	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3307	13C4-PFBA	2597820	10000	Avg	0.862417		0.01	14.761	0.14761	0.1476	Yes				
101124A040.d	CCB A1	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1092917	13C2-PFHxA	595348	2500	Avg	0.8747				5246.83	5246.83	Yes	5000	105	104.9	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	139730	18O2-PFHxS	432621	2500	Avg	0.171095				4719.37	4719.38	Yes	5000	94	94.4	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	676556	13C2-PFHxA	595348	2500	Avg	1.027817				2764.12	2764.12	Yes	2500	111	110.6	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	503075	18O2-PFHxS	432621	2500	Avg	1.337567				2173.45	2173.45	Yes	2500	87	86.9	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	486419	13C2-PFHxA	595348	2500	Avg	0.187386				10900	10900.4	Yes	10000	109	109	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	839039	13C2-PFHxA	595348	2500	Avg	1.233488				2856.38	2856.38	Yes	2500	114	114.3	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	128789	18O2-PFHxS	432621	2500	Avg	0.189449				3928.43	3928.43	Yes	5000	79	78.6	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	855274	13C4-PFOA	120194	2500	Avg	6.935343				2565.04	2565.04	Yes	2500	103	102.6	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	461836	18O2-PFHxS	432621	2500	Avg	1.223059				2182.09	2182.09	Yes	2500	87	87.3	Yes

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124A040.d	CCB A1	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	424197	13C5-PFNA	406602	1250	Avg	0.970593				1343.6	1343.6	Yes	1250	107	107.5	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	132145	18O2-PFHxS	432621	2500	Avg	0.188821				4044.21	4044.2	Yes	5000	81	80.9	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	407805	13C2-PFDA	330753	1250	Avg	1.158659				1330.16	1330.16	Yes	1250	106	106.4	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	528070	13C4-PFOS	414633	2500	Avg	0.604638				5265.9	5265.9	Yes	5000	105	105.3	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	397522	13C4-PFOS	414633	2500	Avg	0.464185				5163.52	5163.52	Yes	5000	103	103.3	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	420510	13C4-PFOS	414633	2500	Avg	1.031655				2457.64	2457.64	Yes	2500	98	98.3	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	377032	13C2-PFDA	330753	1250	Avg	1.110582				1283.02	1283.02	Yes	1250	103	102.6	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	379866	13C2-PFDA	330753	1250	Avg	1.123999				1277.24	1277.23	Yes	1250	102	102.2	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	796574	13C4-PFOS	414633	2500	Avg	1.903232				2523.54	2523.54	Yes	2500	101	100.9	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	354883	13C2-PFDA	330753	1250	Avg	0.979484				1369.29	1369.29	Yes	1250	110	109.5	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3370120	13C4-PFOS	414633	2500	Avg	0.787621				25799	25799.08	Yes	25000	103	103.2	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	192726	13C4-PFOS	414633	2500	Avg	0.473429				2454.49	2454.49	Yes	2500	98	98.2	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3689527	13C4-PFOS	414633	2500	Avg	0.875607				25406	25406.08	Yes	25000	102	101.6	Yes
101124A040.d	CCB A1	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	219039	13C4-PFOS	414633	2500	Avg	0.517751				2550.8	2550.8	Yes	2500	102	102	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2696261	13C3-PFBA	1123426	5000	Avg	1.139492				10531	10531.16	Yes	10000	105	105.3	Yes
101124A115.d	CCB A6	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2608	13C4-PFBA	2696261	10000	Avg	0.862417		0.01	11.216	0.11216	0.1122	Yes				
101124A115.d	CCB A6	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1144603	13C2-PFHxA	607419	2500	Avg	0.8747				5385.77	5385.76	Yes	5000	108	107.7	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	127295	18O2-PFHxS	368585	2500	Avg	0.171095				5046.33	5046.34	Yes	5000	101	100.9	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	694844	13C2-PFHxA	607419	2500	Avg	1.027817				2782.42	2782.42	Yes	2500	111	111.3	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	519537	18O2-PFHxS	368585	2500	Avg	1.337567				2634.53	2634.53	Yes	2500	105	105.4	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	500423	13C2-PFHxA	607419	2500	Avg	0.187386				10991	10991.37	Yes	10000	110	109.9	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	906016	13C2-PFHxA	607419	2500	Avg	1.233488				3023.1	3023.1	Yes	2500	121	120.9	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	120179	18O2-PFHxS	368585	2500	Avg	0.189449				4302.67	4302.68	Yes	5000	86	86.1	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	964001	13C4-PFOA	114312	2500	Avg	6.935343				3039.89	3039.89	Yes	2500	122	121.6	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	509406	18O2-PFHxS	368585	2500	Avg	1.223059				2825	2825	Yes	2500	113	113	Yes
101124A115.d	CCB A6	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3191	13C3-PFHxS	509406	2500	Avg	1.134147		0.01	13.808	0.13808	0.1381	Yes				
101124A115.d	CCB A6	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	448850	13C5-PFNA	435051	1250	Avg	0.970593				1328.72	1328.72	Yes	1250	106	106.3	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	130344	18O2-PFHxS	368585	2500	Avg	0.188821				4682.13	4682.13	Yes	5000	94	93.6	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	412060	13C2-PFDA	368572	1250	Avg	1.158659				1206.13	1206.13	Yes	1250	96	96.5	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	512200	13C4-PFOS	417584	2500	Avg	0.604638				5071.55	5071.55	Yes	5000	101	101.4	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	368762	13C4-PFOS	417584	2500	Avg	0.464185				4756.1	4756.1	Yes	5000	95	95.1	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	447806	13C4-PFOS	417584	2500	Avg	1.031655				2598.67	2598.67	Yes	2500	104	103.9	Yes
101124A115.d	CCB A6	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2152	13C8-PFOS	447806	2500	Avg	1.036752		0.01	11.588	0.11588	0.1159	Yes				
101124A115.d	CCB A6	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	431740	13C2-PFDA	368572	1250	Avg	1.110582				1318.44	1318.44	Yes	1250	105	105.5	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	411427	13C2-PFDA	368572	1250	Avg	1.123999				1241.41	1241.41	Yes	1250	99	99.3	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	816027	13C4-PFOS	417584	2500	Avg	1.903232				2566.9	2566.9	Yes	2500	103	102.7	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	350730	13C2-PFDA	368572	1250	Avg	0.979484				1214.4	1214.4	Yes	1250	97	97.2	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3721025	13C4-PFOS	417584	2500	Avg	0.787621				28284	28284.04	Yes	25000	113	113.1	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	203300	13C4-PFOS	417584	2500	Avg	0.473429				2570.86	2570.86	Yes	2500	103	102.8	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	4059961	13C4-PFOS	417584	2500	Avg	0.875607				27759	27759.32	Yes	25000	111	111	Yes
101124A115.d	CCB A6	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	219924	13C4-PFOS	417584	2500	Avg	0.517751				2543.01	2543.01	Yes	2500	102	101.7	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	2644551	13C3-PFBA	1091574	5000	Avg	1.139492				10631	10630.59	Yes	10000	106	106.3	Yes
101124A127.d	CCB A7	Instrument_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1902	13C4-PFBA	2644551	10000	Avg	0.862417		0.01	8.3395	0.0834	0.0834	Yes				
101124A127.d	CCB A7	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	1102345	13C2-PFHxA	606859	2500	Avg	0.8747				5191.71	5191.71	Yes	5000	104	103.8	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	127721	18O2-PFHxS	408892	2500	Avg	0.171095				4564.1	4564.11	Yes	5000	91	91.3	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	711173	13C2-PFHxA	606859	2500	Avg	1.027817				2850.44	2850.44	Yes	2500	114	114	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	499420	18O2-PFHxS	408892	2500	Avg	1.337567				2282.87	2282.87	Yes	2500	91	91.3	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	503907	13C2-PFHxA	606859	2500	Avg	0.187386				11078	11078.1	Yes	10000	111	110.8	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	847349	13C2-PFHxA	606859	2500	Avg	1.233488				2829.96	2829.96	Yes	2500	113	113.2	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	131332	18O2-PFHxS	408892	2500	Avg	0.189449				4238.47	4238.48	Yes	5000	85	84.8	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	900990	13C4-PFOA	121942	2500	Avg	6.935343				2663.41	2663.41	Yes	2500	107	106.5	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	453094	18O2-PFHxS	408892	2500	Avg	1.223059				2265.02	2265.02	Yes	2500	91	90.6	Yes
101124A127.d	CCB A7	Instrument_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1959	13C3-PFHxS	453094	2500	Avg	1.134147		0.01	9.5305	0.09531	0.0953	Yes				
101124A127.d	CCB A7	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	420453	13C5-PFNA	420943	1250	Avg	0.970593				1286.37	1286.37	Yes	1250	103	102.9	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	123007	18O2-PFHxS	408892	2500	Avg	0.188821				3983.01	3983.01	Yes	5000	80	79.7	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	426587	13C2-PFDA	296736	1250	Avg	1.158659				1550.93	1550.93	Yes	1250	124	124.1	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	498963	13C4-PFOS	439666	2500	Avg	0.604638				4692.35	4692.35	Yes	5000	94	93.8	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	385338	13C4-PFOS	439666	2500	Avg	0.464185				4720.28	4720.28	Yes	5000	94	94.4	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	413834	13C4-PFOS	439666	2500	Avg	1.031655				2280.91	2280.91	Yes	2500	91	91.2	Yes
101124A127.d	CCB A7	Instrument_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2469	13C8-PFOS	413834	2500	Avg	1.036752		0.01	14.387	0.14387	0.1439	Yes				

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101124A127.d	CCB A7	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	393778	13C2-PFDA	296736	1250	Avg	1.110582				1493.62	1493.62	Yes	1250	119	119.5	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	356477	13C2-PFDA	296736	1250	Avg	1.123999				1336	1336	Yes	1250	107	106.9	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	793758	13C4-PFOS	439666	2500	Avg	1.903232				2371.45	2371.45	Yes	2500	95	94.9	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	343689	13C2-PFDA	296736	1250	Avg	0.979484				1478.11	1478.11	Yes	1250	118	118.2	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	3551832	13C4-PFOS	439666	2500	Avg	0.787621				25642	25642.02	Yes	25000	103	102.6	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	201269	13C4-PFOS	439666	2500	Avg	0.473429				2417.35	2417.35	Yes	2500	97	96.7	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3908711	13C4-PFOS	439666	2500	Avg	0.875607				25383	25382.91	Yes	25000	102	101.5	Yes
101124A127.d	CCB A7	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	220175	13C4-PFOS	439666	2500	Avg	0.517751				2418.04	2418.04	Yes	2500	97	96.7	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1517766	13C3-PFBA	667796	5000	Avg	1.116788				10176	10175.61	Yes	10000	102	101.8	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	594683	13C2-PFHxA	337079	2500	Avg	0.887028				4972.29	4972.29	Yes	5000	99	99.4	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	85246	18O2-PFHxS	238018	2500	Avg	0.179213				4996.14	4996.14	Yes	5000	100	99.9	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	342418	13C2-PFHxA	337079	2500	Avg	0.975375				2603.71	2603.71	Yes	2500	104	104.1	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	335491	18O2-PFHxS	238018	2500	Avg	1.367759				2576.33	2576.33	Yes	2500	103	103.1	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	335461	13C2-PFHxA	337079	2500	Avg	0.257147				9675.39	9675.4	Yes	10000	97	96.8	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	334712	13C2-PFHxA	337079	2500	Avg	0.967611				2565.54	2565.54	Yes	2500	103	102.6	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	111378	18O2-PFHxS	238018	2500	Avg	0.232206				5037.99	5037.98	Yes	5000	101	100.8	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	346488	13C4-PFOA	89479	2500	Avg	4.201779				2303.95	2303.95	Yes	2500	92	92.2	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	245514	18O2-PFHxS	238018	2500	Avg	1.040797				2477.65	2477.65	Yes	2500	99	99.1	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	110042	13C5-PFNA	166958	1250	Avg	0.748168				1101.19	1101.19	Yes	1250	88	88.1	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	96692	18O2-PFHxS	238018	2500	Avg	0.224161				4530.66	4530.65	Yes	5000	91	90.6	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	232303	13C4-PFOS	322603	2500	Avg	0.338626				5316.26	5316.26	Yes	5000	106	106.3	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	137612	13C2-PFDA	151592	1250	Avg	0.911902				1244.35	1244.35	Yes	1250	100	99.5	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	292954	13C4-PFOS	322603	2500	Avg	0.420737				5395.85	5395.86	Yes	5000	108	107.9	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	309302	13C4-PFOS	322603	2500	Avg	0.946037				2533.65	2533.65	Yes	2500	101	101.3	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	131693	13C2-PFDA	151592	1250	Avg	0.794666				1366.51	1366.51	Yes	1250	109	109.3	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	114187	13C2-PFDA	151592	1250	Avg	0.68959				1365.4	1365.4	Yes	1250	109	109.2	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	650842	13C4-PFOS	322603	2500	Avg	1.895178				2661.32	2661.32	Yes	2500	106	106.5	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	84881	13C2-PFDA	151592	1250	Avg	0.529413				1322.06	1322.06	Yes	1250	106	105.8	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2463076	13C4-PFOS	322603	2500	Avg	0.681735				27998	27998.44	Yes	25000	112	112	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	141172	13C4-PFOS	322603	2500	Avg	0.427819				2557.17	2557.17	Yes	2500	102	102.3	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3021177	13C4-PFOS	322603	2500	Avg	0.859105				27252	27252.2	Yes	25000	109	109	Yes
101424A063.d	CCB A3	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	168573	13C4-PFOS	322603	2500	Avg	0.492801				2650.87	2650.87	Yes	2500	106	106	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1574292	13C3-PFBA	679869	5000	Avg	1.116788				10367	10367.15	Yes	10000	104	103.7	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	594425	13C2-PFHxA	330474	2500	Avg	0.887028				5069.47	5069.47	Yes	5000	101	101.4	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	83063	18O2-PFHxS	224865	2500	Avg	0.179213				5152.95	5152.95	Yes	5000	103	103.1	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	317919	13C2-PFHxA	330474	2500	Avg	0.975375				2465.74	2465.74	Yes	2500	99	98.6	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	328742	18O2-PFHxS	224865	2500	Avg	1.367759				2672.17	2672.17	Yes	2500	107	106.9	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	350923	13C2-PFHxA	330474	2500	Avg	0.257147				10324	10323.65	Yes	10000	103	103.2	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	316959	13C2-PFHxA	330474	2500	Avg	0.967611				2478.02	2478.02	Yes	2500	99	99.1	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	111792	18O2-PFHxS	224865	2500	Avg	0.232206				5352.49	5352.48	Yes	5000	107	107	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	369709	13C4-PFOA	81688	2500	Avg	4.201779				2692.83	2692.83	Yes	2500	108	107.7	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	257049	18O2-PFHxS	224865	2500	Avg	1.040797				2745.8	2745.79	Yes	2500	110	109.8	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	121729	13C5-PFNA	152122	1250	Avg	0.748168				1336.94	1336.94	Yes	1250	107	107	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	115246	18O2-PFHxS	224865	2500	Avg	0.224161				5715.9	5715.89	Yes	5000	114	114.3	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	249716	13C4-PFOS	348814	2500	Avg	0.338626				5285.33	5285.33	Yes	5000	106	105.7	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	158230	13C2-PFDA	151284	1250	Avg	0.911902				1433.7	1433.7	Yes	1250	115	114.7	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	323728	13C4-PFOS	348814	2500	Avg	0.420737				5514.62	5514.62	Yes	5000	110	110.3	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	329096	13C4-PFOS	348814	2500	Avg	0.946037				2493.22	2493.22	Yes	2500	100	99.7	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	141371	13C2-PFDA	151284	1250	Avg	0.794666				1469.92	1469.92	Yes	1250	118	117.6	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	113062	13C2-PFDA	151284	1250	Avg	0.68959				1354.7	1354.7	Yes	1250	108	108.4	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	687073	13C4-PFOS	348814	2500	Avg	1.895178				2598.36	2598.36	Yes	2500	104	103.9	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	98414	13C2-PFDA	151284	1250	Avg	0.529413				1535.96	1535.96	Yes	1250	123	122.9	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2442015	13C4-PFOS	348814	2500	Avg	0.681735				25673	25673.13	Yes	25000	103	102.7	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	144787	13C4-PFOS	348814	2500	Avg	0.427819				2425.58	2425.58	Yes	2500	97	97	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3059083	13C4-PFOS	348814	2500	Avg	0.859105				25521	25520.61	Yes	25000	102	102.1	Yes
101424A077.d	CCB A4	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	173442	13C4-PFOS	348814	2500	Avg	0.492801				2522.49	2522.49	Yes	2500	101	100.9	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C4-PFBA	SESI-0111	1535973	13C3-PFBA	673261	5000	Avg	1.116788				10214	10214.08	Yes	10000	102	102.1	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C5-PFPeA	SESI-0112	582682	13C2-PFHxA	318939	2500	Avg	0.887028				5149.05	5149.04	Yes	5000	103	103	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C2-4:2FTS	SESI-0104	83536	18O2-PFHxS	212966	2500	Avg	0.179213				5471.84	5471.85	Yes	5000	109	109.4	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C5-PFHxA	SESI-0113	304564	13C2-PFHxA	318939	2500	Avg	0.975375				2447.59	2447.59	Yes	2500	98	97.9	Yes

Table 4e – Recalculation Summary: ZI12017 Instrument QC Samples

Data File	Lab Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg RF. or Linear	Constant	CF	Conc (ng/L)	Instrument Conc. (ng/L)	Calc. Instrument Conc. (ng/L)	Match?	Spike Amount (ng/L)	%R	Calc. %R	Match?
101424A097.d	CCB A5	Instrument_Blank	EIS	13C3-PFBS	SESI-0116	341227	18O2-PFHxS	212966	2500	Avg	1.367759				2928.62	2928.62	Yes	2500	117	117.1	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C3-HFPO-DA	SESI-0121	342437	13C2-PFHxA	318939	2500	Avg	0.257147				10438	10438.34	Yes	10000	104	104.4	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C4-PFHpA	SESI-0114	299195	13C2-PFHxA	318939	2500	Avg	0.967611				2423.74	2423.74	Yes	2500	97	96.9	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C2-6:2FTS	SESI-0105	107526	18O2-PFHxS	212966	2500	Avg	0.232206				5435.89	5435.88	Yes	5000	109	108.7	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C8-PFOA	SESI-0097	364691	13C4-PFOA	84857	2500	Avg	4.201779				2557.08	2557.08	Yes	2500	102	102.3	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C3-PFHxS	SESI-0096	241108	18O2-PFHxS	212966	2500	Avg	1.040797				2719.42	2719.41	Yes	2500	109	108.8	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C9-PFNA	SESI-0099	122614	13C5-PFNA	137541	1250	Avg	0.748168				1489.42	1489.43	Yes	1250	119	119.2	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C2-8:2FTS	SESI-0106	101188	18O2-PFHxS	212966	2500	Avg	0.224161				5299.07	5299.06	Yes	5000	106	106	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSAA	SESI-0102	247048	13C4-PFOS	335374	2500	Avg	0.338626				5438.41	5438.41	Yes	5000	109	108.8	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C6-PFDA	SESI-0115	152094	13C2-PFDA	141088	1250	Avg	0.911902				1477.69	1477.69	Yes	1250	118	118.2	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSAA	SESI-0110	282784	13C4-PFOS	335374	2500	Avg	0.420737				5010.19	5010.2	Yes	5000	100	100.2	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C8-PFOS	SESI-0098	320923	13C4-PFOS	335374	2500	Avg	0.946037				2528.73	2528.74	Yes	2500	101	101.1	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C7-PFUnA	SESI-0117	119076	13C2-PFDA	141088	1250	Avg	0.794666				1327.58	1327.58	Yes	1250	106	106.2	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C2-PFDoA	SESI-0118	111319	13C2-PFDA	141088	1250	Avg	0.68959				1430.21	1430.2	Yes	1250	114	114.4	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C8-PFOSA	SESI-0107	638654	13C4-PFOS	335374	2500	Avg	1.895178				2512.04	2512.04	Yes	2500	100	100.5	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	13C2-PFTeDA	SESI-0119	92043	13C2-PFDA	141088	1250	Avg	0.529413				1540.34	1540.34	Yes	1250	123	123.2	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	D7-NMeFOSE	SESI-0129	2390528	13C4-PFOS	335374	2500	Avg	0.681735				26139	26138.99	Yes	25000	105	104.6	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	D3-NMeFOSA	SESI-0109	146343	13C4-PFOS	335374	2500	Avg	0.427819				2549.89	2549.9	Yes	2500	102	102	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	D9-NEtFOSE	SESI-0130	3024273	13C4-PFOS	335374	2500	Avg	0.859105				26241	26241.3	Yes	25000	105	105	Yes
101424A097.d	CCB A5	Instrument_Blank	EIS	D5-NEtFOSA	SESI-0108	165598	13C4-PFOS	335374	2500	Avg	0.492801				2504.92	2504.92	Yes	2500	100	100.2	Yes

Key

	from quantitation report
	from reported calibration
	from lab report/EDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
IS	internal standard
ND	not detected
ng/L	nanograms per liter
RF	response factor

Table 5a – 1633 Recalculation Summary: ZH22011 Field and QC Samples

Arctic Data Services, LLC

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C4-PFBA	SESI-0111	2169975	13C3-PFBA	1157478	5000	Avg	1.132459						8277.32	8277.3154	42				10000	83	83	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	41750	13C4-PFBA	2169975	10000	Ln	0.838689	-69.518543	312.29	5	1.19	1	1.3122	1.3122	42	3.1	3.1	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C5-PFPeA	SESI-0112	848236	13C2-PFHxA	592142	2500	Avg	0.88245						4058.27	4058.2681	42				5000	81	81	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	270301	13C5-PFPeA	848236	5000	Ln	1.069127	-60.158907	1546.56	5	1.19	1	6.4982	6.4982	42	15	15	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	108564	18O2-PFHxS	412795	2500	Avg	0.169914						3869.56	3869.566	42				5000	77	77	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C5-PFHxA	SESI-0113	480667	13C2-PFHxA	592142	2500	Avg	0.99614						2037.22	2037.2207	42				2500	81	81	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	858004	13C5-PFHxA	480667	2500	Ln	1.168552	-27.909119	3842.77	5	1.19	1	16.146	16.1461	42	38	38	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C3-PFBS	SESI-0116	470973	18O2-PFHxS	412795	2500	Avg	1.445824						1972.81	1972.8141	42				2500	79	79	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	209421	13C3-PFBS	470973	2500	Avg	1.690931		657.41	5	1.19	1	2.7622	2.7622	42	6.6	6.6	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	507370	13C2-PFHxA	592142	2500	Avg	0.253851						8438.4	8438.3988	42				10000	84	84	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C4-PFHpA	SESI-0114	463570	13C2-PFHxA	592142	2500	Avg	0.963985						2030.3	2030.2952	42				2500	81	81	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	429182	13C4-PFHpA	463570	2500	Ln	1.128349	-29.834323	2077.71	5	1.19	1	8.7299	8.7299	42	21	21	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	159458	18O2-PFHxS	412795	2500	Avg	0.227833						4238.73	4238.7252	42				5000	85	85	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	738787	13C2-6:2FTS	159458	5000	Avg	1.91644		12088	5	1.19	1	50.789	50.7891	42	120	120	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C8-PFOA	SESI-0097	520715	13C4-PFOA	152717	2500	Avg	4.051267						2104.08	2104.0781	42				2500	84	84	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1328895	13C8-PFOA	520715	2500	Ln	1.165767	-28.270811	5497.17	5	1.19	1	23.097	23.0973	42	55	55	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C3-PFHxS	SESI-0096	371097	18O2-PFHxS	412795	2500	Avg	1.06234						2115.58	2115.5802	42				2500	85	85	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	168541	13C3-PFHxS	371097	2500	Ln	1.101826	-34.556249	1061.86	5	1.19	1	4.4616	4.4616	42	11	11	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2255506	13C3-PFHxS	371097	2500	Avg	0.960514		15819	5	1.19	1	66.468	66.4685	42	160	160	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C9-PFNA	SESI-0099	180445	13C5-PFNA	323823	1250	Avg	0.659954						1055.44	1055.4399	42				1250	84	84	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	147585	13C9-PFNA	180445	1250	Avg	1.161623		880.12	5	1.19	1	3.698	3.698	42	8.8	8.8	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	150750	18O2-PFHxS	412795	2500	Avg	0.220738						4136.04	4136.0502	42				5000	83	83	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	104235	13C2-8:2FTS	150750	5000	Avg	1.466136		2358.05	5	1.19	1	9.9078	9.9077	42	24	24	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	410384	13C4-PFOS	615009	2500	Avg	0.32346						5157.37	5157.371	42				5000	103	103	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	57688	D3-NMeFOSAA	410384	5000	Avg	0.708746		991.69	5	1.19	1	4.1667	4.1668	42	9.9	9.9	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C6-PFDA	SESI-0115	230637	13C2-PFDA	262657	1250	Avg	0.956495						1147.54	1147.5386	42				1250	92	92	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	25518	13C6-PFDA	230637	1250	Ln	1.02029	-46.537457	181.16	5	1.19	1	0.76119	0.7612	42	1.8	1.8	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	301926	13C4-PFOS	615009	2500	Avg	0.319265						3844.21	3844.2156	42				5000	77	77	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	52019	D5-NEtFOSAA	301926	5000	Ln	0.903902	-27.656798	983.64	5	1.19	1	4.1329	4.1329	42	9.8	9.8	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C8-PFOS	SESI-0098	489957	13C4-PFOS	615009	2500	Avg	0.983323						2025.44	2025.4443	42				2500	81	81	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	136531	13C8-PFOS	489957	2500	Avg	0.766112		909.33	5	1.19	1	3.8207	3.8207	42	9.1	9.1	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	14578	13C8-PFOS	489957	2500	Avg	0.83787		88.778	5	1.19	1	0.37302	0.373	42	0.89	0.89	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C7-PFUnA	SESI-0117	220736	13C2-PFDA	262657	1250	Avg	0.950697						1104.97	1104.974	42				1250	88	88	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	63970	13C7-PFUnA	220736	1250	Avg	0.921833		392.97	5	1.19	1	1.6511	1.6511	42	3.9	3.9	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C2-PFDoA	SESI-0118	178311	13C2-PFDA	262657	1250	Avg	0.795811						1066.32	1066.3241	42				1250	85	85	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	17734	13C2-PFDoA	178311	1250	Avg	0.597037		208.23	5	1.19	1	0.8749	0.8749	42	2.1	2.1	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	134413	13C2-PFDA	262657	1250	Avg	0.593931						1077.03	1077.0263	42				1250	86	86	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C8-PFOSA	SESI-0107	950043	13C4-PFOS	615009	2500	Avg	1.890633						2042.65	2042.6529	42				2500	82	82	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	259401	13C8-PFOSA	950043	2500	Ln	1.03613	-30.611404	688.34	5	1.19	1	2.8922	2.8922	42	6.9	6.9	Yes							
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2710530	13C4-PFOS	615009	2500	Avg	0.699585						15750	15749.699	42				25000	63	63	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	138571	13C4-PFOS	615009	2500	Avg	0.446776						1260.79	1260.7851	42				2500	50	50	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	3496977	13C4-PFOS	615009	2500	Avg	0.887621						16015	16014.882	42				25000	64	64	Yes			
092124B131.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	148699	13C4-PFOS	615009	2500	Avg	0.512381						1179.7	1179.7054	42				2500	47	47	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C4-PFBA	SESI-0111	3304707	13C3-PFBA	1641250	5000	Avg	1.161292						8669.35	8669.3551	35.9				10000	87	87	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1432710	13C2-PFHxA	985641	2500	Avg	0.828627						4385.52	4385.5136	35.9				5000	88	88	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	53903	13C5-PFPeA	1432710	5000	Avg	0.845037		222.61	5	1.39	1	0.80076	0.8008	35.9	2.2	2.2	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	255395	18O2-PFHxS	572795	2500	Avg	0.219423						5080.08	5080.0856	35.9				5000	102	102	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C5-PFHxA	SESI-0113	940668	13C2-PFHxA	985641	2500	Avg	1.121098						2128.21	2128.2078	35.9				2500	85	85	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	160482	13C5-PFHxA	940668	2500	Avg	0.809879		526.64	5	1.39	1	1.8944	1.8944	35.9	5.3	5.3	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C3-PFBS	SESI-0116	663618	18O2-PFHxS	572795	2500	Avg	1.313089						2205.79	2205.7932	35.9				2500	88	88	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	59330	13C3-PFBS	663618	2500	Avg	1.143965		195.38	5	1.39	1	0.70281	0.7028	35.9	2	2	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	689025	13C2-PFHxA	985641	2500	Avg	0.19845						8806.54	8806.5362	35.9				10000	88	88	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1033331	13C2-PFHxA	985641	2500	Avg	1.194702						2193.82	2193.8206	35.9				2500	88	88	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	74956	13C4-PFHpA	1033331	2500	Avg	0.995725		182.12	5	1.39	1	0.65512	0.6551	35.9	1.8	1.8	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	280276	18O2-PFHxS	572795	2500	Avg	0.237162						5158.01	5158.0031	35.9				5000	103	103	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	620936	13C2-6:2FTS	280276	5000	Avg	1.761997		6286.74	5	1.39	1	22.614	22.6142	35.9	63	63	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C8-PFOA	SESI-0097	1103305	13C4-PFOA	198723	2500	Avg	7.142863						1943.19	1943.1894	35.9				2500	78	78	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	296753	13C8-PFOA	1103305	2500	Avg	0.838198		802.22	5	1.39	1	2.8857	2.8857	35.9	8	8	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C3-PFHxS	SESI-0096	623656	18O2-PFHxS	572795	2500	Avg	1.219515						2232.02	2232.0234	35.9				2500	89	89	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	71735	13C3-PFHxS	623656	2500	Avg	1.0639		270.29	5	1.39	1	0.97226	0.9723	35.9	2.7	2.7	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	624363	13C3-PFHxS	623656	2500	Avg	1.030748		2428.17	5	1.39	1	8.7344	8.7344	35.9	24	24	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C9-PFNA	SESI-0099	610051	13C5-PFNA	870179	1250	Avg	0.86335						1015.03	1015.0342	35.9				1250	81	81	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	80172	13C9-PFNA	610051	1250	Avg	0.776752		211.49	5	1.39	1	0.76075	0.7607	35.9	2.1	2.1	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	244928	18O2-PFHxS	572795	2500	Avg	0.213504						5006.95	5006.9495	35.9				5000	100	100	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	14149	13C2-8:2FTS	244928	5000	Avg	1.619153		178.39	5	1.39	1	0.64169	0.6417	35.9	1.8	1.8	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	685553	13C4-PFOS	696667	2500	Avg	0.522181						4711.23	4711.2347	35.9				5000	94	94	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	4570	D3-NMeFOSAA	685553	5000	Avg	0.711099		46.872	5	1.39	1	0.1686	0.1686	35.9	0.47	0.47	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C6-PFDA	SESI-0115	623371	13C2-PFDA	585612	1250	Avg	1.19879						1109.95	1109.9503	35.9				1250	89	89	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	521770	13C4-PFOS	696667	2500	Avg	0.396254						4725.21	4725.2002	35.9				5000	95	95	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	6475	D5-NEtFOSAA	521770	5000	Avg	1.043077		59.486	5	1.39	1	0.21398	0.214	35.9	0.6	0.6	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C8-PFOS	SESI-0098	666307	13C4-PFOS	696667	2500	Avg	1.036214						2307.49	2307.4893	35.9				2500	92	92	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	32025	13C8-PFOS	666307	2500	Avg	0.886401		135.56	5	1.39	1	0.48762	0.4876	35.9	1.4	1.4	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2048309	13C8-PFOS	666307	2500	Avg	0.934293		8225.8	5	1.39	1	29.589	29.5892	35.9	83	82	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C7-PFUnA	SESI-0117	546788	13C2-PFDA	585612	1250	Avg	1.090348						1070.42	1070.4192	35.9				1250	86	86	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	127358	13C7-PFUnA	546788	1250	Avg	0.852827		341.39	5	1.39	1	1.228	1.228	35.9	3.4	3.4	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C2-PFDoA	SESI-0118	543827	13C2-PFDA	585612	1250	Avg	1.058364						1096.8	1096.7957	35.9				1250	88	88	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	69557	13C2-PFDoA	543827	1250	Avg	0.691664		231.15	5	1.39	1	0.83148	0.8315	35.9	2.3	2.3	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C8-PFOSA	SESI-0107	1086777	13C4-PFOS	696667	2500	Avg	1.770989						2202.11	2202.1117	35.9				2500	88	88	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	23495	13C8-PFOSA	1086777	2500	Avg	0.902242		59.903	5	1.39	1	0.21548	0.2155	35.9	0.6	0.6	Yes							
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	406288	13C2-PFDA	585612	1250	Avg	0.976439						888.15	888.1553	35.9				1250	71	71	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	3099133	13C4-PFOS	696667	2500	Avg	0.714673						15561	15561.362	35.9				25000	62	62	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	149303	13C4-PFOS	696667	2500	Avg	0.435575						1230.04	1230.0432	35.9				2500	49	49	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	3261718	13C4-PFOS	696667	2500	Avg	0.798258						14663	14662.833	35.9				25000	59	59	Yes			
092224C019.d	ZH22011-066	CACMW-008-160-137.5-0817	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	147109	13C4-PFOS	696667	2500	Avg	0.461946						1142.78	1142.7804	35.9				2500	46	46	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C4-PFBA	SESI-0111	3152786	13C3-PFBA	1615082	5000	Avg	1.161292						8404.82	8404.8213	33.3				10000	84	84	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	65057	13C4-PFBA	3152786	10000	Avg	0.790145		261.15	5	1.51	1	0.86474	0.8647	33.3	2.6	2.6	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1354886	13C2-PFHxA	999218	2500	Avg	0.828627						4090.95	4090.9431	33.3				5000	82	82	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	410978	13C5-PFPeA	1354886	5000	Avg	0.845037		1794.78	5	1.51	1	5.943	5.943	33.3	18	18	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	241110	18O2-PFHxS	572498	2500	Avg	0.219423						4798.43	4798.4294	33.3				5000	96	96	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C5-PFHxA	SESI-0113	940053	13C2-PFHxA	999218	2500	Avg	1.121098						2097.92	2097.9181	33.3				2500	84	84	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1212359	13C5-PFHxA	940053	2500	Avg	0.809879		3981.06	5	1.51	1	13.182	13.1823	33.3	40	40	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C3-PFBS	SESI-0116	651098	18O2-PFHxS	572498	2500	Avg	1.313089						2165.3	2165.3008	33.3				2500	87	87	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	171854	13C3-PFBS	651098	2500	Avg	1.143965		576.82	5	1.51	1	1.91	1.91	33.3	5.7	5.7	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	680228	13C2-PFHxA	999218	2500	Avg	0.19845						8575.97	8575.9682	33.3				10000	86	86	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C4-PFHpA	SESI-0114	980280	13C2-PFHxA	999218	2500	Avg	1.194702						2052.91	2052.9119	33.3				2500	82	82	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	693211	13C4-PFHpA	980280	2500	Avg	0.995725		1775.48	5	1.51	1	5.8791	5.8791	33.3	18	18	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	269980	18O2-PFHxS	572498	2500	Avg	0.237162						4971.1	4971.1003	33.3				5000	99	99	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1202511	13C2-6:2FTS	269980	5000	Avg	1.761997		12639	5	1.51	1	41.852	41.8519	33.3	130	130	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C8-PFOA	SESI-0097	1165765	13C4-PFOA	229799	2500	Avg	7.142863						1775.54	1775.5404	33.3				2500	71	71	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	2083438	13C8-PFOA	1165765	2500	Avg	0.838198		5330.44	5	1.51	1	17.65	17.6505	33.3	53	53	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C3-PFHxS	SESI-0096	609152	18O2-PFHxS	572498	2500	Avg	1.219515						2181.24	2181.2456	33.3				2500	87	87	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	238476	13C3-PFHxS	609152	2500	Avg	1.0639		919.94	5	1.51	1	3.0462	3.0461	33.3	9.1	9.1	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3573896	13C3-PFHxS	609152	2500	Avg	1.030748		14230	5	1.51	1	47.119	47.1191	33.3	140	140	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C9-PFNA	SESI-0099	610072	13C5-PFNA	870127	1250	Avg	0.86335						1015.13	1015.1298	33.3				1250	81	81	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	302825	13C9-PFNA	610072	1250	Avg	0.776752		798.8	5	1.51	1	2.645	2.645	33.3	7.9	7.9	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	267448	18O2-PFHxS	572498	2500	Avg	0.213504						5470.15	5470.1517	33.3				5000	109	109	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	681292	13C4-PFOS	730005	2500	Avg	0.522181						4468.13	4468.1361	33.3				5000	89	89	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	89503	D3-NMeFOSAA	681292	5000	Avg	0.711099		923.73	5	1.51	1	3.0587	3.0587	33.3	9.2	9.2	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C6-PFDA	SESI-0115	588851	13C2-PFDA	630930	1250	Avg	1.19879						973.18	973.1754	33.3				1250	78	78	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	51779	13C6-PFDA	588851	1250	Avg	0.773597		142.08	5	1.51	1	0.47047	0.4705	33.3	1.4	1.4	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	510731	13C4-PFOS	730005	2500	Avg	0.396254						4414.01	4414.0041	33.3				5000	88	88	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	89390	D5-NEtFOSAA	510731	5000	Avg	1.043077		838.98	5	1.51	1	2.7781	2.7781	33.3	8.3	8.3	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C8-PFOS	SESI-0098	610693	13C4-PFOS	730005	2500	Avg	1.036214						2018.31	2018.309	33.3				2500	81	81	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	172792	13C8-PFOS	610693	2500	Avg	0.886401		798.01	5	1.51	1	2.6424	2.6424	33.3	7.9	7.9	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	10756	13C8-PFOS	610693	2500	Avg	1.12962		38.979	5	1.51	1	0.12907	0.1291	33.3	0.39	0.39	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C7-PFUnA	SESI-0117	540780	13C2-PFDA	630930	1250	Avg	1.090348						982.62	982.6171	33.3				1250	79	79	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	151825	13C7-PFUnA	540780	1250	Avg	0.852827		411.5	5	1.51	1	1.3626	1.3626	33.3	4.1	4.1	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C2-PFDoA	SESI-0118	486337	13C2-PFDA	630930	1250	Avg	1.058364						910.4	910.3976	33.3				1250	73	73	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	64176	13C2-PFDoA	486337	1250	Avg	0.691664		238.48	5	1.51	1	0.78967	0.7897	33.3	2.4	2.4	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C8-PFOSA	SESI-0107	1041550	13C4-PFOS	730005	2500	Avg	1.770989						2014.09	2014.088	33.3				2500	81	81	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	237554	13C8-PFOSA	1041550	2500	Avg	0.902242		631.97	5	1.51	1	2.0926	2.0926	33.3	6.3	6.3	Yes							
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	440734	13C2-PFDA	630930	1250	Avg	0.976439						894.25	894.2527	33.3				1250	72	72	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	3265188	13C4-PFOS	730005	2500	Avg	0.714673						15646	15646.42	33.3				25000	63	63	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	165987	13C4-PFOS	730005	2500	Avg	0.435575						1305.05	1305.0445	33.3				2500	52	52	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	3480418	13C4-PFOS	730005	2500	Avg	0.798258						14931	14931.461	33.3				25000	60	60	Yes			
092224C024.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	157469	13C4-PFOS	730005	2500	Avg	0.461946						1167.4	1167.3955	33.3				2500	47	47	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3032279	13C3-PFBA	1723182	5000	Avg	1.161292						7576.46	7576.4643	100				10000	76	76	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1356558	13C2-PFHxA	1084082	2500	Avg	0.828627						3775.35	3775.3495	100				5000	76	76	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	217867	18O2-PFHxS	684663	2500	Avg	0.219423						3625.54	3625.5379	100				5000	73	73	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	876166	13C2-PFHxA	1084082	2500	Avg	1.121098						1802.27	1802.2735	100				2500	72	72	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	621553	18O2-PFHxS	684663	2500	Avg	1.313089						1728.41	1728.4115	100				2500	69	69	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	642226	13C2-PFHxA	1084082	2500	Avg	0.19845						7463.02	7463.0209	100				10000	75	75	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	952367	13C2-PFHxA	1084082	2500	Avg	1.194702						1838.33	1838.3264	100				2500	74	74	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	230765	18O2-PFHxS	684663	2500	Avg	0.237162						3552.94	3552.9409	100				5000	71	71	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1120878	13C4-PFOA	217023	2500	Avg	7.142863						1807.67	1807.6747	100				2500	72	72	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	566613	18O2-PFHxS	684663	2500	Avg	1.219515						1696.53	1696.5339	100				2500	68	68	Yes			
092224C045.d	ZQ17947-001		Method_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3827	13C3-PFHxS	566613	2500	Avg	1.030748		16.382	5	5	1	0.01638	0.0164	100	ND	0.016	Yes							
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	595755	13C5-PFNA	898029	1250	Avg	0.86335						960.51	960.5068	100				1250	77	77	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	215870	18O2-PFHxS	684663	2500	Avg	0.213504						3691.9	3691.8957	100				5000	74	74	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	565061	13C4-PFOS	763739	2500	Avg	0.522181						3542.17	3542.1692	100				5000	71	71	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	582834	13C2-PFDA	613864	1250	Avg	1.19879						990.01	990.0101	100				1250	79	79	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	424512	13C4-PFOS	763739	2500	Avg	0.396254						3506.81	3506.8029	100				5000	70	70	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	587491	13C4-PFOS	763739	2500	Avg	1.036214						1855.87	1855.8668	100				2500	74	74	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	472062	13C2-PFDA	613864	1250	Avg	1.090348						881.6	881.6004	100				1250	71	71	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	449922	13C2-PFDA	613864	1250	Avg	1.058364						865.65	865.6454	100				1250	69	69	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	793305	13C4-PFOS	763739	2500	Avg	1.770989						1466.29	1466.2883	100				2500	59	59	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	438675	13C2-PFDA	613864	1250	Avg	0.976439						914.82	914.8199	100				1250	73	73	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2172644	13C4-PFOS	763739	2500	Avg	0.714673						9951.22	9951.2179	100				25000	40	40	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	113783	13C4-PFOS	763739	2500	Avg	0.435575						855.09	855.0854	100				2500	34	34	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2358416	13C4-PFOS	763739	2500	Avg	0.798258						9671.02	9671.0176	100				25000	39	39	Yes			
092224C045.d	ZQ17947-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	118681	13C4-PFOS	763739	2500	Avg	0.461946						840.98	840.9788	100				2500	34	34	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C4-PFBA	SESI-0111	3349992	13C3-PFBA	2006700	5000	Avg	1.161292						7187.7	7187.6991	40.3				10000	72	72	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	49688	13C4-PFBA	3349992	10000	Avg	0.790145		187.72	5	1.24	1	0.75692	0.7569	40.3	1.9	1.9	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1421720	13C2-PFHxA	1198413	2500	Avg	0.828627						3579.22	3579.2208	40.3				5000	72	72	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	476233	13C5-PFPeA	1421720	5000	Avg	0.845037		1981.98	5	1.24	1	7.9919	7.9919	40.3	20	20	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	251544	18O2-PFHxS	789352	2500	Avg	0.219423						3630.79	3630.7898	40.3				5000	73	73	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C5-PFHxA	SESI-0113	913720	13C2-PFHxA	1198413	2500	Avg	1.121098						1700.21	1700.2119	40.3				2500	68	68	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1549151	13C5-PFHxA	913720	2500	Avg	0.809879		5233.6	5	1.24	1	21.103	21.1032	40.3	52	52	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C3-PFBS	SESI-0116	660514	18O2-PFHxS	789352	2500	Avg	1.313089						1593.15	1593.1518	40.3				2500	64	64	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	249694	13C3-PFBS	660514	2500	Avg	1.143965		826.14	5	1.24	1	3.3312	3.3312	40.3	8.3	8.3	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	664050	13C2-PFHxA	1198413	2500	Avg	0.19845						6980.45	6980.4461	40.3				10000	70	70	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1061654	13C2-PFHxA	1198413	2500	Avg	1.194702						1853.77	1853.7745	40.3				2500	74	74	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	838670	13C4-PFHpA	1061654	2500	Avg	0.995725		1983.39	5	1.24	1	7.9976	7.9976	40.3	20	20	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	267769	18O2-PFHxS	789352	2500	Avg	0.237162						3575.89	3575.8928	40.3				5000	72	72	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1359722	13C2-6:2FTS	267769	5000	Avg	1.761997		14410	5	1.24	1	58.104	58.1036	40.3	140	140	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C8-PFOA	SESI-0097	1256129	13C4-PFOA	247541	2500	Avg	7.142863						1776.05	1776.0484	40.3				2500	71	71	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	2726029	13C8-PFOA	1256129	2500	Avg	0.838198		6472.77	5	1.24	1	26.1	26.0998	40.3	65	65	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C3-PFHxS	SESI-0096	614944	18O2-PFHxS	789352	2500	Avg	1.219515						1597.05	1597.0471	40.3				2500	64	64	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	374077	13C3-PFHxS	614944	2500	Avg	1.0639		1429.44	5	1.24	1	5.7639	5.7639	40.3	14	14	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	5289899	13C3-PFHxS	614944	2500	Avg	1.030748		20864	5	1.24	1	84.129	84.1294	40.3	210	210	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C9-PFNA	SESI-0099	592766	13C5-PFNA	976980	1250	Avg	0.86335						878.46	878.4575	40.3				1250	70	70	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	375945	13C9-PFNA	592766	1250	Avg	0.776752		1020.63	5	1.24	1	4.1154	4.1154	40.3	10	10	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	297770	18O2-PFHxS	789352	2500	Avg	0.213504						4417.17	4417.1711	40.3				5000	88	88	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	756637	13C4-PFOS	883256	2500	Avg	0.522181						4101.28	4101.2847	40.3				5000	82	82	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	131080	D3-NMeFOSAA	756637	5000	Avg	0.711099		1218.12	5	1.24	1	4.9118	4.9118	40.3	12	12	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C6-PFDA	SESI-0115	613397	13C2-PFDA	715159	1250	Avg	1.19879						894.35	894.3468	40.3				1250	72	72	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	73704	13C6-PFDA	613397	1250	Avg	0.773597		194.15	5	1.24	1	0.78288	0.7829	40.3	1.9	1.9	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	505946	13C4-PFOS	883256	2500	Avg	0.396254						3613.97	3613.9648	40.3				5000	72	72	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	125195	D5-NEtFOSAA	505946	5000	Avg	1.043077		1186.14	5	1.24	1	4.7828	4.7828	40.3	12	12	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C8-PFOS	SESI-0098	640578	13C4-PFOS	883256	2500	Avg	1.036214						1749.75	1749.7499	40.3				2500	70	70	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	344561	13C8-PFOS	640578	2500	Avg	0.886401		1517.06	5	1.24	1	6.1172	6.1172	40.3	15	15	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	25684	13C8-PFOS	640578	2500	Avg	1.12962		88.736	5	1.24	1	0.35781	0.3578	40.3	0.89	0.89	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C7-PFUnA	SESI-0117	519805	13C2-PFDA	715159	1250	Avg	1.090348						833.26	833.2642	40.3				1250	67	67	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	159598	13C7-PFUnA	519805	1250	Avg	0.852827		450.02	5	1.24	1	1.8146	1.8146	40.3	4.5	4.5	Yes							
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C2-PFDoA	SESI-0118	501712	13C2-PFDA	715159	1250	Avg	1.058364						828.57	828.5655	40.3				1250	66	66	Yes			
092224C070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	72131	13C2-PFDoA	501712	1250	Avg	0.691664		259.83	5	1.24	1	1.0477	1.0477	40.3	2.6	2.6	Yes							
092224C071.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C8-PFOSA	SESI-0107	1021654	13C4-PFOS	883256	2500	Avg	1.770989						1632.83	1632.8316	40.3				2500	65	65	Yes			
092224C071.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	304210	13C8-PFOSA	1021654	2500	Avg	0.902242		825.06	5	1.24	1	3.3269	3.3269	40.3	8.3	8.3	Yes							
092224C071.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	445597	13C2-PFDA	715159	1250	Avg	0.976439						797.64	797.6356	40.3				1250	64	64	Yes			
092224C071.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	3082491	13C4-PFOS	883256	2500	Avg	0.714673						12208	12208.094	40.3				25000	49	49	Yes			
092224C071.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	161892	13C4-PFOS	883256	2500	Avg	0.435575						1052	1052.0003	40.3				2500	42	42	Yes			
092224C071.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	3350339	13C4-PFOS	883256	2500	Avg	0.798258						11880	11879.52	40.3				25000	48	48	Yes			
092224C071.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	157417	13C4-PFOS	883256	2500	Avg	0.461946						964.53	964.5258	40.3				2500	39	39	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	3339552	13C3-PFBA	1927919	5000	Avg	1.161292						7458.1	7458.0965	40.3				10000	75	75	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2827673	13C4-PFBA	3339552	10000	Avg	0.790145		10716	5	1.24	1	43.21	43.2098	40.3	110	110	Yes	96	110	109.7	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	1431515	13C2-PFHxA	1215124	2500	Avg	0.828627						3554.32	3554.3176	40.3				5000	71	71	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1712145	13C5-PFPeA	1431515	5000	Avg	0.845037		7076.84	5	1.24	1	28.536	28.5356	40.3	71	71	Yes	48	106	106.2	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	252637	18O2-PFHxS	694839	2500	Avg	0.219423						4142.57	4142.5774	40.3				5000	83	83	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	885150	13C2-4:2FTS	252637	5000	Avg	1.781468		9833.59	5	1.24	1	39.652	39.6516	40.3	99	98	Yes	90	109	109.3	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	964248	13C2-PFHxA	1215124	2500	Avg	1.121098						1769.56	1769.5571	40.3				2500	71	71	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	2326942	13C5-PFHxA	964248	2500	Avg	0.809879		7449.32	5	1.24	1	30.038	30.0376	40.3	75	75	Yes	24	92	92.4	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	662915	18O2-PFHxS	694839	2500	Avg	1.313089						1816.43	1816.4335	40.3				2500	73	73	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	952611	13C3-PFBS	662915	2500	Avg	1.143965		3140.4	5	1.24	1	12.663	12.6629	40.3	31	31	Yes	21	109	110.3	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	684327	13C2-PFHxA	1215124	2500	Avg	0.19845						7094.67	7094.6664	40.3				10000	71	71	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	1044624	13C2-PFHxA	1215124	2500	Avg	1.194702						1798.95	1798.953	40.3				2500	72	72	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1881123	13C4-PFHpA	1044624	2500	Avg	0.995725		4521.24	5	1.24	1	18.231	18.2308	40.3	45	45	Yes	24	106	105.8	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	312811	18O2-PFHxS	694839	2500	Avg	0.237162						4745.62	4745.6175	40.3				5000	95	95	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	2483656	13C2-6:2FTS	312811	5000	Avg	1.761997		22531	5	1.24	1	90.85	90.8495	40.3	230	230	Yes	91	89	89.3	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	1226062	13C4-PFOA	238282	2500	Avg	7.142863						1800.9	1800.897	40.3				2500	72	72	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	4059605	13C8-PFOA	1226062	2500	Avg	0.838198		9875.63	5	1.24	1	39.821	39.8211	40.3	99	99	Yes	24	142	141.9	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	619525	18O2-PFHxS	694839	2500	Avg	1.219515						1827.79	1827.7951	40.3				2500	73	73	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	1020390	13C3-PFHxS	619525	2500	Avg	1.0639		3870.32	5	1.24	1	15.606	15.6061	40.3	39	39	Yes	23	108	106.2	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	6184538	13C3-PFHxS	619525	2500	Avg	1.030748		24212	5	1.24	1	97.63	97.6302	40.3	240	240	Yes	22	153	152.3	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	645598	13C5-PFNA	974965	1250	Avg	0.86335						958.73	958.7299	40.3				1250	77	77	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	1298628	13C9-PFNA	645598	1250	Avg	0.776752		3237.06	5	1.24	1	13.053	13.0526	40.3	32	32	Yes	24	92	92.4	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	313905	18O2-PFHxS	694839	2500	Avg	0.213504						5289.91	5289.907	40.3				5000	106	105.8	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1388729	13C2-8:2FTS	313905	5000	Avg	1.619153		13662	5	1.24	1	55.087	55.087074	40.3	140	140	Yes	92	120	120.6	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	778926	13C4-PFOS	815729	2500	Avg	0.522181						4571.61	4571.6107	40.3				5000	91	91	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	446823	D3-NMeFOSAA	778926	5000	Avg	0.711099		4033.47	5	1.24	1	16.264	16.264	40.3	40	40	Yes	24	117	117.4	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	578012	13C2-PFDA	672381	1250	Avg	1.19879						896.37	896.3721	40.3				1250	72	72	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorodecanoic acid (PFDA)	335-76-2	1093152	13C6-PFDA	578012	1250	Avg	0.773597		3055.9	5	1.24	1	12.322	12.3222	40.3	31	31	Yes	24	119	119.3	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	530778	13C4-PFOS	815729	2500	Avg	0.396254						4105.2	4105.1909	40.3				5000	82	82	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	403571	D5-NEtFOSAA	530778	5000	Avg	1.043077		3644.69	5	1.24	1	14.696	14.6963	40.3	37	36	Yes	24	103	102.5	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	663437	13C4-PFOS	815729	2500	Avg	1.036214						1962.21	1962.2048	40.3				2500	78	78.5	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	948410	13C8-PFOS	663437	2500	Avg	0.886401		4031.87	5	1.24	1	16.258	16.2575	40.3	40	40	Yes	23	110	109.4	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2.8E+07	13C8-PFOS	663437	2500	Avg	0.934293		112178	5	1.24	1	452.33	452.3294	40.3	1100	1100	Yes	22	7.8	7.9	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	782134	13C8-PFOS	663437	2500	Avg	1.12962		2609.09	5	1.24	1	10.521	10.5205	40.3	26	26	Yes	23	109	109.6	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	568895	13C2-PFDA	672381	1250	Avg	1.090348						969.98	969.9773	40.3				1250	78	78	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	1149628	13C7-PFUnA	568895	1250	Avg	0.852827		2961.93	5	1.24	1	11.943	11.9433	40.3	30	30	Yes	24	105	104.7	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	493577	13C2-PFDA	672381	1250	Avg	1.058364						866.99	866.9907	40.3				1250	69	69	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	748314	13C2-PFDoA	493577	1250	Avg	0.691664		2739.96	5	1.24	1	11.048	11.0482	40.3	27	27	Yes	24	103	103.4	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	1003715	13C4-PFOS	815729	2500	Avg	1.770989						1736.96	1736.9554	40.3				2500	69	69	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1305008	13C8-PFOSA	1003715	2500	Avg	0.902242		3602.63	5	1.24	1	14.527	14.5267	40.3	36	36	Yes	24	116	115.8	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	419989	13C2-PFDA	672381	1250	Avg	0.976439						799.63	799.6269	40.3				1250	64	64	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	3149024	13C4-PFOS	815729	2500	Avg	0.714673						13504	13504.009	40.3				25000	54	54	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	167947	13C4-PFOS	815729	2500	Avg	0.435575						1181.69	1181.6896	40.3				2500	47	47	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	3452643	13C4-PFOS	815729	2500	Avg	0.798258						13256	13255.695	40.3				25000	53	53	Yes			
092224C071.d	ZH22011-038MS	CACMW-005-110-92.75-0816	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	159956	13C4-PFOS	815729	2500	Avg	0.461946						1061.22	1061.2151	40.3				2500	42	42	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	3241463	13C3-PFBA	1922555	5000	Avg	1.161292						7259.23	7259.2352	40.3				10000	73	73	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2769652	13C4-PFBA	3241463	10000	Avg	0.790145		10814	5	1.24	1	43.604	43.6039	40.3	110	110	Yes	96	111	110.8	Yes	0.91	0.9	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	1390816	13C2-PFHxA	1180033	2500	Avg	0.828627						3555.96	3555.9566	40.3				5000	71	71	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1712600	13C5-PFPeA	1390816	5000	Avg	0.845037		7285.86	5	1.24	1	29.378	29.3784	40.3	73	73	Yes	48	111	110.6	Yes	2.9	2.9	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	218263	18O2-PFHxS	716741	2500	Avg	0.219423						3469.57	3469.5706	40.3				5000	69	69	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	861112	13C2-4:2FTS	218263	5000	Avg	1.781468		11073	5	1.24	1	44.65	44.6498	40.3	110	110	Yes	90	122	123.1	Yes	12	11.9	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	928814	13C2-PFHxA	1180033	2500	Avg	1.121098						1755.22	1755.2179	40.3				2500	70	70	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	2407421	13C5-PFHxA	928814	2500	Avg	0.809879		8000.98	5	1.24	1	32.262	32.262	40.3	80	80	Yes	24	115	115.4	Yes	7.1	7.1	Yes

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0116	646616	18O2-PFHxS	716741	2500	Avg	1.313089						1717.63	1717.6317	40.3				2500	69	69	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	955105	13C3-PFBS	646616	2500	Avg	1.143965		3227.99	5	1.24	1	13.016	13.0161	40.3	32	32	Yes	21	113	114.4	Yes	2.8	2.8	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	701973	13C2-PFHxA	1180033	2500	Avg	0.19845						7494.03	7494.0254	40.3				10000	75	75	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	995153	13C2-PFHxA	1180033	2500	Avg	1.194702						1764.72	1764.7213	40.3				2500	71	71	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1880330	13C4-PFHpA	995153	2500	Avg	0.995725		4744	5	1.24	1	19.129	19.129	40.3	48	47	Yes	24	115	115.1	Yes	4.8	4.8	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	271711	18O2-PFHxS	716741	2500	Avg	0.237162						3996.13	3996.1325	40.3				5000	80	80	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	2439194	13C2-6:2FTS	271711	5000	Avg	1.761997		25474	5	1.24	1	102.72	102.7194	40.3	260	250	Yes	91	121	121.7	Yes	12	12.3	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	1200113	13C4-PFOA	227780	2500	Avg	7.142863						1844.06	1844.0566	40.3				2500	74	74	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	4122857	13C8-PFOA	1200113	2500	Avg	0.838198		10246	5	1.24	1	41.316	41.316	40.3	100	100	Yes	24	157	157.3	Yes	3.7	3.7	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	646094	18O2-PFHxS	716741	2500	Avg	1.219515						1847.93	1847.9334	40.3				2500	74	74	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	1004045	13C3-PFHxS	646094	2500	Avg	1.0639		3651.71	5	1.24	1	14.725	14.7247	40.3	37	37	Yes	23	98	96.7	Yes	5.8	5.8	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	6059499	13C3-PFHxS	646094	2500	Avg	1.030748		22747	5	1.24	1	91.723	91.7227	40.3	230	230	Yes	22	86	85.6	Yes	6.2	6.2	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	614045	13C5-PFNA	983933	1250	Avg	0.86335						903.56	903.5617	40.3				1250	72	72	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	1353026	13C9-PFNA	614045	1250	Avg	0.776752		3545.96	5	1.24	1	14.298	14.2982	40.3	36	35	Yes	24	105	105.3	Yes	9.1	9.1	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	302976	18O2-PFHxS	716741	2500	Avg	0.213504						4949.71	4949.7125	40.3				5000	99	99.0	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1290723	13C2-8:2FTS	302976	5000	Avg	1.619153		13155	5	1.24	1	53.046	53.046319	40.3	130	130	Yes	92	115	115.1	Yes	3.8	3.8	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	743243	13C4-PFOS	822572	2500	Avg	0.522181						4325.89	4325.8938	40.3				5000	87	87	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	423692	D3-NMeFOSAA	743243	5000	Avg	0.711099		4008.29	5	1.24	1	16.162	16.1625	40.3	40	40	Yes	24	116	116.3	Yes	0.63	0.6	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	616605	13C2-PFDA	705580	1250	Avg	1.19879						911.23	911.2293	40.3				1250	73	73	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorodecanoic acid (PFDA)	335-76-2	1116971	13C6-PFDA	616605	1250	Avg	0.773597		2927.05	5	1.24	1	11.803	11.8026	40.3	29	29	Yes	24	114	113.9	Yes	4.3	4.3	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	495129	13C4-PFOS	822572	2500	Avg	0.396254						3797.62	3797.6137	40.3				5000	76	76	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	407778	D5-NEtFOSAA	495129	5000	Avg	1.043077		3947.83	5	1.24	1	15.919	15.9187	40.3	40	40	Yes	24	115	115.1	Yes	8	8.0	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	632998	13C4-PFOS	822572	2500	Avg	1.036214						1856.6	1856.6027	40.3				2500	74	74.3	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	922952	13C8-PFOS	632998	2500	Avg	0.886401		4112.32	5	1.24	1	16.582	16.5819	40.3	41	41	Yes	23	114	112.9	Yes	2	2.0	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2.9E+07	13C8-PFOS	632998	2500	Avg	0.934293		121998	5	1.24	1	491.93	491.92893	40.3	1200	1200	Yes	22	449	454.5	Yes	8.4	8.4	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	794896	13C8-PFOS	632998	2500	Avg	1.12962		2779.17	5	1.24	1	11.206	11.2063	40.3	28	28	Yes	23	117	117.0	Yes	6.3	6.3	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	524891	13C2-PFDA	705580	1250	Avg	1.090348						852.84	852.8404	40.3				1250	68	68	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	1132037	13C7-PFUnA	524891	1250	Avg	0.852827		3161.12	5	1.24	1	12.746	12.7464	40.3	32	32	Yes	24	113	113.0	Yes	6.5	6.5	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	470948	13C2-PFDA	705580	1250	Avg	1.058364						788.32	788.3184	40.3				1250	63	63	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	739400	13C2-PFDoA	470948	1250	Avg	0.691664		2837.41	5	1.24	1	11.441	11.4411	40.3	28	28	Yes	24	107	107.5	Yes	3.5	3.5	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	957919	13C4-PFOS	822572	2500	Avg	1.770989						1643.91	1643.9137	40.3				2500	66	66	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1294726	13C8-PFOSA	957919	2500	Avg	0.902242		3745.12	5	1.24	1	15.101	15.1013	40.3	38	37	Yes	24	122	121.7	Yes	3.9	3.9	Yes
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	415281	13C2-PFDA	705580	1250	Avg	0.976439						753.46	753.4609	40.3				1250	60	60	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	3074888	13C4-PFOS	822572	2500	Avg	0.714673						13076	13076.395	40.3				25000	52	52	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	158159	13C4-PFOS	822572	2500	Avg	0.435575						1103.56	1103.5628	40.3				2500	44	44	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	3313303	13C4-PFOS	822572	2500	Avg	0.798258						12615	12614.904	40.3				25000	50	50	Yes			
092224C072.d	ZH22011-038MD	CACMW-005-110-92.75-0816	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	147912	13C4-PFOS	822572	2500	Avg	0.461946						973.15	973.1466	40.3				2500	39	39	Yes			
092324B031.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	EIS	13C8-PFOS	SESI-0098	93778	13C4-PFOS	117049	500	Avg	0.993393						403.26	403.2572	42				500	81	81	Yes			
092324B031.d	ZH22011-058	CACMW-008-060-42.75-0817	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2475175	13C8-PFOS	93778	500	Avg	0.872096		15132	5	1.19	5	317.91	317.9096	42	760	760	Yes							
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	1883943	13C3-PFBA	1009118	5000	Avg	1.14978						8118.6	8118.5984	100				10000	81	81	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	761439	13C2-PFHxA	507529	2500	Avg	0.912806						4109	4108.9966	100				5000	82	82	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	92758	18O2-PFHxS	339108	2500	Avg	0.174396						3921.18	3921.1805	100				5000	78	78	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	411384	13C2-PFHxA	507529	2500	Avg	1.004407						2017.52	2017.5152	100				2500	81	81	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	402551	18O2-PFHxS	339108	2500	Avg	1.514202						1959.92	1959.9233	100				2500	78	78	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	428335	13C2-PFHxA	507529	2500	Avg	0.258101						8174.71	8174.7225	100				10000	82	82	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	405187	13C2-PFHxA	507529	2500	Avg	0.971591						2054.24	2054.2399	100				2500	82	82	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	128677	18O2-PFHxS	339108	2500	Avg	0.237573						3993.07	3993.0598	100				5000	80	80	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	447169	13C4-PFOA	126030	2500	Avg	4.183914						2120.09	2120.0935	100				2500	85	85	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	299059	18O2-PFHxS	339108	2500	Avg	1.112944						1981.01	1981.0048	100				2500	79	79	Yes			
092324B037.d	ZQ17976-001		Method_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2094	13C3-PFHxS	299059	2500	Avg	0.961146		18.213	5	5	1	0.01821	0.0182	100	ND	0.018	Yes							
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	160035	13C5-PFNA	286308	1250	Avg	0.672232						1039.38	1039.3751	100				1250	83	83	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	114715	18O2-PFHxS	339108	2500	Avg	0.217572						3887.04	3887.0415	100				5000	78	78	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	267587	13C4-PFOS	511625	2500	Avg	0.325783						4013.51	4013.5146	100				5000	80	80	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	174903	13C2-PFDA	221777	1250	Avg	0.940314						1048.38	1048.3779	100				1250	84	84	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	302878	13C4-PFOS	511625	2500	Avg	0.345606						4282.28	4282.2765	100				5000	86	86	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	428746	13C4-PFOS	511625	2500	Avg	0.993393						2108.96	2108.9546	100				2500	84	84	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	174946	13C2-PFDA	221777	1250	Avg	0.934831						1054.79	1054.7862	100				1250	84	84	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	144336	13C2-PFDA	221777	1250	Avg	0.793171						1025.66	1025.6551	100				1250	82	82	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	99783	13C2-PFDA	221777	1250	Avg	0.578567						972.07	972.0675	100				1250	78	78	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	673888	13C4-PFOS	511625	2500	Avg	1.917495						1717.28	1717.2825	100				2500	69	69	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1853512	13C4-PFOS	511625	2500	Avg	0.709879						12758	12758.491	100				25000	51	51	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	93993	13C4-PFOS	511625	2500	Avg	0.446899						1027.72	1027.719	100				2500	41	41	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2316496	13C4-PFOS	511625	2500	Avg	0.877222						12904	12903.582	100				25000	52	52	Yes			
092324B037.d	ZQ17976-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	107944	13C4-PFOS	511625	2500	Avg	0.510919						1032.37	1032.3684	100				2500	41	41	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2229479	13C3-PFBA	1112248	5000	Avg	1.14978						8716.8	8716.7985	100				10000	87	87	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1963289	13C4-PFBA	2229479	10000	Avg	0.799533		11014	5	5	1	11.014	11.014	100	11	11	Yes	9.6	115	115	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	904923	13C2-PFHxA	577261	2500	Avg	0.912806						4293.39	4293.3958	100				5000	86	86	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	937663	13C5-PFPeA	904923	5000	Avg	1.00198		5170.66	5	5	1	5.1707	5.1707	100	5.2	5.2	Yes	4.8	108	108	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	109752	18O2-PFHxS	381747	2500	Avg	0.174396						4121.36	4121.3576	100				5000	82	82	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	339020	13C2-4:2FTS	109752	5000	Avg	1.561581		9890.5	5	5	1	9.8905	9.8905	100	9.9	9.9	Yes	9	110	110	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	527304	13C2-PFHxA	577261	2500	Avg	1.004407						2273.63	2273.6265	100				2500	91	91	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	588631	13C5-PFHxA	527304	2500	Avg	1.138995		2450.19	5	5	1	2.4502	2.4502	100	2.5	2.5	Yes	2.4	102	102	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	476922	18O2-PFHxS	381747	2500	Avg	1.514202						2062.66	2062.6613	100				2500	83	83	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	776136	13C3-PFBS	476922	2500	Avg	1.653717		2460.19	5	5	1	2.4602	2.4602	100	2.5	2.5	Yes	2.1	116	117	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	521686	13C2-PFHxA	577261	2500	Avg	0.258101						8753.6	8753.6119	100				10000	88	88	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	459860	13C2-PFHxA	577261	2500	Avg	0.971591						2049.79	2049.7927	100				2500	82	82	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	525833	13C4-PFHpA	459860	2500	Avg	1.086825		2630.28	5	5	1	2.6303	2.6303	100	2.6	2.6	Yes	2.4	110	110	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	153596	18O2-PFHxS	381747	2500	Avg	0.237573						4233.97	4233.9644	100				5000	85	85	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	575330	13C2-6:2FTS	153596	5000	Ln	1.924681	-117	9791.78	5	5	1	9.7918	9.7916	100	9.8	9.8	Yes	9.1	107	108	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	531803	13C4-PFOA	138364	2500	Avg	4.183914						2296.6	2296.5977	100				2500	92	92	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	594838	13C8-PFOA	531803	2500	Avg	1.102996		2535.21	5	5	1	2.5352	2.5352	100	2.5	2.5	Yes	2.4	106	106	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	365473	18O2-PFHxS	381747	2500	Avg	1.112944						2150.53	2150.5342	100				2500	86	86	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	371124	13C3-PFHxS	365473	2500	Avg	1.02469		2477.49	5	5	1	2.4775	2.4775	100	2.5	2.5	Yes	2.3	110	108	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	315307	13C3-PFHxS	365473	2500	Avg	0.961146		2244.03	5	5	1	2.244	2.244	100	2.2	2.2	Yes	2.2	102	102	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	182364	13C5-PFNA	314523	1250	Avg	0.672232						1078.15	1078.1459	100				1250	86	86	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	420277	13C9-PFNA	182364	1250	Avg	1.184726		2431.58	5	5	1	2.4316	2.4316	100	2.4	2.4	Yes	2.4	101	101	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	133638	18O2-PFHxS	381747	2500	Avg	0.217572						4022.45	4022.4563	100				5000	80	80	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	432313	13C2-8:2FTS	133638	5000	Ln	1.582433	-143	10312	5	5	1	10.312	10.3118	100	10	10	Yes	9.2	112	112	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	326185	13C4-PFOS	602215	2500	Avg	0.325783						4156.46	4156.4638	100				5000	83	83	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	128872	D3-NMeFOSAA	326185	5000	Avg	0.714909		2763.21	5	5	1	2.7632	2.7632	100	2.8	2.8	Yes	2.4	115	115	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	202128	13C2-PFDA	258870	1250	Avg	0.940314						1037.96	1037.963	100				1250	83	83	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	405071	13C6-PFDA	202128	1250	Avg	0.958302		2614.04	5	5	1	2.614	2.614	100	2.6	2.6	Yes	2.4	109	109	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	331040	13C4-PFOS	602215	2500	Avg	0.345606						3976.38	3976.3778	100				5000	80	80	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	152837	D5-NEtFOSAA	331040	5000	Avg	0.841671		2742.68	5	5	1	2.7427	2.7427	100	2.7	2.7	Yes	2.4	114	114	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	527132	13C4-PFOS	602215	2500	Avg	0.993393						2202.86	2202.8591	100				2500	88	88	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	370136	13C8-PFOS	527132	2500	Avg	0.750488		2339.04	5	5	1	2.339	2.339	100	2.3	2.3	Yes	2.3	103	102	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	425353	13C8-PFOS	527132	2500	Avg	0.872096		2313.16	5	5	1	2.3132	2.3132	100	2.3	2.3	Yes	2.2	104	105	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	447964	13C8-PFOS	527132	2500	Avg	0.836875		2538.65	5	5	1	2.5387	2.5387	100	2.5	2.5	Yes	2.3	110	110	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	214001	13C2-PFDA	258870	1250	Avg	0.934831						1105.38	1105.3784	100				1250	88	88	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	415453	13C7-PFUnA	214001	1250	Avg	0.930416		2608.19	5	5	1	2.6082	2.6082	100	2.6	2.6	Yes	2.4	109	109	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	168805	13C2-PFDA	258870	1250	Avg	0.793171						1027.65	1027.6536	100				1250	82	82	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	203003	13C2-PFDoA	168805	1250	Avg	0.592818		2535.75	5	5	1	2.5357	2.5357	100	2.5	2.5	Yes	2.4	106	106	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	120914	13C2-PFDA	258870	1250	Avg	0.578567						1009.14	1009.1395	100				1250	81	81	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	811268	13C4-PFOS	602215	2500	Avg	1.917495						1756.38	1756.3803	100				2500	70	70	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	862639	13C8-PFOSA	811268	2500	Avg	0.98714		2692.94	5	5	1	2.6929	2.6929	100	2.7	2.7	Yes	2.4	112	112	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2138172	13C4-PFOS	602215	2500	Avg	0.709879						12504	12503.936	100				25000	50	50	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	116114	13C4-PFOS	602215	2500	Avg	0.446899						1078.61	1078.608	100				2500	43	43	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2688312	13C4-PFOS	602215	2500	Avg	0.877222						12722	12722.094	100				25000	51	51	Yes			
092324B038.d	ZQ17976-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	128861	13C4-PFOS	602215	2500	Avg	0.510919						1047.03	1047.027	100				2500	42	42	Yes			
092324B047.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	24776	18O2-PFHxS	75770	500	Avg	0.217572						751.45	751.4514	33.3				1000	75	75	Yes			
092324B047.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	15377	13C2-8:2FTS	24776	1000	Ln	1.582433	-143	482.98	5	1.51	5	7.9963	7.9896	33.3	24	24	Yes							
092324B047.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	EIS	13C8-PFOS	SESI-0098	104336	13C4-PFOS	121648	500	Avg	0.993393						431.7	431.6961	33.3				500	86	86	Yes			
092324B047.d	ZH22011-071	FD-1-081624-FM-R	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2280424	13C8-PFOS	104336	500	Avg	0.872096		12531	5	1.51	5	207.47	207.4676	33.3	620	620	Yes							
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2151208	13C3-PFBA	1074465	5000	Avg	1.14978						8706.54	8706.5357	100				10000	87	87	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1916420	13C4-PFBA	2151208	10000	Avg	0.799533		11142	5	5	1	11.142	11.1422	100	11	11	Yes	9.6	116	116	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	860791	13C2-PFHxA	534032	2500	Avg	0.912806						4414.6	4414.6061	100				5000	88	88	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	951760	13C5-PFPeA	860791	5000	Avg	1.00198		5517.48	5	5	1	5.5175	5.5175	100	5.5	5.5	Yes	4.8	115	115	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	105792	18O2-PFHxS	363173	2500	Avg	0.174396						4175.83	4175.8295	100				5000	84	84	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	344354	13C2-4:2FTS	105792	5000	Avg	1.561581		10422	5	5	1	10.422	10.4222	100	10	10	Yes	9	116	116	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	481700	13C2-PFHxA	534032	2500	Avg	1.004407						2245.12	2245.1204	100				2500	90	90	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	580767	13C5-PFHxA	481700	2500	Avg	1.138995		2646.33	5	5	1	2.6463	2.6463	100	2.6	2.6	Yes	2.4	110	110	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	474192	18O2-PFHxS	363173	2500	Avg	1.514202						2155.74	2155.7424	100				2500	86	86	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	706349	13C3-PFBS	474192	2500	Avg	1.653717		2251.87	5	5	1	2.2519	2.2519	100	2.3	2.3	Yes	2.1	106	107	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	502417	13C2-PFHxA	534032	2500	Avg	0.258101						9112.69	9112.7061	100				10000	91	91	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	459266	13C2-PFHxA	534032	2500	Avg	0.971591						2212.86	2212.858	100				2500	89	89	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	525407	13C4-PFHpA	459266	2500	Avg	1.086825		2631.55	5	5	1	2.6316	2.6316	100	2.6	2.6	Yes	2.4	110	110	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	143674	18O2-PFHxS	363173	2500	Avg	0.237573						4163.02	4163.011	100				5000	83	83	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	561496	13C2-6:2FTS	143674	5000	Ln	1.924681	-117	10214	5	5	1	10.214	10.2134	100	10	10	Yes	9.1	112	112	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	530485	13C4-PFOA	142641	2500	Avg	4.183914						2222.21	2222.2146	100				2500	89	89	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	585547	13C8-PFOA	530485	2500	Avg	1.102996		2501.81	5	5	1	2.5018	2.5018	100	2.5	2.5	Yes	2.4	104	104	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	346868	18O2-PFHxS	363173	2500	Avg	1.112944						2145.45	2145.445	100				2500	86	86	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	411246	13C3-PFHxS	346868	2500	Avg	1.02469		2892.58	5	5	1	2.8926	2.8926	100	2.9	2.9	Yes	2.3	129	126	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	337840	13C3-PFHxS	346868	2500	Avg	0.961146		2533.36	5	5	1	2.5334	2.5334	100	2.5	2.5	Yes	2.2	116	115	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	167472	13C5-PFNA	291341	1250	Avg	0.672232						1068.89	1068.8861	100				1250	86	86	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	429059	13C9-PFNA	167472	1250	Avg	1.184726		2703.13	5	5	1	2.7031	2.7031	100	2.7	2.7	Yes	2.4	113	113	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	140797	18O2-PFHxS	363173	2500	Avg	0.217572						4454.68	4454.6835	100				5000	89	89	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	390715	13C2-8:2FTS	140797	5000	Ln	1.582433	-143	8858.99	5	5	1	8.859	8.8586	100	8.9	8.9	Yes	9.2	96	96	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	284034	13C4-PFOS	564517	2500	Avg	0.325783						3861.04	3861.0453	100				5000	77	77	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	125487	D3-NMeFOSAA	284034	5000	Avg	0.714909		3089.92	5	5	1	3.0899	3.0899	100	3.1	3.1	Yes	2.4	129	129	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	197875	13C2-PFDA	244850	1250	Avg	0.940314						1074.31	1074.3058	100				1250	86	86	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	437256	13C6-PFDA	197875	1250	Avg	0.958302		2882.39	5	5	1	2.8824	2.8824	100	2.9	2.9	Yes	2.4	120	120	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	284294	13C4-PFOS	564517	2500	Avg	0.345606						3642.92	3642.9181	100				5000	73	73	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	138985	D5-NEtFOSAA	284294	5000	Avg	0.841671		2904.21	5	5	1	2.9042	2.9042	100	2.9	2.9	Yes	2.4	121	121	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	484190	13C4-PFOS	564517	2500	Avg	0.993393						2158.53	2158.5281	100				2500	86	86	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	386436	13C8-PFOS	484190	2500	Avg	0.750488		2658.63	5	5	1	2.6586	2.6586	100	2.7	2.7	Yes	2.3	117	116	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	429870	13C8-PFOS	484190	2500	Avg	0.872096		2545.05	5	5	1	2.5451	2.5451	100	2.5	2.5	Yes	2.2	115	116	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	425159	13C8-PFOS	484190	2500	Avg	0.836875		2623.1	5	5	1	2.6231	2.6231	100	2.6	2.6	Yes	2.3	114	114	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	184519	13C2-PFDA	244850	1250	Avg	0.934831						1007.67	1007.669	100				1250	81	81	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	367920	13C7-PFUnA	184519	1250	Avg	0.930416		2678.83	5	5	1	2.6788	2.6788	100	2.7	2.7	Yes	2.4	112	112	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	157400	13C2-PFDA	244850	1250	Avg	0.793171						1013.09	1013.0895	100				1250	81	81	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	191801	13C2-PFDoA	157400	1250	Avg	0.592818		2569.42	5	5	1	2.5694	2.5694	100	2.6	2.6	Yes	2.4	107	107	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	111154	13C2-PFDA	244850	1250	Avg	0.578567						980.8	980.802	100				1250	78	78	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	789737	13C4-PFOS	564517	2500	Avg	1.917495						1823.94	1823.9429	100				2500	73	73	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	827263	13C8-PFOSA	789737	2500	Avg	0.98714		2652.91	5	5	1	2.6529	2.6529	100	2.7	2.7	Yes	2.4	111	111	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1889383	13C4-PFOS	564517	2500	Avg	0.709879						11787	11786.875	100				25000	47	47	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	97503	13C4-PFOS	564517	2500	Avg	0.446899						966.21	966.2101	100				2500	39	39	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2331754	13C4-PFOS	564517	2500	Avg	0.877222						11772	11771.619	100				25000	47	47	Yes			
092324B053.d	ZQ17947-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	105977	13C4-PFOS	564517	2500	Avg	0.510919						918.59	918.5918	100				2500	37	37	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2213418	13C3-PFBA	1192910	5000	Avg	1.14978						8068.84	8068.8383	100				10000	81	80.7	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	156764	13C4-PFBA	2213418	10000	Avg	0.799533		885.82	5	5	1	0.88582	0.8858221	100	0.89	0.89	Yes	0.80	111	110.7	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	877748	13C2-PFHxA	603534	2500	Avg	0.912806						3983.18	3983.1772	100				5000	80	79.7	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	77984	13C5-PFPeA	877748	5000	Avg	1.00198		443.35	5	5	1	0.44335	0.4433499	100	0.44	0.44	Yes	0.40	111	110.8	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	109298	18O2-PFHxS	400476	2500	Avg	0.174396						3912.37	3912.3636	100				5000	78	78.2	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	27650	13C2-4:2FTS	109298	5000	Avg	1.561581		810.01	5	5	1	0.81001	0.8100063	100	0.81	0.81	Yes	0.75	108	108.0	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	483751	13C2-PFHxA	603534	2500	Avg	1.004407						1995.04	1995.0345	100				2500	80	79.8	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	49847	13C5-PFHxA	483751	2500	Avg	1.138995		226.17	5	5	1	0.22617	0.2261702	100	0.23	0.23	Yes	0.20	113	113.1	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	462637	18O2-PFHxS	400476	2500	Avg	1.514202						1907.3	1907.3046	100				2500	76	76.3	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	59214	13C3-PFBS	462637	2500	Avg	1.653717		193.49	5	5	1	0.19349	0.1934919	100	0.19	0.19	Yes	0.17	114	113.8	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	504420	13C2-PFHxA	603534	2500	Avg	0.258101						8095.44	8095.4478	100				10000	81	81.0	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	470400	13C2-PFHxA	603534	2500	Avg	0.971591						2005.5	2005.4974	100				2500	80	80.2	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	50800	13C4-PFHpA	470400	2500	Avg	1.086825		248.41	5	5	1	0.24841	0.2484144	100	0.25	0.25	Yes	0.20	124	124.2	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	147109	18O2-PFHxS	400476	2500	Avg	0.237573						3865.51	3865.5	100				5000	77	77.3	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	46227	13C2-6:2FTS	147109	5000	Ln	1.924681	-117	877.32	5	5	1	0.87732	0.877123	100	0.88	0.88	Yes	0.76	115	115.4	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	546315	13C4-PFOA	152354	2500	Avg	4.183914						2142.63	2142.6268	100				2500	86	85.7	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	54525	13C8-PFOA	546315	2500	Avg	1.102996		226.21	5	5	1	0.22621	0.2262136	100	0.23	0.23	Yes	0.20	113	113.1	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	355247	18O2-PFHxS	400476	2500	Avg	1.112944						1992.6	1992.6023	100				2500	80	79.7	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	32731	13C3-PFHxS	355247	2500	Avg	1.02469		224.79	5	5	1	0.22479	0.2247897	100	0.22	0.22	Yes	0.18	125	124.9	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	28932	13C3-PFHxS	355247	2500	Avg	0.961146		211.84	5	5	1	0.21184	0.2118355	100	0.21	0.21	Yes	0.18	118	117.7	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	194086	13C5-PFNA	329831	1250	Avg	0.672232						1094.19	1094.1921	100				1250	88	87.5	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	31875	13C9-PFNA	194086	1250	Avg	1.184726		173.28	5	5	1	0.17328	0.1732799	100	0.17	0.17	Yes	0.20	87	86.6	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	142467	18O2-PFHxS	400476	2500	Avg	0.217572						4087.65	4087.6602	100				5000	82	81.8	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	32917	13C2-8:2FTS	142467	5000	Ln	1.582433	-143	820.82	5	5	1	0.82082	0.8204139	100	0.82	0.82	Yes	0.76	108	107.9	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	301518	13C4-PFOS	634704	2500	Avg	0.325783						3645.47	3645.4706	100				5000	73	72.9	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	7950	D3-NMeFOSAA	301518	5000	Avg	0.714909		184.41	5	5	1	0.18441	0.1844052	100	0.18	0.18	Yes	0.20	92	92.2	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	202015	13C2-PFDA	280228	1250	Avg	0.940314						958.32	958.31702	100				1250	77	76.7	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	37935	13C6-PFDA	202015	1250	Avg	0.958302		244.94	5	5	1	0.24494	0.2449425	100	0.24	0.24	Yes	0.20	122	122.5	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	297894	13C4-PFOS	634704	2500	Avg	0.345606						3395.08	3395.0741	100				5000	68	67.9	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	9224	D5-NEtFOSAA	297894	5000	Avg	0.841671		183.94	5	5	1	0.18394	0.1839438	100	0.18	0.18	Yes	0.20	92	92.0	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	509051	13C4-PFOS	634704	2500	Avg	0.993393						2018.41	2018.4081	100				2500	81	80.7	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	34100	13C8-PFOS	509051	2500	Avg	0.750488		223.15	5	5	1	0.22315	0.2231461	100	0.22	0.22	Yes	0.19	117	117.4	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	33050	13C8-PFOS	509051	2500	Avg	0.872096		186.12	5	5	1	0.18612	0.1861169	100	0.19	0.19	Yes	0.18	103	103.4	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	33625	13C8-PFOS	509051	2500	Avg	0.836875		197.32	5	5	1	0.19732	0.1973242	100	0.2	0.20	Yes	0.19	104	103.9	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	194885	13C2-PFDA	280228	1250	Avg	0.934831						929.92	929.91616	100				1250	74	74.4	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	32064	13C7-PFUnA	194885	1250	Avg	0.930416		221.04	5	5	1	0.22104	0.2210406	100	0.22	0.22	Yes	0.20	111	110.5	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	157734	13C2-PFDA	280228	1250	Avg	0.793171						887.07	887.06813	100				1250	71	71.0	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	16605	13C2-PFDoA	157734	1250	Avg	0.592818		221.97	5	5	1	0.22197	0.221974	100	0.22	0.22	Yes	0.20	111	111.0	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	119557	13C2-PFDA	280228	1250	Avg	0.578567						921.76	921.7642	100				1250	74	73.7	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	751686	13C4-PFOS	634704	2500	Avg	1.917495						1544.08	1544.0843	100				2500	62	61.8	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	74517	13C8-PFOSA	751686	2500	Avg	0.98714		251.06	5	5	1	0.25106	0.2510615	100	0.25	0.25	Yes	0.20	126	125.5	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1955402	13C4-PFOS	634704	2500	Avg	0.709879						10850	10849.769	100				25000	43	43.4	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	108871	13C4-PFOS	634704	2500	Avg	0.446899						959.56	959.55882	100				2500	38	38.4	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2442869	13C4-PFOS	634704	2500	Avg	0.877222						10969	10968.808	100				25000	44	43.9	Yes			
092324B054.d	ZQ17947-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	118129	13C4-PFOS	634704	2500	Avg	0.510919						910.7	910.69562	100				2500	36	36.4	Yes			
092324B070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	31599	18O2-PFHxS	103790	500	Avg	0.217572						699.66	699.6564	40.3				1000	70	70	Yes			
092324B070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	22440	13C2-8:2FTS	31599	1000	Ln	1.582433	-143	539.54	5	1.24	5	10.878	10.8697	40.3	27	27	Yes							
092324B070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	EIS	13C8-PFOS	SESI-0098	106185	13C4-PFOS	155651	500	Avg	0.993393						343.37	343.3683	40.3				500	69	69	Yes			
092324B070.d	ZH22011-038	CACMW-005-110-92.75-0816	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4060875	13C8-PFOS	106185	500	Avg	0.872096		21926	5	1.24	5	442.06	442.0593	40.3	1100	1100	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C4-PFBA	SESI-0111	2567128	13C3-PFBA	1291662	5000	Avg	1.14978						8642.79	8642.7887	39.8				10000	86	86	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C5-PFPeA	SESI-0112	991805	13C2-PFHxA	657295	2500	Avg	0.912806						4132.64	4132.6392	39.8				5000	83	83	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	232454	13C5-PFPeA	991805	5000	Avg	1.00198		1169.56	5	1.26	1	4.6411	4.6411	39.8	12	12	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	139150	18O2-PFHxS	491798	2500	Avg	0.174396						4056.02	4056.0186	39.8				5000	81	81	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	5173	13C2-4:2FTS	139150	5000	Avg	1.561581		119.03	5	1.26	1	0.47235	0.4724	39.8	1.2	1.2	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C5-PFHxA	SESI-0113	570332	13C2-PFHxA	657295	2500	Avg	1.004407						2159.72	2159.7212	39.8				2500	86	86	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	728291	13C5-PFHxA	570332	2500	Avg	1.138995		2802.82	5	1.26	1	11.122	11.1223	39.8	28	28	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C3-PFBS	SESI-0116	503929	18O2-PFHxS	491798	2500	Avg	1.514202						1691.76	1691.7601	39.8				2500	68	68	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	352195	13C3-PFBS	503929	2500	Avg	1.653717		1056.56	5	1.26	1	4.1927	4.1927	39.8	11	11	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	550359	13C2-PFHxA	657295	2500	Avg	0.258101						8110.27	8110.2841	39.8				10000	81	81	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C4-PFHpA	SESI-0114	549122	13C2-PFHxA	657295	2500	Avg	0.971591						2149.64	2149.6366	39.8				2500	86	86	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	310184	13C4-PFHpA	549122	2500	Avg	1.086825		1299.36	5	1.26	1	5.1562	5.1562	39.8	13	13	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	178772	18O2-PFHxS	491798	2500	Avg	0.237573						3825.22	3825.2134	39.8				5000	77	77	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1073547	13C2-6:2FTS	178772	5000	Ln	1.924681	-117	15661	5	1.26	1	62.148	62.1472	39.8	160	160	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C8-PFOA	SESI-0097	604685	13C4-PFOA	166264	2500	Avg	4.183914						2173.14	2173.1426	39.8				2500	87	87	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1262963	13C8-PFOA	604685	2500	Avg	1.102996		4733.99	5	1.26	1	18.786	18.7857	39.8	47	47	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C3-PFHxS	SESI-0096	413082	18O2-PFHxS	491798	2500	Avg	1.112944						1886.76	1886.758	39.8				2500	75	75	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	286731	13C3-PFHxS	413082	2500	Avg	1.02469		1693.5	5	1.26	1	6.7203	6.7202	39.8	17	17	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2665982	13C3-PFHxS	413082	2500	Avg	0.961146		16787	5	1.26	1	66.615	66.6148	39.8	170	170	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C9-PFNA	SESI-0099	232158	13C5-PFNA	348572	1250	Avg	0.672232						1238.46	1238.46	39.8				1250	99	99	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	97632	13C9-PFNA	232158	1250	Avg	1.184726		443.71	5	1.26	1	1.7608	1.7608	39.8	4.4	4.4	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	157221	18O2-PFHxS	491798	2500	Avg	0.217572						3673.33	3673.3372	39.8				5000	73	73	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	74235	13C2-8:2FTS	157221	5000	Ln	1.582433	-143	1582.68	5	1.26	1	6.2805	6.2789	39.8	16	16	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	416099	13C4-PFOS	650612	2500	Avg	0.325783						4907.79	4907.7925	39.8				5000	98	98	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	25080	D3-NMeFOSAA	416099	5000	Avg	0.714909		421.55	5	1.26	1	1.6728	1.6728	39.8	4.2	4.2	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C6-PFDA	SESI-0115	244096	13C2-PFDA	329910	1250	Avg	0.940314						983.56	983.5633	39.8				1250	79	79	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	13564	13C6-PFDA	244096	1250	Avg	0.958302		72.483	5	1.26	1	0.28763	0.2876	39.8	0.72	0.72	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	386027	13C4-PFOS	650612	2500	Avg	0.345606						4291.95	4291.947	39.8				5000	86	86	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	41078	D5-NEtFOSAA	386027	5000	Avg	0.841671		632.15	5	1.26	1	2.5085	2.5085	39.8	6.3	6.3	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C8-PFOS	SESI-0098	567524	13C4-PFOS	650612	2500	Avg	0.993393						2195.24	2195.2353	39.8				2500	88	88	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	215785	13C8-PFOS	567524	2500	Avg	0.750488		1266.58	5	1.26	1	5.0261	5.0261	39.8	13	13	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C7-PFUnA	SESI-0117	250797	13C2-PFDA	329910	1250	Avg	0.934831						1016.49	1016.4915	39.8				1250	81	81	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	75798	13C7-PFUnA	250797	1250	Avg	0.930416		406.04	5	1.26	1	1.6113	1.6113	39.8	4	4	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C2-PFDoA	SESI-0118	209205	13C2-PFDA	329910	1250	Avg	0.793171						999.36	999.3549	39.8				1250	80	80	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	23088	13C2-PFDoA	209205	1250	Avg	0.592818		232.7	5	1.26	1	0.92343	0.9234	39.8	2.3	2.3	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	136527	13C2-PFDA	329910	1250	Avg	0.578567						894.09	894.0863	39.8				1250	72	72	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C8-PFOSA	SESI-0107	1064490	13C4-PFOS	650612	2500	Avg	1.917495						2133.17	2133.1691	39.8				2500	85	85	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	225373	13C8-PFOSA	1064490	2500	Avg	0.98714		536.19	5	1.26	1	2.1278	2.1278	39.8	5.3	5.3	Yes							
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2714141	13C4-PFOS	650612	2500	Avg	0.709879						14691	14691.496	39.8				25000	59	59	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	126192	13C4-PFOS	650612	2500	Avg	0.446899						1085.03	1085.0266	39.8				2500	43	43	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	3132446	13C4-PFOS	650612	2500	Avg	0.877222						13721	13721.198	39.8				25000	55	55	Yes			
092324B116.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	130847	13C4-PFOS	650612	2500	Avg	0.510919						984.08	984.0783	39.8				2500	39	39	Yes			
092424A027.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	EIS	13C8-PFOS	SESI-0098	100971	13C4-PFOS	133948	500	Avg	0.984793						382.72	382.7238	39.8				500	77	77	Yes			
092424A027.d	ZH22011-013	CACMW-001-160-148.5-0815	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2305154	13C8-PFOS	100971	500	Avg	0.870004		13121	5	1.26	5	260.33	260.3284	39.8	650	650	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C4-PFBA	SESI-0111	2467632	13C3-PFBA	1214426	5000	Avg	1.153035						8811.24	8811.2364	40.3				10000	88	88	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C5-PFPeA	SESI-0112	955077	13C2-PFHxA	615257	2500	Avg	0.891292						4354.13	4354.1343	40.3				5000	87	87	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	84403	13C5-PFPeA	955077	5000	Avg	1.018879		433.68	5	1.24	1	1.7487	1.7487	40.3	4.3	4.3	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	122189	18O2-PFHxS	399965	2500	Avg	0.16784						4550.45	4550.4533	40.3				5000	91	91	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C5-PFHxA	SESI-0113	521254	13C2-PFHxA	615257	2500	Avg	0.983356						2153.88	2153.8828	40.3				2500	86	86	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	286484	13C5-PFHxA	521254	2500	Avg	1.153986		1190.67	5	1.24	1	4.8011	4.8011	40.3	12	12	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C3-PFBS	SESI-0116	504850	18O2-PFHxS	399965	2500	Avg	1.4649						2154.13	2154.1324	40.3				2500	86	86	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	75068	13C3-PFBS	504850	2500	Avg	1.649991		225.29	5	1.24	1	0.90845	0.9084	40.3	2.3	2.3	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	560248	13C2-PFHxA	615257	2500	Avg	0.255296						8917.02	8917.0202	40.3				10000	89	89	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C4-PFHpA	SESI-0114	500318	13C2-PFHxA	615257	2500	Avg	0.972655						2090.12	2090.1177	40.3				2500	84	84	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	105959	13C4-PFHpA	500318	2500	Avg	1.095097		483.48	5	1.24	1	1.9495	1.9495	40.3	4.8	4.8	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	146380	18O2-PFHxS	399965	2500	Avg	0.235608						3883.38	3883.3786	40.3				5000	78	78	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	400763	13C2-6:2FTS	146380	5000	Avg	1.87751		7291.11	5	1.24	1	29.4	29.3996	40.3	73	73	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C8-PFOA	SESI-0097	581730	13C4-PFOA	148918	2500	Avg	4.359235						2240.29	2240.2887	40.3				2500	90	90	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	417575	13C8-PFOA	581730	2500	Avg	1.129938		1588.17	5	1.24	1	6.4039	6.4039	40.3	16	16	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C3-PFHxS	SESI-0096	367851	18O2-PFHxS	399965	2500	Avg	1.087071						2115.11	2115.1056	40.3				2500	85	85	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	53556	13C3-PFHxS	367851	2500	Avg	1.036407		351.19	5	1.24	1	1.4161	1.4161	40.3	3.5	3.5	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	640876	13C3-PFHxS	367851	2500	Avg	0.948151		4593.72	5	1.24	1	18.523	18.5231	40.3	46	46	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C9-PFNA	SESI-0099	198451	13C5-PFNA	318017	1250	Avg	0.681638						1144.35	1144.3508	40.3				1250	92	92	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	58168	13C9-PFNA	198451	1250	Avg	1.15809		316.37	5	1.24	1	1.2757	1.2757	40.3	3.2	3.2	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	144616	18O2-PFHxS	399965	2500	Avg	0.22089						4092.22	4092.2137	40.3				5000	82	82	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	24200	13C2-8:2FTS	144616	5000	Avg	1.486942		562.7	5	1.24	1	2.2689	2.2689	40.3	5.6	5.6	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	312968	13C4-PFOS	604612	2500	Avg	0.319821						4046.28	4046.2825	40.3				5000	81	81	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	12561	D3-NMeFOSAA	312968	5000	Avg	0.724285		277.07	5	1.24	1	1.1172	1.1172	40.3	2.8	2.8	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C6-PFDA	SESI-0115	233582	13C2-PFDA	280641	1250	Avg	0.949905						1095.26	1095.2622	40.3				1250	88	88	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	289796	13C4-PFOS	604612	2500	Avg	0.294766						4065.16	4065.1656	40.3				5000	81	81	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	14340	D5-NEtFOSAA	289796	5000	Avg	0.91407		270.67	5	1.24	1	1.0914	1.0914	40.3	2.7	2.7	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C8-PFOS	SESI-0098	521631	13C4-PFOS	604612	2500	Avg	0.984793						2190.19	2190.1895	40.3				2500	88	88	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	40987	13C8-PFOS	521631	2500	Avg	0.747625		262.75	5	1.24	1	1.0595	1.0595	40.3	2.6	2.6	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3991040	13C8-PFOS	521631	2500	Avg	0.870004		21986	5	1.24	1	88.652	88.6523	40.3	220	220	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C7-PFUnA	SESI-0117	217953	13C2-PFDA	280641	1250	Avg	0.997704						973.02	973.0161	40.3				1250	78	78	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	57478	13C7-PFUnA	217953	1250	Avg	0.893971		368.74	5	1.24	1	1.4869	1.4869	40.3	3.7	3.7	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C2-PFDoA	SESI-0118	175159	13C2-PFDA	280641	1250	Avg	0.795406						980.85	980.8498	40.3				1250	78	78	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	18871	13C2-PFDoA	175159	1250	Avg	0.599359		224.69	5	1.24	1	0.90601	0.906	40.3	2.2	2.2	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	114485	13C2-PFDA	280641	1250	Avg	0.588079						867.11	867.1052	40.3				1250	69	69	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	13C8-PFOSA	SESI-0107	910198	13C4-PFOS	604612	2500	Avg	1.895997						1985	1985.0044	40.3				2500	79	79	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	65146	13C8-PFOSA	910198	2500	Avg	0.985796		181.51	5	1.24	1	0.7319	0.7319	40.3	1.8	1.8	Yes							
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2194927	13C4-PFOS	604612	2500	Avg	0.700486						12956	12956.386	40.3				25000	52	52	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	103882	13C4-PFOS	604612	2500	Avg	0.437202						982.48	982.4748	40.3				2500	39	39	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2614060	13C4-PFOS	604612	2500	Avg	0.870998						12410	12409.71	40.3				25000	50	50	Yes			
092424A034.d	ZH22011-019	CACMW-004-060-53.25-0816	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	110818	13C4-PFOS	604612	2500	Avg	0.508417						901.27	901.267	40.3				2500	36	36	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	2503163	13C3-PFBA	1285530	5000	Avg	1.153035						8443.73	8443.7318	40.3				10000	84	84	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2353850	13C4-PFBA	2503163	10000	Avg	0.798354		11779	5	1.24	1	47.494	47.4944	40.3	120	120	Yes	96	122	122.8	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	1007202	13C2-PFHxA	652354	2500	Avg	0.891292						4330.65	4330.6516	40.3				5000	87	87	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1210460	13C5-PFPeA	1007202	5000	Avg	1.018879		5897.68	5	1.24	1	23.781	23.781	40.3	59	59	Yes	48	114	113.9	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	124091	18O2-PFHxS	412806	2500	Avg	0.16784						4477.53	4477.5333	40.3				5000	90	90	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	424438	13C2-4:2FTS	124091	5000	Avg	1.621025		10550	5	1.24	1	42.541	42.5405	40.3	110	110	Yes	90	117	117.3	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	568275	13C2-PFHxA	652354	2500	Avg	0.983356						2214.65	2214.6467	40.3				2500	89	89	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	994328	13C5-PFHxA	568275	2500	Avg	1.153986		3790.62	5	1.24	1	15.285	15.2848	40.3	38	38	Yes	24	108	108.4	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	533115	18O2-PFHxS	412806	2500	Avg	1.4649						2203.98	2203.9764	40.3				2500	88	88	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	952963	13C3-PFBS	533115	2500	Avg	1.649991		2708.4	5	1.24	1	10.921	10.921	40.3	27	27	Yes	21	117	118.3	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	559816	13C2-PFHxA	652354	2500	Avg	0.255296						8403.46	8403.4569	40.3				10000	84	84	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	535226	13C2-PFHxA	652354	2500	Avg	0.972655						2108.8	2108.7984	40.3				2500	84	84	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	760154	13C4-PFHpA	535226	2500	Avg	1.095097		3242.29	5	1.24	1	13.074	13.0737	40.3	32	32	Yes	24	115	115.0	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	165194	18O2-PFHxS	412806	2500	Avg	0.235608						4246.18	4246.1785	40.3				5000	85	85	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1120842	13C2-6:2FTS	165194	5000	Avg	1.87751		18069	5	1.24	1	72.86	72.8595	40.3	180	180	Yes	91	118	118.5	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	590725	13C4-PFOA	173491	2500	Avg	4.359235						1952.71	1952.7117	40.3				2500	78	78	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1111741	13C8-PFOA	590725	2500	Avg	1.129938		4163.93	5	1.24	1	16.79	16.79	40.3	42	42	Yes	24	107	107.4	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	407555	18O2-PFHxS	412806	2500	Avg	1.087071						2270.5	2270.5043	40.3				2500	91	91	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	472306	13C3-PFHxS	407555	2500	Avg	1.036407		2795.42	5	1.24	1	11.272	11.2719	40.3	28	28	Yes	23	108	106.3	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1009123	13C3-PFHxS	407555	2500	Avg	0.948151		6528.6	5	1.24	1	26.325	26.325	40.3	65	65	Yes	22	88	88.0	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	205951	13C5-PFNA	341240	1250	Avg	0.681638						1106.78	1106.7772	40.3				1250	89	89	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	564038	13C9-PFNA	205951	1250	Avg	1.15809		2956.05	5	1.24	1	11.92	11.9196	40.3	30	30	Yes	24	110	110.0	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	160429	18O2-PFHxS	412806	2500	Avg	0.22089						4398.47	4398.4618	40.3				5000	88	88	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	555542	13C2-8:2FTS	160429	5000	Avg	1.486942		11644	5	1.24	1	46.952	46.9525	40.3	120	120	Yes	92	120	120.5	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	338581	13C4-PFOS	630877	2500	Avg	0.319821						4195.18	4195.1831	40.3				5000	84	84	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	142564	D3-NMeFOSAA	338581	5000	Avg	0.724285		2906.75	5	1.24	1	11.721	11.7208	40.3	29	29	Yes	24	110	109.6	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	247225	13C2-PFDA	316952	1250	Avg	0.949905						1026.43	1026.4286	40.3				1250	82	82	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorodecanoic acid (PFDA)	335-76-2	538144	13C6-PFDA	247225	1250	Avg	0.945859		2876.67	5	1.24	1	11.599	11.5995	40.3	29	29	Yes	24	120	119.9	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	311003	13C4-PFOS	630877	2500	Avg	0.294766						4181.02	4181.0225	40.3				5000	84	84	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	163337	D5-NEtFOSAA	311003	5000	Avg	0.91407		2872.84	5	1.24	1	11.584	11.584	40.3	29	29	Yes	24	109	108.5	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	530097	13C4-PFOS	630877	2500	Avg	0.984793						2133.07	2133.0729	40.3				2500	85	85	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	503126	13C8-PFOS	530097	2500	Avg	0.747625		3173.78	5	1.24	1	12.798	12.7975	40.3	32	32	Yes	23	127	126.6	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4709134	13C8-PFOS	530097	2500	Avg	0.870004		25527	5	1.24	1	102.93	102.9326	40.3	260	260	Yes	22	159	161.1	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	549868	13C8-PFOS	530097	2500	Avg	0.82691		3136.07	5	1.24	1	12.645	12.6454	40.3	31	31	Yes	23	136	136.4	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	233426	13C2-PFDA	316952	1250	Avg	0.997704						922.71	922.7075	40.3				1250	74	74	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	528633	13C7-PFUnA	233426	1250	Avg	0.893971		3166.59	5	1.24	1	12.769	12.7685	40.3	32	32	Yes	24	117	116.6	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	193442	13C2-PFDA	316952	1250	Avg	0.795406						959.13	959.1321	40.3				1250	77	77	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	244387	13C2-PFDoA	193442	1250	Avg	0.599359		2634.82	5	1.24	1	10.624	10.6243	40.3	26	26	Yes	24	100	100.5	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	125544	13C2-PFDA	316952	1250	Avg	0.588079						841.93	841.9316	40.3				1250	67	67	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	1002668	13C4-PFOS	630877	2500	Avg	1.895997						2095.63	2095.631	40.3				2500	84	84	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1151530	13C8-PFOSA	1002668	2500	Avg	0.985796		2912.54	5	1.24	1	11.744	11.7441	40.3	29	29	Yes	24	114	113.9	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	2625316	13C4-PFOS	630877	2500	Avg	0.700486						14852	14851.744	40.3				25000	59	59	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	136806	13C4-PFOS	630877	2500	Avg	0.437202						1239.99	1239.9904	40.3				2500	50	50	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	3255199	13C4-PFOS	630877	2500	Avg	0.870998						14810	14810.022	40.3				25000	59	59	Yes			
092424A035.d	ZH22011-019MS	CACMW-004-060-53.25-0816	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	149215	13C4-PFOS	630877	2500	Avg	0.508417						1163.02	1163.0215	40.3				2500	47	47	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	2323488	13C3-PFBA	1146019	5000	Avg	1.153035						8791.77	8791.7662	40.3				10000	88	88	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2143890	13C4-PFBA	2323488	10000	Avg	0.798354		11558	5	1.24	1	46.603	46.6031	40.3	120	120	Yes	96	120	120.5	Yes	1.9	1.9	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	952601	13C2-PFHxA	580014	2500	Avg	0.891292						4606.73	4606.7279	40.3				5000	92	92	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1118362	13C5-PFPeA	952601	5000	Avg	1.018879		5761.28	5	1.24	1	23.231	23.231	40.3	58	58	Yes	48	111	111.1	Yes	2.3	2.3	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	117139	18O2-PFHxS	393994	2500	Avg	0.16784						4428.5	4428.4979	40.3				5000	89	89	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	388385	13C2-4:2FTS	117139	5000	Avg	1.621025		10227	5	1.24	1	41.237	41.2372	40.3	100	100	Yes	90	114	113.7	Yes	3.1	3.1	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	539870	13C2-PFHxA	580014	2500	Avg	0.983356						2366.35	2366.3553	40.3				2500	95	95	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	921088	13C5-PFHxA	539870	2500	Avg	1.153986		3696.16	5	1.24	1	14.904	14.9039	40.3	37	37	Yes	24	104	104.5	Yes	2.5	2.5	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	492965	18O2-PFHxS	393994	2500	Avg	1.4649						2135.3	2135.2981	40.3				2500	85	85	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	865432	13C3-PFBS	492965	2500	Avg	1.649991		2659.96	5	1.24	1	10.726	10.7256	40.3	27	27	Yes	21	114	116.0	Yes	1.8	1.8	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	545271	13C2-PFHxA	580014	2500	Avg	0.255296						9205.98	9205.9778	40.3				10000	92	92	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	512798	13C2-PFHxA	580014	2500	Avg	0.972655						2272.42	2272.4222	40.3				2500	91	91	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	687808	13C4-PFHpA	512798	2500	Avg	1.095097		3062.02	5	1.24	1	12.347	12.3469	40.3	31	31	Yes	24	108	107.5	Yes	5.7	5.7	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	151414	18O2-PFHxS	393994	2500	Avg	0.235608						4077.8	4077.8045	40.3				5000	82	82	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1005218	13C2-6:2FTS	151414	5000	Avg	1.87751		17680	5	1.24	1	71.29	71.2903	40.3	180	180	Yes	91	114	114.2	Yes	2.2	2.2	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	567197	13C4-PFOA	148900	2500	Avg	4.359235						2184.58	2184.585	40.3				2500	87	87	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	980330	13C8-PFOA	567197	2500	Avg	1.129938		3824.05	5	1.24	1	15.42	15.4196	40.3	38	38	Yes	24	93	93.2	Yes	8.5	8.5	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	388494	18O2-PFHxS	393994	2500	Avg	1.087071						2267.65	2267.6541	40.3				2500	91	91	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	450025	13C3-PFHxS	388494	2500	Avg	1.036407		2794.23	5	1.24	1	11.267	11.2671	40.3	28	28	Yes	23	108	106.3	Yes	0.04	0.0	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	957463	13C3-PFHxS	388494	2500	Avg	0.948151		6498.3	5	1.24	1	26.203	26.2028	40.3	65	65	Yes	22	87	86.6	Yes	0.47	0.5	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	187294	13C5-PFNA	308866	1250	Avg	0.681638						1112.01	1112.0133	40.3				1250	89	89	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	500353	13C9-PFNA	187294	1250	Avg	1.15809		2883.5	5	1.24	1	11.627	11.627	40.3	29	29	Yes	24	107	107.0	Yes	2.5	2.5	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	139644	18O2-PFHxS	393994	2500	Avg	0.22089						4011.41	4011.4061	40.3				5000	80	80	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	488700	13C2-8:2FTS	139644	5000	Avg	1.486942		11768	5	1.24	1	47.451	47.4509	40.3	120	120	Yes	92	122	121.9	Yes	1.1	1.1	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	344030	13C4-PFOS	609149	2500	Avg	0.319821						4414.74	4414.7469	40.3				5000	88	88	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	132263	D3-NMeFOSAA	344030	5000	Avg	0.724285		2654.01	5	1.24	1	10.702	10.7017	40.3	27	27	Yes	24	99	99.1	Yes	9.1	9.1	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	223529	13C2-PFDA	241122	1250	Avg	0.949905						1219.91	1219.9074	40.3				1250	98	98	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorodecanoic acid (PFDA)	335-76-2	447613	13C6-PFDA	223529	1250	Avg	0.945859		2646.38	5	1.24	1	10.671	10.6709	40.3	26	26	Yes	24	110	110.3	Yes	8.3	8.3	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	296850	13C4-PFOS	609149	2500	Avg	0.294766						4133.1	4133.1021	40.3				5000	83	83	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	159833	D5-NEtFOSAA	296850	5000	Avg	0.91407		2945.24	5	1.24	1	11.876	11.8759	40.3	29	29	Yes	24	112	111.5	Yes	2.5	2.5	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	532589	13C4-PFOS	609149	2500	Avg	0.984793						2219.54	2219.5438	40.3				2500	89	89	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	458792	13C8-PFOS	532589	2500	Avg	0.747625		2880.58	5	1.24	1	11.615	11.6152	40.3	29	29	Yes	23	114	113.9	Yes	9.7	9.7	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4336122	13C8-PFOS	532589	2500	Avg	0.870004		23395	5	1.24	1	94.336	94.3358	40.3	230	230	Yes	22	63	64.1	Yes	8.7	8.7	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	502777	13C8-PFOS	532589	2500	Avg	0.82691		2854.07	5	1.24	1	11.508	11.5084	40.3	29	29	Yes	23	124	124.2	Yes	9.4	9.4	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	221234	13C2-PFDA	241122	1250	Avg	0.997704						1149.54	1149.538	40.3				1250	92	92	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	471152	13C7-PFUnA	221234	1250	Avg	0.893971		2977.8	5	1.24	1	12.007	12.0073	40.3	30	30	Yes	24	109	108.8	Yes	6.1	6.1	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	172814	13C2-PFDA	241122	1250	Avg	0.795406						1126.32	1126.3237	40.3				1250	90	90	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	229241	13C2-PFDoA	172814	1250	Avg	0.599359		2766.54	5	1.24	1	11.155	11.1554	40.3	28	28	Yes	24	106	100.0	Yes	4.9	4.9	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	130122	13C2-PFDA	241122	1250	Avg	0.588079						1147.07	1147.0655	40.3				1250	92	92	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	934815	13C4-PFOS	609149	2500	Avg	1.895997						2023.51	2023.506	40.3				2500	81	81	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1136335	13C8-PFOSA	934815	2500	Avg	0.985796		3082.72	5	1.24	1	12.43	12.4303	40.3	31	31	Yes	24	121	121.0	Yes	5.7	5.7	Yes
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	2363747	13C4-PFOS	609149	2500	Avg	0.700486						13849	13848.987	40.3				25000	55	55	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	135308	13C4-PFOS	609149	2500	Avg	0.437202						1270.16	1270.1582	40.3				2500	51	51	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	2911267	13C4-PFOS	609149	2500	Avg	0.870998						13718	13717.702	40.3				25000	55	55	Yes			
092424A036.d	ZH22011-019MD	CACMW-004-060-53.25-0816	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	142507	13C4-PFOS	609149	2500	Avg	0.508417						1150.36	1150.3569	40.3				2500	46	46	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	2075981	13C3-PFBA	1149541	5000	Avg	1.136894						7942.35	7942.3485	100				10000	79	79	Yes			
092524061.d	ZQ17975-001		Method_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	5283	13C4-PFBA	2075981	10000	Avg	0.895963		28.403	5	5	1	0.0284	0.0284	100	ND	0.028	Yes							
092524061.d	ZQ17975-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	798782	13C2-PFHxA	588723	2500	Avg	0.891167						3806.26	3806.2576	100				5000	76	76	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	102507	18O2-PFHxS	371073	2500	Avg	0.164935						4187.17	4187.1773	100				5000	84	84	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	460847	13C2-PFHxA	588723	2500	Avg	0.967301						2023.13	2023.1316	100				2500	81	81	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	440218	18O2-PFHxS	371073	2500	Avg	1.453938						2039.87	2039.8703	100				2500	82	82	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	480938	13C2-PFHxA	588723	2500	Avg	0.256272						7969.23	7969.2406	100				10000	80	80	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	441874	13C2-PFHxA	588723	2500	Avg	0.991907						1891.72	1891.7184	100				2500	76	76	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	151020	18O2-PFHxS	371073	2500	Avg	0.219087						4644.07	4644.0674	100				5000	93	93	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	498962	13C4-PFOA	153606	2500	Avg	4.175238						1944.99	1944.9931	100				2500	78	78	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	342608	18O2-PFHxS	371073	2500	Avg	1.069919						2157.38	2157.383	100				2500	86	86	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	170972	13C5-PFNA	294632	1250	Avg	0.749868						967.32	967.3202	100				1250	77	77	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	120503	18O2-PFHxS	371073	2500	Avg	0.206645						3928.74	3928.7429	100				5000	79	79	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	290248	13C4-PFOS	576716	2500	Avg	0.360298						3492.09	3492.0897	100				5000	70	70	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	212403	13C2-PFDA	297032	1250	Avg	0.917163						974.59	974.5876	100				1250	78	78	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	309858	13C4-PFOS	576716	2500	Avg	0.377269						3560.32	3560.3246	100				5000	71	71	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	444879	13C4-PFOS	576716	2500	Avg	0.93405						2064.67	2064.6659	100				2500	83	83	Yes			
092524061.d	ZQ17975-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3141	13C8-PFOS	444879	2500	Avg	1.000521		17.642	5	5	1	0.01764	0.0176	100	ND	0.018	Yes							
092524061.d	ZQ17975-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	175393	13C2-PFDA	297032	1250	Avg	0.734493						1004.92	1004.9197	100				1250	80	80	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	147479	13C2-PFDA	297032	1250	Avg	0.66531						932.85	932.8523	100				1250	75	75	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	700581	13C4-PFOS	576716	2500	Avg	1.926242						1576.61	1576.6145	100				2500	63	63	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	104491	13C2-PFDA	297032	1250	Avg	0.514737						854.28	854.2801	100				1250	68	68	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1599270	13C4-PFOS	576716	2500	Avg	0.747197						9278.22	9278.2203	100				25000	37	37	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	83322	13C4-PFOS	576716	2500	Avg	0.468708						770.61	770.6112	100				2500	31	31	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	1861663	13C4-PFOS	576716	2500	Avg	0.967764						8338.92	8338.9163	100				25000	33	33	Yes			
092524061.d	ZQ17975-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	84562	13C4-PFOS	576716	2500	Avg	0.548881						667.84	667.844	100				2500	27	27	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2113997	13C3-PFBA	1206322	5000	Avg	1.136894						7707.1	7707.1027	100				10000	77	77	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2110043	13C4-PFBA	2113997	10000	Avg	0.895963		11140	5	5	1	11.14	11.1403	100	11	11	Yes	9.6	116	116	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	809701	13C2-PFHxA	595236	2500	Avg	0.891167						3816.07	3816.0706	100				5000	76	76	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	992004	13C5-PFPeA	809701	5000	Avg	1.104878		5544.27	5	5	1	5.5443	5.5443	100	5.5	5.5	Yes	4.8	116	116	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	106818	18O2-PFHxS	393518	2500	Avg	0.164935						4114.39	4114.4049	100				5000	82	82	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	375296	13C2-4:2FTS	106818	5000	Avg	1.754213		10014	5	5	1	10.014	10.0142	100	10	10	Yes	9	111	111	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	452591	13C2-PFHxA	595236	2500	Avg	0.967301						1965.15	1965.1472	100				2500	79	79	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	631368	13C5-PFHxA	452591	2500	Avg	1.287042		2709.72	5	5	1	2.7097	2.7097	100	2.7	2.7	Yes	2.4	113	113	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	458098	18O2-PFHxS	393518	2500	Avg	1.453938						2001.65	2001.649	100				2500	80	80	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	878542	13C3-PFBS	458098	2500	Avg	1.820068		2634.25	5	5	1	2.6342	2.6342	100	2.6	2.6	Yes	2.1	124	125	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	503709	13C2-PFHxA	595236	2500	Avg	0.256272						8255.22	8255.2337	100				10000	83	83	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	482900	13C2-PFHxA	595236	2500	Avg	0.991907						2044.74	2044.7352	100				2500	82	82	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	610419	13C4-PFHpA	482900	2500	Avg	1.191595		2652.05	5	5	1	2.6521	2.6521	100	2.7	2.7	Yes	2.4	111	111	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	153575	18O2-PFHxS	393518	2500	Avg	0.219087						4453.28	4453.273	100				5000	89	89	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	632922	13C2-6:2FTS	153575	5000	Avg	2.148719		9590.03	5	5	1	9.59	9.59	100	9.6	9.6	Yes	9.1	105	105	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	515389	13C4-PFOA	161451	2500	Avg	4.175238						1911.41	1911.407	100				2500	76	76	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	693871	13C8-PFOA	515389	2500	Avg	1.257832		2675.84	5	5	1	2.6758	2.6758	100	2.7	2.7	Yes	2.4	111	111	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	315175	18O2-PFHxS	393518	2500	Avg	1.069919						1871.44	1871.4416	100				2500	75	75	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	417114	13C3-PFHxS	315175	2500	Avg	1.189606		2781.25	5	5	1	2.7812	2.7812	100	2.8	2.8	Yes	2.3	124	121	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	373294	13C3-PFHxS	315175	2500	Avg	1.051753		2815.3	5	5	1	2.8153	2.8153	100	2.8	2.8	Yes	2.2	129	128	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	175272	13C5-PFNA	295229	1250	Avg	0.749868						989.64	989.6434	100				1250	79	79	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	474673	13C9-PFNA	175272	1250	Avg	1.347846		2511.61	5	5	1	2.5116	2.5116	100	2.5	2.5	Yes	2.4	105	105	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	131354	18O2-PFHxS	393518	2500	Avg	0.206645						4038.25	4038.2556	100				5000	81	81	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	462490	13C2-8:2FTS	131354	5000	Avg	1.765809		9969.78	5	5	1	9.9698	9.9698	100	10	10	Yes	9.2	108	108	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	283210	13C4-PFOS	596024	2500	Avg	0.360298						3297.03	3297.0307	100				5000	66	66	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	115343	D3-NMeFOSAA	283210	5000	Ln	0.747099	13.759	2707.26	5	5	1	2.7073	2.7073	100	2.7	2.7	Yes	2.4	113	113	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	213089	13C2-PFDA	298884	1250	Avg	0.917163						971.68	971.6768	100				1250	78	78	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	494383	13C6-PFDA	213089	1250	Avg	1.072259		2704.66	5	5	1	2.7047	2.7047	100	2.7	2.7	Yes	2.4	113	113	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	277402	13C4-PFOS	596024	2500	Avg	0.377269						3084.14	3084.1446	100				5000	62	62	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	152547	D5-NEtFOSAA	277402	5000	Avg	0.928484		2961.35	5	5	1	2.9613	2.9613	100	3	3	Yes	2.4	123	123	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	464121	13C4-PFOS	596024	2500	Avg	0.93405						2084.19	2084.1902	100				2500	83	83	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	423493	13C8-PFOS	464121	2500	Ln	0.918199	-29.834323	2455.07	5	5	1	2.4551	2.4551	100	2.5	2.5	Yes	2.3	108	107	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	429370	13C8-PFOS	464121	2500	Avg	1.000521	-29.834323	2311.61	5	5	1	2.3116	2.3116	100	2.3	2.3	Yes	2.2	104	105	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	457104	13C8-PFOS	464121	2500	Avg	1.038139	-29.834323	2371.75	5	5	1	2.3717	2.3717	100	2.4	2.4	Yes	2.3	103	103	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	192807	13C2-PFDA	298884	1250	Avg	0.734493	-29.834323					1097.85	1097.8487	100				1250	88	88	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	393426	13C7-PFUnA	192807	1250	Avg	0.968723	-29.834323	2633	5	5	1	2.633	2.633	100	2.6	2.6	Yes	2.4	110	110	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	155891	13C2-PFDA	298884	1250	Avg	0.66531	-29.834323					979.95	979.9509	100				1250	78	78	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	206976	13C2-PFDoA	155891	1250	Avg	0.659525	-29.834323	2516.39	5	5	1	2.5164	2.5164	100	2.5	2.5	Yes	2.4	105	105	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	720504	13C4-PFOS	596024	2500	Avg	1.926242	-29.834323					1568.92	1568.9236	100				2500	63	63	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	877184	13C8-PFOSA	720504	2500	Avg	1.101995	-29.834323	2761.94	5	5	1	2.7619	2.7619	100	2.8	2.8	Yes	2.4	115	115	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	108276	13C2-PFDA	298884	1250	Avg	0.514737	-29.834323					879.74	879.7396	100				1250	70	70	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1736370	13C4-PFOS	596024	2500	Avg	0.747197	-29.834323					9747.28	9747.2794	100				25000	39	39	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	85265	13C4-PFOS	596024	2500	Avg	0.468708	-29.834323					763.03	763.0354	100				2500	31	31	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2068624	13C4-PFOS	596024	2500	Avg	0.967764	-29.834323					8965.79	8965.7858	100				25000	36	36	Yes			
092524062.d	ZQ17975-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	92061	13C4-PFOS	596024	2500	Avg	0.548881	-29.834323					703.52	703.5156	100				2500	28	28	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C4-PFBA	SESI-0111	2041133	13C3-PFBA	1268158	5000	Avg	1.136894	-29.834323					7078.61	7078.6097	37.4				10000	71	71	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	47196	13C4-PFBA	2041133	10000	Avg	0.895963	-29.834323	258.07	5	1.34	1	0.96296	0.963	37.4	2.6	2.6	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C5-PFPeA	SESI-0112	783661	13C2-PFHxA	627975	2500	Avg	0.891167	-29.834323					3500.8	3500.7959	37.4				5000	70	70	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	335611	13C5-PFPeA	783661	5000	Avg	1.104878	-29.834323	1938.04	5	1.34	1	7.2315	7.2315	37.4	19	19	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	105675	18O2-PFHxS	433685	2500	Avg	0.164935	-29.834323					3693.38	3693.3889	37.4				5000	74	74	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C5-PFHxA	SESI-0113	454634	13C2-PFHxA	627975	2500	Avg	0.967301	-29.834323					1871.1	1871.104	37.4				2500	75	75	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1013315	13C5-PFHxA	454634	2500	Avg	1.287042	-29.834323	4329.42	5	1.34	1	16.155	16.1546	37.4	43	43	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C3-PFBS	SESI-0116	447663	18O2-PFHxS	433685	2500	Avg	1.453938	-29.834323					1774.89	1774.8879	37.4				2500	71	71	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	249184	13C3-PFBS	447663	2500	Avg	1.820068	-29.834323	764.58	5	1.34	1	2.8529	2.8529	37.4	7.6	7.6	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	460515	13C2-PFHxA	627975	2500	Avg	0.256272	-29.834323					7153.85	7153.8574	37.4				10000	72	72	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C4-PFHpA	SESI-0114	456635	13C2-PFHxA	627975	2500	Avg	0.991907	-29.834323					1832.72	1832.7191	37.4				2500	73	73	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	465200	13C4-PFHpA	456635	2500	Avg	1.191595	-29.834323	2137.38	5	1.34	1	7.9753	7.9753	37.4	21	21	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	151596	18O2-PFHxS	433685	2500	Avg	0.219087	-29.834323					3988.76	3988.7493	37.4				5000	80	80	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	808573	13C2-6:2FTS	151596	5000	Avg	2.148719	-29.834323	12411	5	1.34	1	46.311	46.3113	37.4	120	120	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C8-PFOA	SESI-0097	505927	13C4-PFOA	169722	2500	Avg	4.175238	-29.834323					1784.88	1784.8778	37.4				2500	71	71	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1497919	13C8-PFOA	505927	2500	Avg	1.257832	-29.834323	5884.61	5	1.34	1	21.958	21.9575	37.4	59	59	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C3-PFHxS	SESI-0096	347725	18O2-PFHxS	433685	2500	Avg	1.069919	-29.834323					1873.49	1873.4867	37.4				2500	75	75	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	181530	13C3-PFHxS	347725	2500	Avg	1.189606	-29.834323	1097.11	5	1.34	1	4.0937	4.0937	37.4	11	11	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2390196	13C3-PFHxS	347725	2500	Avg	1.051753	-29.834323	16339	5	1.34	1	60.966	60.9662	37.4	160	160	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C9-PFNA	SESI-0099	169343	13C5-PFNA	299402	1250	Avg	0.749868	-29.834323					942.84	942.8394	37.4				1250	75	75	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	154992	13C9-PFNA	169343	1250	Avg	1.347846	-29.834323	848.81	5	1.34	1	3.1672	3.1672	37.4	8.5	8.5	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	147553	18O2-PFHxS	433685	2500	Avg	0.206645	-29.834323					4116.13	4116.1268	37.4				5000	82	82	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	112039	13C2-8:2FTS	147553	5000	Avg	1.765809	-29.834323	2150.04	5	1.34	1	8.0226	8.0226	37.4	21	21	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	372501	13C4-PFOS	618276	2500	Avg	0.360298	-29.834323					4180.45	4180.4517	37.4				5000	84	84	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	57430	D3-NMeFOSAA	372501	5000	Ln	0.747099	-29.834323	1013.4	5	1.34	1	3.7813	3.7813	37.4	10	10	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C6-PFDA	SESI-0115	217517	13C2-PFDA	329835	1250	Avg	0.917163	-29.834323					898.79	898.7936	37.4				1250	72	72	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	37253	13C6-PFDA	217517	1250	Avg	1.072259	-29.834323	199.65	5	1.34	1	0.74498	0.745	37.4	2	2	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	380140	13C4-PFOS	618276	2500	Avg	0.377269	-29.834323					4074.27	4074.2725	37.4				5000	81	81	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	68729	D5-NEtFOSAA	380140	5000	Avg	0.928484	-29.834323	973.63	5	1.34	1	3.6329	3.6329	37.4	9.7	9.7	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C8-PFOS	SESI-0098	445942	13C4-PFOS	618276	2500	Avg	0.93405	-29.834323					1930.48	1930.4825	37.4				2500	77	77	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	159382	13C8-PFOS	445942	2500	Ln	0.918199	-29.834323	943.8	5	1.34	1	3.5216	3.5216	37.4	9.4	9.4	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	13277	13C8-PFOS	445942	2500	Avg	1.038139		71.698	5	1.34	1	0.26753	0.2675	37.4	0.72	0.72	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C7-PFUnA	SESI-0117	205215	13C2-PFDA	329835	1250	Avg	0.734493						1058.85	1058.8507	37.4				1250	85	85	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	68217	13C7-PFUnA	205215	1250	Avg	0.968723		428.94	5	1.34	1	1.6005	1.6005	37.4	4.3	4.3	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C2-PFDoA	SESI-0118	170725	13C2-PFDA	329835	1250	Avg	0.66531						972.49	972.4927	37.4				1250	78	78	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	20585	13C2-PFDoA	170725	1250	Avg	0.659525		228.52	5	1.34	1	0.8527	0.8527	37.4	2.3	2.3	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	788772	13C4-PFOS	618276	2500	Avg	1.926242						1655.76	1655.7633	37.4				2500	66	66	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	252909	13C8-PFOSA	788772	2500	Avg	1.101995		727.4	5	1.34	1	2.7142	2.7142	37.4	7.3	7.3	Yes							
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	115359	13C2-PFDA	329835	1250	Avg	0.514737						849.34	849.3357	37.4				1250	68	68	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2056229	13C4-PFOS	618276	2500	Avg	0.747197						11127	11127.407	37.4				25000	45	45	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	106205	13C4-PFOS	618276	2500	Avg	0.468708						916.22	916.2209	37.4				2500	37	37	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2306304	13C4-PFOS	618276	2500	Avg	0.967764						9636.18	9636.1757	37.4				25000	39	39	Yes			
092524070.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	102261	13C4-PFOS	618276	2500	Avg	0.548881						753.34	753.3373	37.4				2500	30	30	Yes			
092624020.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	EIS	13C8-PFOS	SESI-0098	126293	13C4-PFOS	168355	500	Avg	1.0092						371.66	371.6602	37.4				500	74	74	Yes			
092624020.d	ZH22011-045	CACMW-006-060-48-081724-	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4163244	13C8-PFOS	126293	500	Avg	0.972082		16956	5	1.34	5	316.34	316.3406	37.4	850	850	Yes							

Key

from quantitation report
from reported calibration
from lab report/SEDD
calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
g	grams
IS	internal standard
mL	milliliters
ND	not detected
ng/g	nanograms per gram
ng/L	nanograms per liter
On Col.	on column
RF	response factor
RPD	relative percent difference

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	422458	13C3-PFBA	1199032	5000	Avg	1.153035						1527.85	1527.8485	100				10000	15	15	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	399754	13C2-PFHxA	604523	2500	Avg	0.891292						1854.81	1854.8124	100				5000	37	37	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	103997	18O2-PFHxS	401985	2500	Avg	0.16784						3853.5	3853.5012	100				5000	77	77	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	478386	13C2-PFHxA	604523	2500	Avg	0.983356						2011.85	2011.8466	100				2500	80	80	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	495044	18O2-PFHxS	401985	2500	Avg	1.4649						2101.68	2101.6771	100				2500	84	84	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	526844	13C2-PFHxA	604523	2500	Avg	0.255296						8534.25	8534.247	100				10000	85	85	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	487856	13C2-PFHxA	604523	2500	Avg	0.972655						2074.24	2074.2448	100				2500	83	83	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	157101	18O2-PFHxS	401985	2500	Avg	0.235608						4146.86	4146.8572	100				5000	83	83	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	523586	13C4-PFOA	157282	2500	Avg	4.359235						1909.14	1909.1442	100				2500	76	76	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	355997	18O2-PFHxS	401985	2500	Avg	1.087071						2036.66	2036.6603	100				2500	81	81	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	181609	13C5-PFNA	331280	1250	Avg	0.681638						1005.31	1005.3062	100				1250	80	80	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	144401	18O2-PFHxS	401985	2500	Avg	0.22089						4065.6	4065.5968	100				5000	81	81	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	338830	13C4-PFOS	610102	2500	Avg	0.319821						4341.22	4341.2264	100				5000	87	87	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	227561	13C2-PFDA	276464	1250	Avg	0.949905						1083.15	1083.1512	100				1250	87	87	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	279523	13C4-PFOS	610102	2500	Avg	0.294766						3885.77	3885.7756	100				5000	78	78	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	497046	13C4-PFOS	610102	2500	Avg	0.984793						2068.18	2068.1841	100				2500	83	83	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	208007	13C2-PFDA	276464	1250	Avg	0.997704						942.64	942.6439	100				1250	75	75	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	170682	13C2-PFDA	276464	1250	Avg	0.795406						970.22	970.2201	100				1250	78	78	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	107661	13C2-PFDA	276464	1250	Avg	0.588079						827.74	827.7404	100				1250	66	66	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	822174	13C4-PFOS	610102	2500	Avg	1.895997						1776.9	1776.9027	100				2500	71	71	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1847809	13C4-PFOS	610102	2500	Avg	0.700486						10809	10809.241	100				25000	43	43	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	112246	13C4-PFOS	610102	2500	Avg	0.437202						1052.03	1052.0256	100				2500	42	42	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2182492	13C4-PFOS	610102	2500	Avg	0.870998						10268	10267.697	100				25000	41	41	Yes			
092424A125.d	ZQ18111-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	126540	13C4-PFOS	610102	2500	Avg	0.508417						1019.87	1019.8712	100				2500	41	41	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	1159713	13C3-PFBA	1253098	5000	Avg	1.153035						4013.22	4013.2203	100				10000	40	40	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1064665	13C4-PFBA	1159713	10000	Avg	0.798354		11499	5	5	1	11.499	11.4992	100	11	11	Yes	9.6	120	119.8	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	692589	13C2-PFHxA	640317	2500	Avg	0.891292						3033.89	3033.8951	100				5000	61	61	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	760370	13C5-PFPeA	692589	5000	Avg	1.018879		5387.62	5	5	1	5.3876	5.3876	100	5.4	5.4	Yes	4.8	112	112.2	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	98993	18O2-PFHxS	435630	2500	Avg	0.16784						3384.79	3384.7862	100				5000	68	68	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	350679	13C2-4:2FTS	98993	5000	Avg	1.621025		10927	5	5	1	10.927	10.9266	100	11	11	Yes	9.0	121	121.4	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	477832	13C2-PFHxA	640317	2500	Avg	0.983356						1897.18	1897.1839	100				2500	76	76	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	613123	13C5-PFHxA	477832	2500	Avg	1.153986		2779.79	5	5	1	2.7798	2.7798	100	2.8	2.8	Yes	2.4	116	115.8	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1823607	13C5-PFHxA	477832	2500	Avg	0.159689		59748	5	5	1	59.748	59.7477	100	60	60	Yes	60	100	99.6	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	445069	18O2-PFHxS	435630	2500	Avg	1.4649						1743.58	1743.5789	100				2500	70	70	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	736487	13C3-PFBS	445069	2500	Avg	1.649991		2507.24	5	5	1	2.5072	2.5072	100	2.5	2.5	Yes	2.1	118	119.4	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	495578	13C2-PFHxA	640317	2500	Avg	0.255296						7579.02	7579.0188	100				10000	76	76	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	472563	13C2-PFHxA	640317	2500	Avg	0.972655						1896.91	1896.9063	100				2500	76	76	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	545595	13C4-PFHpA	472563	2500	Avg	1.095097		2635.71	5	5	1	2.6357	2.6357	100	2.6	2.6	Yes	2.4	110	109.8	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	134851	18O2-PFHxS	435630	2500	Avg	0.235608						3284.63	3284.6293	100				5000	66	66	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	570958	13C2-6:2FTS	134851	5000	Avg	1.87751		11276	5	5	1	11.276	11.2756	100	11	11	Yes	9.1	124	123.9	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	504410	13C4-PFOA	161853	2500	Avg	4.359235						1787.28	1787.2803	100				2500	71	71	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	614495	13C8-PFOA	504410	2500	Avg	1.129938		2695.38	5	5	1	2.6954	2.6954	100	2.7	2.7	Yes	2.4	112	112.3	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	359999	18O2-PFHxS	435630	2500	Avg	1.087071						1900.49	1900.4901	100				2500	76	76	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	382292	13C3-PFHxS	359999	2500	Avg	1.036407		2561.55	5	5	1	2.5616	2.5616	100	2.6	2.6	Yes	2.3	114	111.4	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	312559	13C3-PFHxS	359999	2500	Avg	0.948151		2289.25	5	5	1	2.2892	2.2892	100	2.3	2.3	Yes	2.2	105	104.1	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	182196	13C5-PFNA	333524	1250	Avg	0.681638						1001.77	1001.7699	100				1250	80	80	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	444077	13C9-PFNA	182196	1250	Avg	1.15809		2630.8	5	5	1	2.6308	2.6308	100	2.6	2.6	Yes	2.4	110	109.6	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	128985	18O2-PFHxS	435630	2500	Avg	0.22089						3351.09	3351.0845	100				5000	67	67	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	447014	13C2-8:2FTS	128985	5000	Avg	1.486942		11654	5	5	1	11.654	11.6535	100	12	12	Yes	9.2	127	126.7	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	322484	13C4-PFOS	649816	2500	Avg	0.319821						3879.27	3879.2771	100				5000	78	78	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	113196	D3-NMeFOSAA	322484	5000	Avg	0.724285		2423.17	5	5	1	2.4232	2.4232	100	2.4	2.4	Yes	2.4	101	101.0	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	203121	13C2-PFDA	273629	1250	Avg	0.949905						976.84	976.838	100				1250	78	78	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	402713	13C6-PFDA	203121	1250	Avg	0.945859		2620.14	5	5	1	2.6201	2.6201	100	2.6	2.6	Yes	2.4	109	109.2	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	293559	13C4-PFOS	649816	2500	Avg	0.294766						3831.48	3831.4893	100				5000	77	77	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	138868	D5-NEtFOSAA	293559	5000	Avg	0.91407		2587.6	5	5	1	2.5876	2.5876	100	2.6	2.6	Yes	2.4	108	107.8	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	496788	13C4-PFOS	649816	2500	Avg	0.984793						1940.78	1940.7775	100				2500	78	78	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	373704	13C8-PFOS	496788	2500	Avg	0.747625		2515.43	5	5	1	2.5154	2.5154	100	2.5	2.5	Yes	2.3	110	109.4	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	445855	13C8-PFOS	496788	2500	Avg	0.82691		2713.34	5	5	1	2.7133	2.7133	100	2.7	2.7	Yes	2.3	118	118.0	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	388672	13C8-PFOS	496788	2500	Avg	0.778191		2513.43	5	5	1	2.5134	2.5134	100	2.5	2.5	Yes	2.3	109	109.3	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	206907	13C2-PFDA	273629	1250	Avg	0.997704						947.37	947.3738	100				1250	76	76	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	378370	13C7-PFUnA	206907	1250	Avg	0.893971		2556.98	5	5	1	2.557	2.557	100	2.6	2.6	Yes	2.4	107	106.5	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	174068	13C2-PFDA	273629	1250	Avg	0.795406						999.72	999.719	100				1250	80	80	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	379035	13C2-PFDoA	174068	1250	Avg	1.131709		2405.11	5	5	1	2.4051	2.4051	100	2.4	2.4	Yes	2.4	100	100.2	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	189703	13C2-PFDoA	174068	1250	Avg	0.599359		2272.89	5	5	1	2.2729	2.2729	100	2.3	2.3	Yes	2.4	95	94.7	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	109835	13C2-PFDA	273629	1250	Avg	0.588079						853.2	853.2042	100				1250	68	68	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	206317	13C2-PFTeDA	109835	1250	Avg	0.882946		2659.32	5	5	1	2.6593	2.6593	100	2.7	2.7	Yes	2.4	111	110.8	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	856061	13C4-PFOS	649816	2500	Avg	1.895997						1737.07	1737.0674	100				2500	69	69	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	921122	13C8-PFOSA	856061	2500	Avg	0.985796		2728.76	5	5	1	2.7288	2.7288	100	2.7	2.7	Yes	2.4	114	113.7	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1811704	13C4-PFOS	649816	2500	Avg	0.700486						9950.33	9950.3279	100				25000	40	40	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	108374	13C4-PFOS	649816	2500	Avg	0.437202						953.66	953.6578	100				2500	38	38	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	127424	D3-NMeFOSA	108374	2500	Avg	1.089434		2698.14	5	5	1	2.6981	2.6981	100	2.7	2.7	Yes	2.4	112	112.4	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2190525	13C4-PFOS	649816	2500	Avg	0.870998						9675.66	9675.6615	100				25000	39	39	Yes			
092424A126.d	ZQ18111-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	118623	13C4-PFOS	649816	2500	Avg	0.508417						897.63	897.6323	100				2500	36	36	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2070385	13C3-PFBA	1176291	5000	Avg	1.153035						7632.45	7632.448	100				10000	76	76	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	149720	13C4-PFBA	2070385	10000	Avg	0.798354		905.8	5	5	1	0.9058	0.9058	100	0.91	0.91	Yes	0.8	113	113.2	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	839650	13C2-PFHxA	592292	2500	Avg	0.891292						3976.33	3976.3301	100				5000	80	80	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	69895	13C5-PFPeA	839650	5000	Avg	1.018879		408.5	5	5	1	0.4085	0.4085	100	0.41	0.41	Yes	0.4	102	102.1	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	94647	18O2-PFHxS	367338	2500	Avg	0.16784						3837.83	3837.8282	100				5000	77	77	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	27245	13C2-4:2FTS	94647	5000	Avg	1.621025		887.89	5	5	1	0.88789	0.8879	100	0.89	0.89	Yes	0.75	118	118.4	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	457544	13C2-PFHxA	592292	2500	Avg	0.983356						1963.93	1963.931	100				2500	79	79	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	42742	13C5-PFHxA	457544	2500	Avg	1.153986		202.38	5	5	1	0.20238	0.2024	100	0.2	0.2	Yes	0.2	101	101.2	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	144622	13C5-PFHxA	457544	2500	Avg	0.159689		4948.41	5	5	1	4.9484	4.9484	100	4.9	4.9	Yes	5	99	99.0	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	430918	18O2-PFHxS	367338	2500	Avg	1.4649						2001.99	2001.9849	100				2500	80	80	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	56871	13C3-PFBS	430918	2500	Avg	1.649991		199.97	5	5	1	0.19997	0.2	100	0.2	0.2	Yes	0.17	118	117.6	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	478440	13C2-PFHxA	592292	2500	Avg	0.255296						7910.21	7910.2027	100				10000	79	79	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	454440	13C2-PFHxA	592292	2500	Avg	0.972655						1972.07	1972.0679	100				2500	79	79	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	46644	13C4-PFHpA	454440	2500	Avg	1.095097		234.32	5	5	1	0.23432	0.2343	100	0.23	0.23	Yes	0.2	117	117.2	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	135176	18O2-PFHxS	367338	2500	Avg	0.235608						3904.66	3904.6644	100				5000	78	78	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	44610	13C2-6:2FTS	135176	5000	Avg	1.87751		878.86	5	5	1	0.87886	0.8789	100	0.88	0.88	Yes	0.76	116	115.6	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	515800	13C4-PFOA	156481	2500	Avg	4.359235						1890.38	1890.3815	100				2500	76	76	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	54767	13C8-PFOA	515800	2500	Avg	1.129938		234.92	5	5	1	0.23492	0.2349	100	0.23	0.23	Yes	0.2	117	117.5	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	336904	18O2-PFHxS	367338	2500	Avg	1.087071						2109.22	2109.2226	100				2500	84	84	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	28117	13C3-PFHxS	336904	2500	Avg	1.036407		201.31	5	5	1	0.20131	0.2013	100	0.2	0.2	Yes	0.18	112	111.8	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	26889	13C3-PFHxS	336904	2500	Avg	0.948151		210.44	5	5	1	0.21044	0.2104	100	0.21	0.21	Yes	0.18	117	116.9	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	176805	13C5-PFNA	304571	1250	Avg	0.681638						1064.54	1064.5406	100				1250	85	85	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	33781	13C9-PFNA	176805	1250	Avg	1.15809		206.23	5	5	1	0.20623	0.2062	100	0.21	0.21	Yes	0.2	103	103.1	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	125978	18O2-PFHxS	367338	2500	Avg	0.22089						3881.44	3881.4394	100				5000	78	78	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	35741	13C2-8:2FTS	125978	5000	Avg	1.486942		954	5	5	1	0.954	0.954	100	0.95	0.95	Yes	0.76	126	125.5	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	319934	13C4-PFOS	616281	2500	Avg	0.319821						4058.02	4058.0244	100				5000	81	81	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	10879	D3-NMeFOSAA	319934	5000	Avg	0.724285		234.74	5	5	1	0.23474	0.2347	100	0.23	0.23	Yes	0.2	117	117.4	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	208932	13C2-PFDA	290535	1250	Avg	0.949905						946.32	946.3163	100				1250	76	76	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	38480	13C6-PFDA	208932	1250	Avg	0.945859		243.4	5	5	1	0.2434	0.2434	100	0.24	0.24	Yes	0.2	122	121.7	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	273168	13C4-PFOS	616281	2500	Avg	0.294766						3759.35	3759.3578	100				5000	75	75	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	9460	D5-NEtFOSAA	273168	5000	Avg	0.91407		189.43	5	5	1	0.18943	0.1894	100	0.19	0.19	Yes	0.2	95	94.7	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	452036	13C4-PFOS	616281	2500	Avg	0.984793						1862.04	1862.0413	100				2500	74	74	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	31482	13C8-PFOS	452036	2500	Avg	0.747625		232.89	5	5	1	0.23289	0.2329	100	0.23	0.23	Yes	0.19	123	122.6	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	30110	13C8-PFOS	452036	2500	Avg	0.82691		201.38	5	5	1	0.20138	0.2014	100	0.2	0.2	Yes	0.19	106	106.0	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	32315	13C8-PFOS	452036	2500	Avg	0.778191		229.66	5	5	1	0.22966	0.2297	100	0.23	0.23	Yes	0.19	121	120.9	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	191209	13C2-PFDA	290535	1250	Avg	0.997704						824.55	824.5522	100				1250	66	66	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	32761	13C7-PFUnA	191209	1250	Avg	0.893971		239.57	5	5	1	0.23957	0.2396	100	0.24	0.24	Yes	0.2	120	119.8	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	149198	13C2-PFDA	290535	1250	Avg	0.795406						807.02	807.0226	100				1250	65	65	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	27909	13C2-PFDoA	149198	1250	Avg	1.131709		206.61	5	5	1	0.20661	0.2066	100	0.21	0.21	Yes	0.2	103	103.3	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	15082	13C2-PFDoA	149198	1250	Avg	0.599359		210.82	5	5	1	0.21082	0.2108	100	0.21	0.21	Yes	0.2	105	105.4	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	100961	13C2-PFDA	290535	1250	Avg	0.588079						738.63	738.6344	100				1250	59	59	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	15167	13C2-PFTeDA	100961	1250	Avg	0.882946		212.68	5	5	1	0.21268	0.2127	100	0.21	0.21	Yes	0.2	106	106.4	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	794764	13C4-PFOS	616281	2500	Avg	1.895997						1700.44	1700.4418	100				2500	68	68	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	71496	13C8-PFOSA	794764	2500	Avg	0.985796		228.14	5	5	1	0.22814	0.2281	100	0.23	0.23	Yes	0.2	114	114.1	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1656200	13C4-PFOS	616281	2500	Avg	0.700486						9591.24	9591.2354	100				25000	38	38	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	105231	13C4-PFOS	616281	2500	Avg	0.437202						976.39	976.3888	100				2500	39	39	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	9893	D3-NMeFOSA	105231	2500	Avg	1.089434		215.74	5	5	1	0.21574	0.2157	100	0.22	0.22	Yes	0.2	108	107.9	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2055392	13C4-PFOS	616281	2500	Avg	0.870998						9572.8	9572.7945	100				25000	38	38	Yes			
092424A127.d	ZQ18111-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	114503	13C4-PFOS	616281	2500	Avg	0.508417						913.6	913.6041	100				2500	37	37	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C4-PFBA	SESI-0111	628512	13C3-PFBA	1179342	5000	Avg	1.136894						2343.82	2343.8177	39.3				10000	23	23	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	65518	13C4-PFBA	628512	10000	Avg	0.895963		1163.47	5	12.73	1	0.45698	0.457	39.3	1.2	1.2	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C5-PFPeA	SESI-0112	470583	13C2-PFHxA	566761	2500	Avg	0.891167						2329.26	2329.2558	39.3				5000	47	47	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	959045	13C5-PFPeA	470583	5000	Avg	1.104878		9222.71	5	12.73	1	3.6224	3.6224	39.3	9.2	9.2	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	77803	18O2-PFHxS	382816	2500	Avg	0.164935						3080.58	3080.5868	39.3				5000	62	62	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	8323	13C2-4:2FTS	77803	5000	Avg	1.754213		304.91	5	12.73	1	0.11976	0.1198	39.3	0.3	0.3	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C5-PFHxA	SESI-0113	269338	13C2-PFHxA	566761	2500	Avg	0.967301						1228.22	1228.2197	39.3				2500	49	49	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	3434685	13C5-PFHxA	269338	2500	Avg	1.287042		24771	5	12.73	1	9.7292	9.7292	39.3	25	25	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	50879	13C5-PFHxA	269338	2500	Avg	0.175826		2685.95	5	12.73	1	1.055	1.055	39.3	2.7	2.7	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C3-PFBS	SESI-0116	291017	18O2-PFHxS	382816	2500	Avg	1.453938						1307.14	1307.1409	39.3				2500	52	52	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	891567	13C3-PFBS	291017	2500	Avg	1.820068		4208.12	5	12.73	1	1.6528	1.6528	39.3	4.2	4.2	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	296269	13C2-PFHxA	566761	2500	Avg	0.256272						5099.46	5099.4707	39.3				10000	51	51	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C4-PFHpA	SESI-0114	263481	13C2-PFHxA	566761	2500	Avg	0.991907						1171.71	1171.7053	39.3				2500	47	47	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1368697	13C4-PFHpA	263481	2500	Avg	1.191595		10899	5	12.73	1	4.2807	4.2807	39.3	11	11	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	83122	18O2-PFHxS	382816	2500	Avg	0.219087						2477.71	2477.7033	39.3				5000	50	50	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	2836603	13C2-6:2FTS	83122	5000	Avg	2.148719		79410	5	12.73	1	31.19	31.1899	39.3	79	79	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	562855	13C3-PFHxS	176466	2500	Avg	1.189606		6703.05	5	12.73	1	2.6328	2.6328	39.3	6.7	6.7	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C9-PFNA	SESI-0099	89177	13C5-PFNA	293751	1250	Avg	0.749868						506.06	506.0561	39.3				1250	40	40	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	483222	13C9-PFNA	89177	1250	Avg	1.347846		5025.32	5	12.73	1	1.9738	1.9738	39.3	5	5	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	73175	18O2-PFHxS	382816	2500	Avg	0.206645						2312.53	2312.532	39.3				5000	46	46	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	327633	13C2-8:2FTS	73175	5000	Avg	1.765809		12678	5	12.73	1	4.9796	4.9796	39.3	13	13	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	176391	13C4-PFOS	491433	2500	Avg	0.360298						2490.52	2490.5213	39.3				5000	50	50	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	181533	D3-NMeFOSAA	176391	5000	Ln	0.747099	13.759	6869.23	5	12.73	1	2.698	2.698	39.3	6.9	6.9	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	175456	13C4-PFOS	491433	2500	Avg	0.377269						2365.88	2365.8805	39.3				5000	47	47	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	193616	D5-NEtFOSAA	175456	5000	Avg	0.928484		5942.49	5	12.73	1	2.3341	2.3341	39.3	5.9	5.9	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C8-PFOS	SESI-0098	185938	13C4-PFOS	491433	2500	Avg	0.93405						1012.68	1012.6835	39.3				2500	41	41	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	468745	13C8-PFOS	185938	2500	Ln	0.918199	26.9149	6834.6	5	12.73	1	2.6844	2.6844	39.3	6.8	6.8	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	35942	13C8-PFOS	185938	2500	Avg	1.038139		465.5	5	12.73	1	0.18284	0.1828	39.3	0.47	0.47	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C7-PFUnA	SESI-0117	91873	13C2-PFDA	314779	1250	Avg	0.734493						496.71	496.7118	39.3				1250	40	40	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	287218	13C7-PFUnA	91873	1250	Avg	0.968723		4033.98	5	12.73	1	1.5844	1.5844	39.3	4	4	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C8-PFOSA	SESI-0107	427030	13C4-PFOS	491433	2500	Avg	1.926242						1127.78	1127.777	39.3				2500	45	45	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	725648	13C8-PFOSA	427030	2500	Avg	1.101995		3855.03	5	12.73	1	1.5142	1.5142	39.3	3.9	3.9	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	45582	13C2-PFDA	314779	1250	Avg	0.514737						351.65	351.6513	39.3				1250	28	28	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	45351	13C4-PFOS	491433	2500	Avg	0.468708						492.22	492.2211	39.3				2500	20	20	Yes			
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1664	D3-NMeFOSA	45351	2500	Avg	1.228879		74.644	5	12.73	1	0.02932	0.0293	39.3	0.075	0.075	Yes							
092524052.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	36633	13C4-PFOS	491433	2500	Avg	0.548881						339.52	339.5236	39.3				2500	14	14	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C4-PFBA	SESI-0111	1438163	13C3-PFBA	1197820	5000	Avg	1.136894						5280.4	5280.3971	40.2				10000	53	53	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	76518	13C4-PFBA	1438163	10000	Avg	0.895963		593.83	5	12.43	1	0.23887	0.2389	40.2	0.59	0.59	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C5-PFPeA	SESI-0112	536028	13C2-PFHxA	586859	2500	Avg	0.891167						2562.33	2562.3274	40.2				5000	51	51	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	555144	13C5-PFPeA	536028	5000	Avg	1.104878		4686.77	5	12.43	1	1.8853	1.8853	40.2	4.7	4.7	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	72763	18O2-PFHxS	379947	2500	Avg	0.164935						2902.78	2902.7843	40.2				5000	58	58	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	4120	13C2-4:2FTS	72763	5000	Avg	1.754213		161.39	5	12.43	1	0.06492	0.0649	40.2	0.16	0.16	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C5-PFHxA	SESI-0113	300427	13C2-PFHxA	586859	2500	Avg	0.967301								40.2										
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1862772	13C5-PFHxA	300427	2500	Avg	1.287042		12044	5	12.43	1	4.8447	4.8447	40.2	12	12	Yes	2500	53	53	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C3-PFBS	SESI-0116	295033	18O2-PFHxS	379947	2500	Avg	1.453938						1335.19	1335.1858	40.2				2500	53	53	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	534525	13C3-PFBS	295033	2500	Avg	1.820068		2488.57	5	12.43	1	1.001	1.001	40.2	2.5	2.5	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	309330	13C2-PFHxA	586859	2500	Avg	0.256272						5141.93	5141.9414	40.2				10000	51	51	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C4-PFHpA	SESI-0114	276774	13C2-PFHxA	586859	2500	Avg	0.991907						1188.67	1188.668	40.2				2500	48	48	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	646205	13C4-PFHpA	276774	2500	Avg	1.191595		4898.43	5	12.43	1	1.9704	1.9704	40.2	4.9	4.9	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	88619	18O2-PFHxS	379947	2500	Avg	0.219087						2661.51	2661.5046	40.2				5000	53	53	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	2222763	13C2-6:2FTS	88619	5000	Avg	2.148719		58366	5	12.43	1	23.478	23.4777	40.2	58	58	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C3-PFHxS	SESI-0096	180226	18O2-PFHxS	379947	2500	Avg	1.069919						1108.37	1108.3669	40.2				2500	44	44	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	312309	13C3-PFHxS	180226	2500	Avg	1.189606		3641.7	5	12.43	1	1.4649	1.4649	40.2	3.6	3.6	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3620088	13C3-PFHxS	180226	2500	Avg	1.051753		47745	5	12.43	1	19.206	19.2056	40.2	48	48	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C9-PFNA	SESI-0099	101341	13C5-PFNA	287138	1250	Avg	0.749868						588.33	588.3283	40.2				1250	47	47	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	306647	13C9-PFNA	101341	1250	Avg	1.347846		2806.23	5	12.43	1	1.1288	1.1288	40.2	2.8	2.8	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	67695	18O2-PFHxS	379947	2500	Avg	0.206645						2155.5	2155.5032	40.2				5000	43	43	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	146531	13C2-8:2FTS	67695	5000	Avg	1.765809		6129.14	5	12.43	1	2.4655	2.4655	40.2	6.1	6.1	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	170590	13C4-PFOS	530446	2500	Avg	0.360298						2231.47	2231.4674	40.2				5000	45	45	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	69603	D3-NMeFOSAA	170590	5000	Ln	0.747099	13.759	2712.23	5	12.43	1	1.091	1.091	40.2	2.7	2.7	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C6-PFDA	SESI-0115	121252	13C2-PFDA	311700	1250	Avg	0.917163						530.17	530.1705	40.2				1250	42	42	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	52803	13C6-PFDA	121252	1250	Avg	1.072259		507.67	5	12.43	1	0.20421	0.2042	40.2	0.51	0.51	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	170694	13C4-PFOS	530446	2500	Avg	0.377269						2132.39	2132.3867	40.2				5000	43	43	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	85873	D5-NEtFOSAA	170694	5000	Avg	0.928484		2709.16	5	12.43	1	1.0898	1.0898	40.2	2.7	2.7	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C8-PFOS	SESI-0098	199087	13C4-PFOS	530446	2500	Avg	0.93405						1004.55	1004.5501	40.2				2500	40	40	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	269522	13C8-PFOS	199087	2500	Ln	0.918199	26.9149	3656.68	5	12.43	1	1.4709	1.4709	40.2	3.7	3.7	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	15872	13C8-PFOS	199087	2500	Avg	1.038139		191.99	5	12.43	1	0.07723	0.0772	40.2	0.19	0.19	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C7-PFUnA	SESI-0117	106193	13C2-PFDA	311700	1250	Avg	0.734493						579.8	579.8043	40.2				1250	46	46	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	263784	13C7-PFUnA	106193	1250	Avg	0.968723		3205.26	5	12.43	1	1.2893	1.2893	40.2	3.2	3.2	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C8-PFOSA	SESI-0107	458135	13C4-PFOS	530446	2500	Avg	1.926242						1120.94	1120.9376	40.2				2500	45	45	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	312968	13C8-PFOSA	458135	2500	Avg	1.101995		1549.77	5	12.43	1	0.6234	0.6234	40.2	1.6	1.6	Yes							
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	55759	13C2-PFDA	311700	1250	Avg	0.514737						434.41	434.413	40.2				1250	35	35	Yes			
092524056.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	25737	13C4-PFOS	530446	2500	Avg	0.468708						258.79	258.7941	40.2				2500	10	10	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	1572322	13C3-PFBA	1317833	5000	Avg	1.136894						5247.24	5247.2426	40.2				10000	52	52	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1518059	13C4-PFBA	1572322	10000	Avg	0.895963		10776	5	12.44	1	4.3312	4.3312	40.2	11	11	Yes	9.6	106	106.0	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	567007	13C2-PFHxA	634721	2500	Avg	0.891167						2506.03	2506.0312	40.2				5000	50	50	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1206113	13C5-PFPeA	567007	5000	Avg	1.104878		9626.21	5	12.44	1	3.8691	3.8691	40.2	9.6	9.6	Yes	4.8	103	102.8	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	77642	18O2-PFHxS	437361	2500	Avg	0.164935						2690.81	2690.815	40.2				5000	54	54	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	258236	13C2-4:2FTS	77642	5000	Avg	1.754213		9479.99	5	12.44	1	3.8103	3.8103	40.2	9.5	9.5	Yes	9.0	106	103.5	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	317434	13C2-PFHxA	634721	2500	Avg	0.967301						1292.55	1292.5547	40.2				2500	52	52	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	2345826	13C5-PFHxA	317434	2500	Avg	1.287042		14355	5	12.44	1	5.7695	5.7695	40.2	14	14	Yes	2.4	96	95.9	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1224972	13C5-PFHxA	317434	2500	Avg	0.175826		54869	5	12.44	1	22.054	22.0536	40.2	55	55	Yes	60	91	91.4	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	322571	18O2-PFHxS	437361	2500	Avg	1.453938						1268.18	1268.1756	40.2				2500	51	51	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	1094287	13C3-PFBS	322571	2500	Avg	1.820068		4659.7	5	12.44	1	1.8729	1.8729	40.2	4.7	4.7	Yes	2.1	103	103.3	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	356407	13C2-PFHxA	634721	2500	Avg	0.256272						5477.74	5477.75	40.2				10000	55	55	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	285901	13C2-PFHxA	634721	2500	Avg	0.991907						1135.28	1135.2771	40.2				2500	45	45	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1093443	13C4-PFHpA	285901	2500	Avg	1.191595		8024.02	5	12.44	1	3.2251	3.2251	40.2	8	8	Yes	2.4	131	130.0	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	97427	18O2-PFHxS	437361	2500	Avg	0.219087						2541.93	2541.9247	40.2				5000	51	51	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	2675453	13C2-6:2FTS	97427	5000	Avg	2.148719		63901	5	12.44	1	25.684	25.6837	40.2	64	64	Yes	9.1	60	60.3	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	339204	13C4-PFOA	164313	2500	Avg	4.175238						1236.08	1236.0835	40.2				2500	49	49	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	2800395	13C8-PFOA	339204	2500	Avg	1.257832		16409	5	12.44	1	6.5952	6.5952	40.2	16	16	Yes	2.4	43	43.2	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	209066	18O2-PFHxS	437361	2500	Avg	1.069919						1116.95	1116.9467	40.2				2500	45	45	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	600246	13C3-PFHxS	209066	2500	Avg	1.189606		6033.68	5	12.44	1	2.4251	2.4251	40.2	6	6	Yes	2.2	107	108.6	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	4270518	13C3-PFHxS	209066	2500	Avg	1.051753		48554	5	12.44	1	19.515	19.5152	40.2	49	49	Yes	2.2	35	35.0	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	114637	13C5-PFNA	335354	1250	Avg	0.749868						569.83	569.8316	40.2				1250	46	46	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	575558	13C9-PFNA	114637	1250	Avg	1.347846		4656.22	5	12.44	1	1.8715	1.8715	40.2	4.7	4.7	Yes	2.4	77	77.0	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	71505	18O2-PFHxS	437361	2500	Avg	0.206645						1977.93	1977.9325	40.2				5000	40	40	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	408219	13C2-8:2FTS	71505	5000	Avg	1.765809		16165	5	12.44	1	6.4973	6.4973	40.2	16	16	Yes	9.2	109	109.0	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	211852	13C4-PFOS	599912	2500	Avg	0.360298						2450.32	2450.3221	40.2				5000	49	49	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	164529	D3-NMeFOSAA	211852	5000	Ln	0.747099	13.759	5179.17	5	12.44	1	2.0817	2.0817	40.2	5.2	5.2	Yes	2.4	103	102.7	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	146057	13C2-PFDA	360135	1250	Avg	0.917163						552.74	552.7395	40.2				1250	44	44	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorodecanoic acid (PFDA)	335-76-2	340007	13C6-PFDA	146057	1250	Avg	1.072259		2713.79	5	12.44	1	1.0908	1.0908	40.2	2.7	2.7	Yes	2.4	92	91.9	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	198934	13C4-PFOS	599912	2500	Avg	0.377269						2197.41	2197.4062	40.2				5000	44	44	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	197841	D5-NEtFOSAA	198934	5000	Avg	0.928484		5355.54	5	12.44	1	2.1525	2.1525	40.2	5.4	5.4	Yes	2.4	111	110.1	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	246498	13C4-PFOS	599912	2500	Avg	0.93405						1099.75	1099.7545	40.2				2500	44	44	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	550720	13C8-PFOS	246498	2500	Ln	0.918199	26.9149	6053.73	5	12.44	1	2.4332	2.4332	40.2	6.1	6.1	Yes	2.3	106	104.1	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	278093	13C8-PFOS	246498	2500	Avg	1.038139		2716.82	5	12.44	1	1.092	1.092	40.2	2.7	2.7	Yes	2.3	110	109.8	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	207466	13C8-PFOS	246498	2500	Avg	0.928176		2266.96	5	12.44	1	0.91116	0.9112	40.2	2.3	2.3	Yes	2.3	98	98.6	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	120076	13C2-PFDA	360135	1250	Avg	0.734493						567.43	567.4312	40.2				1250	45	45	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	555847	13C7-PFUnA	120076	1250	Avg	0.968723		5973.23	5	12.44	1	2.4008	2.4008	40.2	6	6	Yes	2.4	116	115.2	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	94032	13C2-PFDA	360135	1250	Avg	0.66531						490.56	490.5647	40.2				1250	39	39	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	247083	13C2-PFDoA	94032	1250	Avg	1.238225		2652.64	5	12.44	1	1.0662	1.0662	40.2	2.7	2.7	Yes	2.4	111	110.5	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	217129	13C2-PFDoA	94032	1250	Avg	0.659525		4376.44	5	12.44	1	1.759	1.759	40.2	4.4	4.4	Yes	2.4	103	102.4	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	507699	13C4-PFOS	599912	2500	Avg	1.926242						1098.37	1098.3681	40.2				2500	44	44	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	914274	13C8-PFOSA	507699	2500	Avg	1.101995		4085.36	5	12.44	1	1.642	1.642	40.2	4.1	4.1	Yes	2.4	106	105.6	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	57214	13C2-PFDA	360135	1250	Avg	0.514737						385.8	385.7995	40.2				1250	31	31	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	115993	13C2-PFTeDA	57214	1250	Avg	0.948648		2671.37	5	12.44	1	1.0737	1.0737	40.2	2.7	2.7	Yes	2.4	112	111.3	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	225364	13C4-PFOS	599912	2500	Avg	0.747197						1256.9	1256.9033	40.2				25000	5	5	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	45498	13C4-PFOS	599912	2500	Avg	0.468708						404.52	404.5222	40.2				2500	16	16	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	57758	D3-NMeFOSA	45498	2500	Avg	1.228879		2582.56	5	12.44	1	1.038	1.038	40.2	2.6	2.6	Yes	2.4	108	107.6	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	218547	13C4-PFOS	599912	2500	Avg	0.967764						941.08	941.0828	40.2				25000	4	4	Yes			
092524057.d	ZH22013-009MS	CACMW-002-110-92.75-0815	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	33462	13C4-PFOS	599912	2500	Avg	0.548881						254.05	254.0541	40.2				2500	10	10	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	1595479	13C3-PFBA	1242967	5000	Avg	1.136894						5645.23	5645.2285	40.2				10000	56	56	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1496268	13C4-PFBA	1595479	10000	Avg	0.895963		10467	5	12.47	1	4.1969	4.1969	40.2	10	10	Yes	9.6	103	102.6	Yes	3.1	3.1	Yes

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	595861	13C2-PFHxA	614720	2500	Avg	0.891167						2719.25	2719.2462	40.2				5000	54	54	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1262666	13C5-PFPeA	595861	5000	Avg	1.104878		9589.57	5	12.47	1	3.8451	3.8451	40.2	9.6	9.6	Yes	4.8	102	101.6	Yes	0.62	0.6	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	72723	18O2-PFHxS	394881	2500	Avg	0.164935						2791.46	2791.4685	40.2				5000	56	56	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	240002	13C2-4:2FTS	72723	5000	Avg	1.754213		9406.56	5	12.47	1	3.7717	3.7717	40.2	9.4	9.4	Yes	9.0	105	102.5	Yes	1	1.0	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	327572	13C2-PFHxA	614720	2500	Avg	0.967301						1377.23	1377.2342	40.2				2500	55	55	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	2240392	13C5-PFHxA	327572	2500	Avg	1.287042		13285	5	12.47	1	5.3268	5.3268	40.2	13	13	Yes	2.4	50	50.0	Yes	8	8.0	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1249001	13C5-PFHxA	327572	2500	Avg	0.175826		54214	5	12.47	1	21.738	21.7378	40.2	54	54	Yes	60	90	90.1	Yes	1.4	1.4	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	327787	18O2-PFHxS	394881	2500	Avg	1.453938						1427.31	1427.3143	40.2				2500	57	57	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	1013404	13C3-PFBS	327787	2500	Avg	1.820068		4246.62	5	12.47	1	1.7027	1.7027	40.2	4.2	4.2	Yes	2.1	83	83.1	Yes	9.5	9.5	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	344616	13C2-PFHxA	614720	2500	Avg	0.256272						5468.85	5468.8617	40.2				10000	55	55	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	306064	13C2-PFHxA	614720	2500	Avg	0.991907						1254.89	1254.8851	40.2				2500	50	50	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	967275	13C4-PFHpA	306064	2500	Avg	1.191595		6630.54	5	12.47	1	2.6586	2.6586	40.2	6.6	6.6	Yes	2.4	72	71.3	Yes	19	19.3	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	91752	18O2-PFHxS	394881	2500	Avg	0.219087						2651.39	2651.3844	40.2				5000	53	53	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	2500091	13C2-6:2FTS	91752	5000	Avg	2.148719		63406	5	12.47	1	25.423	25.4234	40.2	63	63	Yes	9.1	53	53.2	Yes	1	1.0	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	309390	13C4-PFOA	147757	2500	Avg	4.175238						1253.77	1253.7674	40.2				2500	50	50	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	2350513	13C8-PFOA	309390	2500	Avg	1.257832		15100	5	12.47	1	6.0545	6.0545	40.2	15	15	Yes	2.4	-13	-12.8	Yes	8.5	8.5	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	184966	18O2-PFHxS	394881	2500	Avg	1.069919						1094.5	1094.4975	40.2				2500	44	44	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	547444	13C3-PFHxS	184966	2500	Avg	1.189606		6219.92	5	12.47	1	2.494	2.494	40.2	6.2	6.2	Yes	2.2	114	116.4	Yes	2.8	2.8	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3465413	13C3-PFHxS	184966	2500	Avg	1.051753		44534	5	12.47	1	17.856	17.8564	40.2	44	44	Yes	2.2	-155	-152.6	Yes	8.9	8.9	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	97599	13C5-PFNA	293909	1250	Avg	0.749868						553.55	553.551	40.2				1250	44	44	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	508723	13C9-PFNA	97599	1250	Avg	1.347846		4833.99	5	12.47	1	1.9382	1.9382	40.2	4.8	4.8	Yes	2.4	84	83.9	Yes	3.5	3.5	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	72745	18O2-PFHxS	394881	2500	Avg	0.206645						2228.7	2228.7021	40.2				5000	45	45	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	383267	13C2-8:2FTS	72745	5000	Avg	1.765809		14918	5	12.47	1	5.9817	5.9817	40.2	15	15	Yes	9.2	95	95.1	Yes	8.3	8.3	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	186483	13C4-PFOS	557944	2500	Avg	0.360298						2319.14	2319.1391	40.2				5000	46	46	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	135593	D3-NMeFOSAA	186483	5000	Ln	0.747099	13.759	4847.78	5	12.47	1	1.9438	1.9438	40.2	4.8	4.8	Yes	2.4	89	88.4	Yes	6.9	6.9	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	114017	13C2-PFDA	325050	1250	Avg	0.917163						478.06	478.0606	40.2				1250	38	38	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorodecanoic acid (PFDA)	335-76-2	303282	13C6-PFDA	114017	1250	Avg	1.072259		3100.9	5	12.47	1	1.2433	1.2433	40.2	3.1	3.1	Yes	2.4	108	107.7	Yes	13	13.1	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	194367	13C4-PFOS	557944	2500	Avg	0.377269						2308.45	2308.4518	40.2				5000	46	46	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	158089	D5-NEtFOSAA	194367	5000	Avg	0.928484		4380.01	5	12.47	1	1.7562	1.7562	40.2	4.4	4.4	Yes	2.4	69	69.1	Yes	20	20.3	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	215458	13C4-PFOS	557944	2500	Avg	0.93405						1033.58	1033.5748	40.2				2500	41	41	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	469673	13C8-PFOS	215458	2500	Ln	0.918199	26.9149	5905.9	5	12.47	1	2.368	2.368	40.2	5.9	5.9	Yes	2.3	99	97.0	Yes	2.7	2.7	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	233446	13C8-PFOS	215458	2500	Avg	1.038139		2609.21	5	12.47	1	1.0462	1.0462	40.2	2.6	2.6	Yes	2.3	105	104.8	Yes	4.3	4.3	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	194565	13C8-PFOS	215458	2500	Avg	0.928176		2432.27	5	12.47	1	0.97525	0.9752	40.2	2.4	2.4	Yes	2.3	106	105.5	Yes	6.8	6.8	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	110083	13C2-PFDA	325050	1250	Avg	0.734493						576.36	576.3581	40.2				1250	46	46	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	449547	13C7-PFUnA	110083	1250	Avg	0.968723		5269.45	5	12.47	1	2.1128	2.1129	40.2	5.3	5.3	Yes	2.4	86	85.4	Yes	13	12.8	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	92965	13C2-PFDA	325050	1250	Avg	0.66531						537.35	537.3475	40.2				1250	43	43	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	220559	13C2-PFDoA	92965	1250	Avg	1.238225		2395.06	5	12.47	1	0.96033	0.9603	40.2	2.4	2.4	Yes	2.4	100	99.5	Yes	10	10.5	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	191877	13C2-PFDoA	92965	1250	Avg	0.659525		3911.85	5	12.47	1	1.5685	1.5685	40.2	3.9	3.9	Yes	2.4	83	82.6	Yes	11	11.5	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	485282	13C4-PFOS	557944	2500	Avg	1.926242						1128.84	1128.8409	40.2				2500	45	45	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	799656	13C8-PFOSA	485282	2500	Avg	1.101995		3738.26	5	12.47	1	1.4989	1.4989	40.2	3.7	3.7	Yes	2.4	91	90.7	Yes	9.1	9.1	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	111209	13C2-PFTeDA	56807	1250	Avg	0.948648		2579.54	5	12.47	1	1.0343	1.0343	40.2	2.6	2.6	Yes	2.4	108	107.2	Yes	3.7	3.7	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	221678	13C4-PFOS	557944	2500	Avg	0.747197						1329.34	1329.3424	40.2				25000	5	5	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	42893	13C4-PFOS	557944	2500	Avg	0.468708						410.05	410.0468	40.2				2500	16	16	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	49561	D3-NMeFOSA	42893	2500	Avg	1.228879		2350.63	5	12.47	1	0.94251	0.9425	40.2	2.3	2.3	Yes	2.4	98	97.7	Yes	9.6	9.6	Yes
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	210567	13C4-PFOS	557944	2500	Avg	0.967764						974.92	974.9228	40.2				25000	4	4	Yes			
092524058.d	ZH22013-009MD	CACMW-002-110-92.75-0815	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	33290	13C4-PFOS	557944	2500	Avg	0.548881						271.76	271.7597	40.2				2500	11	11	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	2128495	13C3-PFBA	1084579	5000	Avg	1.136894						8631.01	8631.0071	100				10000	86	86	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	810644	13C2-PFHxA	539798	2500	Avg	0.891167						4212.89	4212.887	100				5000	84	84	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	104140	18O2-PFHxS	359846	2500	Avg	0.164935						4386.59	4386.6004	100				5000	88	88	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	451761	13C2-PFHxA	539798	2500	Avg	0.967301						2163	2162.9966	100				2500	87	87	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	476358	18O2-PFHxS	359846	2500	Avg	1.453938						2276.2	2276.2025	100				2500	91	91	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	469725	13C2-PFHxA	539798	2500	Avg	0.256272						8488.89	8488.8968	100				10000	85	85	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	458165	13C2-PFHxA	539798	2500	Avg	0.991907						2139.24	2139.2409	100				2500	86	86	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	146483	18O2-PFHxS	359846	2500	Avg	0.219087						4645.1	4645.088	100				5000	93	93	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	495256	13C4-PFOA	154006	2500	Avg	4.175238						1925.53	1925.5326	100				2500	77	77	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	335763	18O2-PFHxS	359846	2500	Avg	1.069919						2180.24	2180.2448	100				2500	87	87	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	172693	13C5-PFNA	269622	1250	Avg	0.749868						1067.69	1067.6886	100				1250	85	85	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	126209	18O2-PFHxS	359846	2500	Avg	0.206645						4243.15	4243.1536	100				5000	85	85	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	319836	13C4-PFOS	544107	2500	Avg	0.360298						4078.69	4078.6946	100				5000	82	82	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	222451	13C2-PFDA	270833	1250	Avg	0.917163						1119.43	1119.4283	100				1250	90	90	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	345493	13C4-PFOS	544107	2500	Avg	0.377269						4207.69	4207.6909	100				5000	84	84	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	460669	13C4-PFOS	544107	2500	Avg	0.93405						2266.08	2266.0765	100				2500	91	91	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	179294	13C2-PFDA	270833	1250	Avg	0.734493						1126.64	1126.6435	100				1250	90	90	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	154285	13C2-PFDA	270833	1250	Avg	0.66531						1070.31	1070.3063	100				1250	86	86	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	724881	13C4-PFOS	544107	2500	Avg	1.926242						1729.07	1729.066	100				2500	69	69	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	116653	13C2-PFDA	270833	1250	Avg	0.514737						1045.97	1045.9693	100				1250	84	84	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1826980	13C4-PFOS	544107	2500	Avg	0.747197						11235	11234.516	100				25000	45	45	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	90423	13C4-PFOS	544107	2500	Avg	0.468708						886.4	886.4051	100				2500	35	35	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2145013	13C4-PFOS	544107	2500	Avg	0.967764						10184	10183.948	100				25000	41	41	Yes			
092524087.d	ZQ18113-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	101135	13C4-PFOS	544107	2500	Avg	0.548881						846.6	846.6014	100				2500	34	34	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2111786	13C3-PFBA	1096281	5000	Avg	1.136894						8471.85	8471.8459	100				10000	85	85	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1919038	13C4-PFBA	2111786	10000	Avg	0.895963		10142	5	5	1	10.142	10.1425	100	10	10	Yes	9.6	106	105.7	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	832120	13C2-PFHxA	603888	2500	Avg	0.891167						3865.54	3865.5427	100				5000	77	77	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	911751	13C5-PFPeA	832120	5000	Avg	1.104878		4958.45	5	5	1	4.9585	4.9585	100	5	5	Yes	4.8	103	103.3	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	108064	18O2-PFHxS	356964	2500	Avg	0.164935						4588.63	4588.6381	100				5000	92	92	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	353554	13C2-4:2FTS	108064	5000	Avg	1.754213		9325.29	5	5	1	9.3253	9.3253	100	9.3	9.3	Yes	9.0	104	103.6	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	471164	13C2-PFHxA	603888	2500	Avg	0.967301						2016.48	2016.4807	100				2500	81	81	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	583739	13C5-PFHxA	471164	2500	Avg	1.287042		2406.54	5	5	1	2.4065	2.4065	100	2.4	2.4	Yes	2.4	100	100.3	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1749703	13C5-PFHxA	471164	2500	Avg	0.175826		52802	5	5	1	52.802	52.8019	100	53	53	Yes	60	88	88.0	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	480225	18O2-PFHxS	356964	2500	Avg	1.453938						2313.21	2313.2068	100				2500	93	93	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	802747	13C3-PFBS	480225	2500	Avg	1.820068		2296.08	5	5	1	2.2961	2.2961	100	2.3	2.3	Yes	2.1	108	109.3	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	469998	13C2-PFHxA	603888	2500	Avg	0.256272						7592.38	7592.3892	100				10000	76	76	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	456936	13C2-PFHxA	603888	2500	Avg	0.991907						1907.08	1907.0761	100				2500	76	76	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	591250	13C4-PFHpA	456936	2500	Avg	1.191595		2714.73	5	5	1	2.7147	2.7147	100	2.7	2.7	Yes	2.4	113	113.1	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	144787	18O2-PFHxS	356964	2500	Avg	0.219087						4628.38	4628.3751	100				5000	93	93	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	548961	13C2-6:2FTS	144787	5000	Avg	2.148719		8822.71	5	5	1	8.8227	8.8227	100	8.8	8.8	Yes	9.1	97	97.0	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	543313	13C4-PFOA	138262	2500	Avg	4.175238						2352.91	2352.9139	100				2500	94	94	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	651656	13C8-PFOA	543313	2500	Avg	1.257832		2383.89	5	5	1	2.3839	2.3839	100	2.4	2.4	Yes	2.4	99	99.3	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	330713	18O2-PFHxS	356964	2500	Avg	1.069919						2164.79	2164.7909	100				2500	87	87	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	357886	13C3-PFHxS	330713	2500	Avg	1.189606		2274.21	5	5	1	2.2742	2.2742	100	2.3	2.3	Yes	2.3	101	98.9	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	308700	13C3-PFHxS	330713	2500	Avg	1.051753		2218.77	5	5	1	2.2188	2.2188	100	2.2	2.2	Yes	2.2	101	100.9	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	174629	13C5-PFNA	287075	1250	Avg	0.749868						1014.02	1014.0192	100				1250	81	81	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	422069	13C9-PFNA	174629	1250	Avg	1.347846		2241.49	5	5	1	2.2415	2.2415	100	2.2	2.2	Yes	2.4	93	93.4	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	126866	18O2-PFHxS	356964	2500	Avg	0.206645						4299.68	4299.678	100				5000	86	86	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	451245	13C2-8:2FTS	126866	5000	Avg	1.765809		10071	5	5	1	10.071	10.0715	100	10	10	Yes	9.2	109	109.5	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	324665	13C4-PFOS	552987	2500	Avg	0.360298						4073.79	4073.7907	100				5000	81	81	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	115964	D3-NMeFOSAA	324665	5000	Ln	0.747099	13.759	2372.03	5	5	1	2.372	2.372	100	2.4	2.4	Yes	2.4	99	98.8	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	225142	13C2-PFDA	289064	1250	Avg	0.917163						1061.52	1061.5147	100				1250	85	85	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	472793	13C6-PFDA	225142	1250	Avg	1.072259		2448.08	5	5	1	2.4481	2.4481	100	2.4	2.4	Yes	2.4	102	102.0	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	362155	13C4-PFOS	552987	2500	Avg	0.377269						4339.79	4339.7874	100				5000	87	87	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	164043	D5-NEtFOSAA	362155	5000	Avg	0.928484		2439.26	5	5	1	2.4393	2.4393	100	2.4	2.4	Yes	2.4	102	101.6	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	446123	13C4-PFOS	552987	2500	Avg	0.93405						2159.28	2159.2831	100				2500	86	86	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	391998	13C8-PFOS	446123	2500	Ln	0.918199	26.9149	2363.08	5	5	1	2.3631	2.3631	100	2.4	2.4	Yes	2.3	104	102.7	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	402198	13C8-PFOS	446123	2500	Avg	1.000521		2252.68	5	5	1	2.2527	2.2527	100	2.3	2.3	Yes	2.2	101	102.4	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	444904	13C8-PFOS	446123	2500	Avg	1.038139		2401.58	5	5	1	2.4016	2.4016	100	2.4	2.4	Yes	2.3	104	104.4	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	413843	13C8-PFOS	446123	2500	Avg	0.928176		2498.57	5	5	1	2.4986	2.4986	100	2.5	2.5	Yes	2.3	108	108.6	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	184352	13C2-PFDA	289064	1250	Avg	0.734493						1085.37	1085.366	100				1250	87	87	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	373792	13C7-PFUnA	184352	1250	Avg	0.968723		2616.33	5	5	1	2.6163	2.6163	100	2.6	2.6	Yes	2.4	109	109.0	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	160498	13C2-PFDA	289064	1250	Avg	0.66531						1043.19	1043.1856	100				1250	83	83	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	387431	13C2-PFDoA	160498	1250	Avg	1.238225		2436.89	5	5	1	2.4369	2.4369	100	2.4	2.4	Yes	2.4	102	101.5	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	209594	13C2-PFDoA	160498	1250	Avg	0.659525		2475.07	5	5	1	2.4751	2.4751	100	2.5	2.5	Yes	2.4	103	103.1	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	751566	13C4-PFOS	552987	2500	Avg	1.926242						1763.93	1763.9301	100				1250	71	71	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	840458	13C8-PFOSA	751566	2500	Avg	1.101995		2536.94	5	5	1	2.5369	2.5369	100	2.5	2.5	Yes	2.4	106	105.7	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	117373	13C2-PFDA	289064	1250	Avg	0.514737						986.05	986.0497	100				2500	79	79	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	215603	13C2-PFTeDA	117373	1250	Avg	0.948648		2420.42	5	5	1	2.4204	2.4204	100	2.4	2.4	Yes	2.4	101	100.9	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1768954	13C4-PFOS	552987	2500	Avg	0.747197						10703	10703.024	100				25000	43	43	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	2125161	D7-NMeFOSE	1768954	25000	Avg	1.187485		25292	5	5	1	25.292	25.2922	100	25	25	Yes	24	105	105.4	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	90515	13C4-PFOS	552987	2500	Avg	0.468708						873.06	873.0584	100				2500	35	35	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	113712	D3-NMeFOSA	90515	2500	Avg	1.228879		2555.74	5	5	1	2.5557	2.5557	100	2.6	2.6	Yes	2.4	106	106.5	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2106878	13C4-PFOS	552987	2500	Avg	0.967764						9842.27	9842.2641	100				25000	39	39	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	2336091	D9-NEtFOSE	2106878	25000	Avg	1.044104		26549	5	5	1	26.549	26.5489	100	27	27	Yes	24	111	110.6	Yes			
092524088.d	ZQ18113-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	97236	13C4-PFOS	552987	2500	Avg	0.548881						800.89	800.892	100				2500	32	32	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C4-PFBA	SESI-0111	2182032	13C3-PFBA	1206535	5000	Avg	1.136894						7953.74	7953.7369	36				10000	80	80	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	39625	13C4-PFBA	2182032	10000	Avg	0.895963		202.68	5	1.39	1	0.72908	0.7291	36	2	2	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C5-PFPeA	SESI-0112	810698	13C2-PFHxA	584524	2500	Avg	0.891167						3890.79	3890.7889	36				5000	78	78	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	260755	13C5-PFPeA	810698	5000	Avg	1.104878		1455.56	5	1.39	1	5.2358	5.2358	36	15	15	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	112860	18O2-PFHxS	417163	2500	Avg	0.164935						4100.72	4100.7326	36				5000	82	82	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C5-PFHxA	SESI-0113	468667	13C2-PFHxA	584524	2500	Avg	0.967301						2072.24	2072.2417	36				2500	83	83	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	853482	13C5-PFHxA	468667	2500	Avg	1.287042		3537.34	5	1.39	1	12.724	12.7243	36	35	35	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C3-PFBS	SESI-0116	478395	18O2-PFHxS	417163	2500	Avg	1.453938						1971.86	1971.855	36				2500	79	79	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	210873	13C3-PFBS	478395	2500	Avg	1.820068		605.46	5	1.39	1	2.1779	2.1779	36	6.1	6	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	482307	13C2-PFHxA	584524	2500	Avg	0.256272						8049.33	8049.3362	36				10000	80	80	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C4-PFHpA	SESI-0114	474815	13C2-PFHxA	584524	2500	Avg	0.991907						2047.35	2047.3455	36				2500	82	82	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	388444	13C4-PFHpA	474815	2500	Avg	1.191595		1716.39	5	1.39	1	6.1741	6.1741	36	17	17	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	149982	18O2-PFHxS	417163	2500	Avg	0.219087						4102.58	4102.5772	36				5000	82	82	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	750281	13C2-6:2FTS	149982	5000	Avg	2.148719		11641	5	1.39	1	41.873	41.8726	36	120	120	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C8-PFOA	SESI-0097	523972	13C4-PFOA	145447	2500	Avg	4.175238						2157.06	2157.0593	36				2500	86	86	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1246816	13C8-PFOA	523972	2500	Avg	1.257832		4729.46	5	1.39	1	17.012	17.0124	36	47	47	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C3-PFHxS	SESI-0096	358695	18O2-PFHxS	417163	2500	Avg	1.069919						2009.13	2009.1328	36				2500	80	80	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	149507	13C3-PFHxS	358695	2500	Avg	1.189606		875.94	5	1.39	1	3.1509	3.1509	36	8.8	8.8	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2057191	13C3-PFHxS	358695	2500	Avg	1.051753		13632	5	1.39	1	49.038	49.0378	36	140	140	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C9-PFNA	SESI-0099	167754	13C5-PFNA	310465	1250	Avg	0.749868						900.71	900.7109	36				1250	72	72	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	136316	13C9-PFNA	167754	1250	Avg	1.347846		753.6	5	1.39	1	2.7108	2.7108	36	7.5	7.5	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	162114	18O2-PFHxS	417163	2500	Avg	0.206645						4701.43	4701.4286	36				5000	94	94	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	85852	13C2-8:2FTS	162114	5000	Avg	1.765809		1499.53	5	1.39	1	5.394	5.394	36	15	15	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	420702	13C4-PFOS	607449	2500	Avg	0.360298						4805.55	4805.5479	36				5000	96	96	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	55773	D3-NMeFOSAA	420702	5000	Ln	0.747099	13.759	868.82	5	1.39	1	3.1253	3.1253	36	8.7	8.7	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C6-PFDA	SESI-0115	251518	13C2-PFDA	324572	1250	Avg	0.917163						1056.14	1056.14	36				1250	84	84	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	24813	13C6-PFDA	251518	1250	Avg	1.072259		115.01	5	1.39	1	0.41369	0.4137	36	1.1	1.1	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	429123	13C4-PFOS	607449	2500	Avg	0.377269						4681.24	4681.2395	36				5000	94	94	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	59145	D5-NEtFOSAA	429123	5000	Avg	0.928484		742.22	5	1.39	1	2.6699	2.6699	36	7.4	7.4	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C8-PFOS	SESI-0098	460232	13C4-PFOS	607449	2500	Avg	0.93405						2027.86	2027.8549	36				2500	81	81	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	132177	13C8-PFOS	460232	2500	Ln	0.918199	26.9149	752.64	5	1.39	1	2.7073	2.7073	36	7.5	7.5	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	11138	13C8-PFOS	460232	2500	Avg	1.038139		58.279	5	1.39	1	0.20964	0.2096	36	0.58	0.58	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C7-PFUnA	SESI-0117	208305	13C2-PFDA	324572	1250	Avg	0.734493						1092.22	1092.2222	36				1250	87	87	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	61359	13C7-PFUnA	208305	1250	Avg	0.968723		380.09	5	1.39	1	1.3672	1.3672	36	3.8	3.8	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C2-PFDoA	SESI-0118	183163	13C2-PFDA	324572	1250	Avg	0.66531						1060.26	1060.2607	36				1250	85	85	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	20705	13C2-PFDoA	183163	1250	Avg	0.659525		214.25	5	1.39	1	0.77067	0.7707	36	2.1	2.1	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C8-PFOSA	SESI-0107	908340	13C4-PFOS	607449	2500	Avg	1.926242						1940.74	1940.7419	36				2500	78	78	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	215504	13C8-PFOSA	908340	2500	Avg	1.101995		538.23	5	1.39	1	1.9361	1.9361	36	5.4	5.4	Yes							
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	114182	13C2-PFDA	324572	1250	Avg	0.514737						854.3	854.3016	36				1250	68	68	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2420181	13C4-PFOS	607449	2500	Avg	0.747197						13330	13330.392	36				25000	53	53	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	116466	13C4-PFOS	607449	2500	Avg	0.468708						1022.65	1022.6499	36				2500	41	41	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2820331	13C4-PFOS	607449	2500	Avg	0.967764						11994	11993.911	36				25000	48	48	Yes			
092524096.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	108481	13C4-PFOS	607449	2500	Avg	0.548881						813.4	813.4028	36				2500	33	33	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C4-PFBA	SESI-0111	2106074	13C3-PFBA	1010680	5000	Avg	1.136894						9164.53	9164.5255	42.8				10000	92	92	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C5-PFPeA	SESI-0112	833677	13C2-PFHxA	519468	2500	Avg	0.891167						4502.15	4502.1497	42.8				5000	90	90	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	103231	18O2-PFHxS	365382	2500	Avg	0.164935						4282.42	4282.429	42.8				5000	86	86	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C5-PFHxA	SESI-0113	467106	13C2-PFHxA	519468	2500	Avg	0.967301						2323.99	2323.9941	42.8				2500	93	93	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C3-PFBS	SESI-0116	463409	18O2-PFHxS	365382	2500	Avg	1.453938						2180.78	2180.7779	42.8				2500	87	87	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	510733	13C2-PFHxA	519468	2500	Avg	0.256272						9591.21	9591.2226	42.8				10000	96	96	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C4-PFHpA	SESI-0114	488281	13C2-PFHxA	519468	2500	Avg	0.991907						2369.08	2369.0819	42.8				2500	95	95	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	156634	18O2-PFHxS	365382	2500	Avg	0.219087						4891.74	4891.7279	42.8				5000	98	98	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	256380	13C2-6:2FTS	156634	5000	Avg	2.148719		3808.8	5	1.17	1	16.277	16.2769	42.8	38	38	Yes							
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C8-PFOA	SESI-0097	552855	13C4-PFOA	131971	2500	Avg	4.175238						2508.37	2508.3695	42.8				2500	100	100	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	36135	13C8-PFOA	552855	2500	Avg	1.257832		129.91	5	1.17	1	0.55516	0.5552	42.8	1.3	1.3	Yes							
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C3-PFHxS	SESI-0096	372740	18O2-PFHxS	365382	2500	Avg	1.069919						2383.68	2383.68	42.8				2500	95	95	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C9-PFNA	SESI-0099	172815	13C5-PFNA	247573	1250	Avg	0.749868						1163.6	1163.599	42.8				1250	93	93	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	31784	13C9-PFNA	172815	1250	Avg	1.347846		170.57	5	1.17	1	0.72892	0.7289	42.8	1.7	1.7	Yes							
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	123901	18O2-PFHxS	365382	2500	Avg	0.206645						4102.44	4102.445	42.8				5000	82	82	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	314804	13C4-PFOS	535688	2500	Avg	0.360298						4077.62	4077.6175	42.8				5000	82	82	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C6-PFDA	SESI-0115	210083	13C2-PFDA	246639	1250	Avg	0.917163						1160.89	1160.8942	42.8				1250	93	93	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	360331	13C4-PFOS	535688	2500	Avg	0.377269						4457.37	4457.3691	42.8				5000	89	89	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C8-PFOS	SESI-0098	488571	13C4-PFOS	535688	2500	Avg	0.93405						2441.1	2441.1005	42.8				2500	98	98	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C7-PFUnA	SESI-0117	188080	13C2-PFDA	246639	1250	Avg	0.734493						1297.79	1297.7864	42.8				1250	104	104	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	56239	13C7-PFUnA	188080	1250	Avg	0.968723		385.84	5	1.17	1	1.6489	1.6489	42.8	3.9	3.9	Yes							
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C2-PFDoA	SESI-0118	159284	13C2-PFDA	246639	1250	Avg	0.66531						1213.38	1213.3787	42.8				1250	97	97	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	14891	13C2-PFDoA	159284	1250	Avg	0.659525		177.19	5	1.17	1	0.75721	0.7572	42.8	1.8	1.8	Yes							
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C8-PFOSA	SESI-0107	816656	13C4-PFOS	535688	2500	Avg	1.926242						1978.59	1978.5927	42.8				2500	79	79	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	110419	13C2-PFDA	246639	1250	Avg	0.514737						1087.19	1087.1931	42.8				1250	87	87	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1959286	13C4-PFOS	535688	2500	Avg	0.747197						12237	12237.447	42.8				25000	49	49	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	106942	13C4-PFOS	535688	2500	Avg	0.468708						1064.81	1064.8147	42.8				2500	43	43	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2305286	13C4-PFOS	535688	2500	Avg	0.967764						11117	11116.893	42.8				25000	44	44	Yes			
092524127.d	ZH22013-054	CACMW-CO-1-081924	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	104702	13C4-PFOS	535688	2500	Avg	0.548881						890.23	890.2354	42.8				2500	36	36	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C4-PFBA	SESI-0111	2076762	13C3-PFBA	1080208	5000	Avg	1.136894						8455.31	8455.3068	42.5				10000	85	85	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C5-PFPeA	SESI-0112	827573	13C2-PFHxA	543575	2500	Avg	0.891167						4270.98	4270.9821	42.5				5000	85	85	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	105345	18O2-PFHxS	399827	2500	Avg	0.164935						3993.63	3993.6407	42.5				5000	80	80	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C5-PFHxA	SESI-0113	464647	13C2-PFHxA	543575	2500	Avg	0.967301						2209.24	2209.2356	42.5				2500	88	88	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C3-PFBS	SESI-0116	487855	18O2-PFHxS	399827	2500	Avg	1.453938						2098.04	2098.0352	42.5				2500	84	84	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	484717	13C2-PFHxA	543575	2500	Avg	0.256272						8698.95	8698.9659	42.5				10000	87	87	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C4-PFHpA	SESI-0114	439685	13C2-PFHxA	543575	2500	Avg	0.991907						2038.69	2038.6902	42.5				2500	82	82	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	146720	18O2-PFHxS	399827	2500	Avg	0.219087						4187.37	4187.3629	42.5				5000	84	84	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	287601	13C2-6:2FTS	146720	5000	Avg	2.148719		4561.33	5	1.18	1	19.328	19.3277	42.5	46	45	Yes							
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C8-PFOA	SESI-0097	518139	13C4-PFOA	152030	2500	Avg	4.175238						2040.68	2040.684	42.5				2500	82	82	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	29581	13C8-PFOA	518139	2500	Avg	1.257832		113.47	5	1.18	1	0.48081	0.4808	42.5	1.1	1.1	Yes							
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C3-PFHxS	SESI-0096	380497	18O2-PFHxS	399827	2500	Avg	1.069919						2223.66	2223.6592	42.5				2500	89	89	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C9-PFNA	SESI-0099	169279	13C5-PFNA	277207	1250	Avg	0.749868						1017.94	1017.9445	42.5				1250	81	81	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	31165	13C9-PFNA	169279	1250	Avg	1.347846		170.74	5	1.18	1	0.72347	0.7235	42.5	1.7	1.7	Yes							
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	128076	18O2-PFHxS	399827	2500	Avg	0.206645						3875.35	3875.3483	42.5				5000	78	78	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	315867	13C4-PFOS	542251	2500	Avg	0.360298						4041.87	4041.8673	42.5				5000	81	81	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C6-PFDA	SESI-0115	220368	13C2-PFDA	266604	1250	Avg	0.917163						1126.54	1126.5367	42.5				1250	90	90	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	343796	13C4-PFOS	542251	2500	Avg	0.377269						4201.35	4201.3547	42.5				5000	84	84	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C8-PFOS	SESI-0098	472072	13C4-PFOS	542251	2500	Avg	0.93405						2330.12	2330.1172	42.5				2500	93	93	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C7-PFUnA	SESI-0117	185529	13C2-PFDA	266604	1250	Avg	0.734493						1184.32	1184.3157	42.5				1250	95	95	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	59495	13C7-PFUnA	185529	1250	Avg	0.968723		413.79	5	1.18	1	1.7533	1.7533	42.5	4.1	4.1	Yes							
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C2-PFDoA	SESI-0118	160046	13C2-PFDA	266604	1250	Avg	0.66531						1127.88	1127.8832	42.5				1250	90	90	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	18282	13C2-PFDoA	160046	1250	Avg	0.659525		216.5	5	1.18	1	0.91737	0.9174	42.5	2.2	2.2	Yes							
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C8-PFOSA	SESI-0107	810178	13C4-PFOS	542251	2500	Avg	1.926242						1939.14	1939.1404	42.5				2500	78	78	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	105523	13C2-PFDA	266604	1250	Avg	0.514737						961.18	961.1808	42.5				1250	77	77	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2000840	13C4-PFOS	542251	2500	Avg	0.747197						12346	12345.733	42.5				25000	49	49	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	101946	13C4-PFOS	542251	2500	Avg	0.468708						1002.78	1002.7842	42.5				2500	40	40	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2308328	13C4-PFOS	542251	2500	Avg	0.967764						10997	10996.835	42.5				25000	44	44	Yes			
092524128.d	ZH22013-055	CACMW-CO-2-081924	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	106745	13C4-PFOS	542251	2500	Avg	0.548881						896.62	896.6212	42.5				2500	36	36	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C4-PFBA	SESI-0111	2298378	13C3-PFBA	1135016	5000	Avg	1.136894						8905.73	8905.7295	33.1				10000	89	89	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C5-PFPeA	SESI-0112	843721	13C2-PFHxA	556784	2500	Avg	0.891167						4251.02	4251.0188	33.1				5000	85	85	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	108319	18O2-PFHxS	374058	2500	Avg	0.164935						4389.26	4389.2759	33.1				5000	88	88	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C5-PFHxA	SESI-0113	496362	13C2-PFHxA	556784	2500	Avg	0.967301						2304.04	2304.0407	33.1				2500	92	92	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	8526	13C5-PFHxA	496362	2500	Avg	1.287042		33.365	5	1.51	1	0.11048	0.1105	33.1	0.33	0.33	Yes							
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C3-PFBS	SESI-0116	483099	18O2-PFHxS	374058	2500	Avg	1.453938						2220.71	2220.7073	33.1				2500	89	89	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	534958	13C2-PFHxA	556784	2500	Avg	0.256272						9372.84	9372.8527	33.1				10000	94	94	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C4-PFHpA	SESI-0114	517515	13C2-PFHxA	556784	2500	Avg	0.991907						2342.64	2342.6384	33.1				2500	94	94	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	144211	18O2-PFHxS	374058	2500	Avg	0.219087						4399.3	4399.2925	33.1				5000	88	88	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	357426	13C2-6:2FTS	144211	5000	Avg	2.148719		5767.37	5	1.51	1	19.097	19.0973	33.1	58	58	Yes							
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C8-PFOA	SESI-0097	551981	13C4-PFOA	137420	2500	Avg	4.175238						2405.1	2405.099	33.1				2500	96	96	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	45889	13C8-PFOA	551981	2500	Avg	1.257832		165.23	5	1.51	1	0.54714	0.5471	33.1	1.7	1.7	Yes							
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C3-PFHxS	SESI-0096	341488	18O2-PFHxS	374058	2500	Avg	1.069919						2133.17	2133.1707	33.1				2500	85	85	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C9-PFNA	SESI-0099	177918	13C5-PFNA	285003	1250	Avg	0.749868						1040.63	1040.6283	33.1				1250	83	83	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	38000	13C9-PFNA	177918	1250	Avg	1.347846		198.08	5	1.51	1	0.65588	0.6559	33.1	2	2	Yes							
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	138859	18O2-PFHxS	374058	2500	Avg	0.206645						4491.07	4491.0738	33.1				5000	90	90	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	385642	13C4-PFOS	538192	2500	Avg	0.360298						4971.93	4971.9328	33.1				5000	99	99	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C6-PFDA	SESI-0115	235255	13C2-PFDA	298688	1250	Avg	0.917163						1073.46	1073.4568	33.1				1250	86	86	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	6651	13C6-PFDA	235255	1250	Avg	1.072259		32.958	5	1.51	1	0.10913	0.1091	33.1	0.33	0.33	Yes							
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	383071	13C4-PFOS	538192	2500	Avg	0.377269						4716.62	4716.6204	33.1				5000	94	94	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C8-PFOS	SESI-0098	475436	13C4-PFOS	538192	2500	Avg	0.93405						2364.42	2364.4205	33.1				2500	95	95	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C7-PFUnA	SESI-0117	196744	13C2-PFDA	298688	1250	Avg	0.734493						1121	1121.0012	33.1				1250	90	90	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	69659	13C7-PFUnA	196744	1250	Avg	0.968723		456.86	5	1.51	1	1.5128	1.5128	33.1	4.6	4.6	Yes							
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C2-PFDoA	SESI-0118	156359	13C2-PFDA	298688	1250	Avg	0.66531						983.54	983.5378	33.1				1250	79	79	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	21695	13C2-PFDoA	156359	1250	Avg	0.659525		262.98	5	1.51	1	0.87078	0.8708	33.1	2.6	2.6	Yes							
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C8-PFOSA	SESI-0107	820386	13C4-PFOS	538192	2500	Avg	1.926242						1978.38	1978.3821	33.1				2500	79	79	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	111354	13C2-PFDA	298688	1250	Avg	0.514737						905.34	905.342	33.1				1250	72	72	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1972863	13C4-PFOS	538192	2500	Avg	0.747197						12265	12264.916	33.1				25000	49	49	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	96052	13C4-PFOS	538192	2500	Avg	0.468708						951.93	951.934	33.1				2500	38	38	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2345056	13C4-PFOS	538192	2500	Avg	0.967764						11256	11256.063	33.1				25000	45	45	Yes			
092524129.d	ZH22013-056	CACMW-CO-3-081924	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	102680	13C4-PFOS	538192	2500	Avg	0.548881						868.98	868.9813	33.1				2500	35	35	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C4-PFBA	SESI-0111	2157990	13C3-PFBA	1277228	5000	Avg	1.136894						7430.72	7430.7222	44.2				10000	74	74	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C5-PFPeA	SESI-0112	839526	13C2-PFHxA	614026	2500	Avg	0.891167						3835.56	3835.5558	44.2				5000	77	77	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	105531	18O2-PFHxS	430900	2500	Avg	0.164935						3712.19	3712.1947	44.2				5000	74	74	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C5-PFHxA	SESI-0113	456514	13C2-PFHxA	614026	2500	Avg	0.967301						1921.52	1921.5236	44.2				2500	77	77	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	10097	13C5-PFHxA	456514	2500	Avg	1.287042		42.962	5	1.13	1	0.1901	0.1901	44.2	0.43	0.43	Yes							
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C3-PFBS	SESI-0116	496161	18O2-PFHxS	430900	2500	Avg	1.453938						1979.89	1979.8863	44.2				2500	79	79	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	512352	13C2-PFHxA	614026	2500	Avg	0.256272						8139.92	8139.9273	44.2				10000	81	81	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C4-PFHpA	SESI-0114	482972	13C2-PFHxA	614026	2500	Avg	0.991907						1982.46	1982.4591	44.2				2500	79	79	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	144738	18O2-PFHxS	430900	2500	Avg	0.219087						3832.92	3832.9175	44.2				5000	77	77	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	300578	13C2-6:2FTS	144738	5000	Avg	2.148719		4832.42	5	1.13	1	21.382	21.3824	44.2	48	48	Yes							
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C8-PFOA	SESI-0097	527937	13C4-PFOA	162714	2500	Avg	4.175238						1942.75	1942.7457	44.2				2500	78	78	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	38244	13C8-PFOA	527937	2500	Avg	1.257832		143.98	5	1.13	1	0.63707	0.6371	44.2	1.4	1.4	Yes							
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C3-PFHxS	SESI-0096	349356	18O2-PFHxS	430900	2500	Avg	1.069919						1894.44	1894.4399	44.2				2500	76	76	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C9-PFNA	SESI-0099	184174	13C5-PFNA	312592	1250	Avg	0.749868						982.15	982.1451	44.2				1250	79	79	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	33273	13C9-PFNA	184174	1250	Avg	1.347846		167.55	5	1.13	1	0.74135	0.7414	44.2	1.7	1.7	Yes							
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	135594	18O2-PFHxS	430900	2500	Avg	0.206645						3806.97	3806.9668	44.2				5000	76	76	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	307394	13C4-PFOS	630163	2500	Avg	0.360298						3384.7	3384.7036	44.2				5000	68	68	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C6-PFDA	SESI-0115	218488	13C2-PFDA	313031	1250	Avg	0.917163						951.27	951.2698	44.2				1250	76	76	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	361651	13C4-PFOS	630163	2500	Avg	0.377269						3802.99	3802.9942	44.2				5000	76	76	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C8-PFOS	SESI-0098	503440	13C4-PFOS	630163	2500	Avg	0.93405						2138.28	2138.2806	44.2				2500	86	86	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C7-PFUnA	SESI-0117	190780	13C2-PFDA	313031	1250	Avg	0.734493						1037.21	1037.2128	44.2				1250	83	83	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	51375	13C7-PFUnA	190780	1250	Avg	0.968723		347.48	5	1.13	1	1.5375	1.5375	44.2	3.5	3.5	Yes							
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C2-PFDoA	SESI-0118	146966	13C2-PFDA	313031	1250	Avg	0.66531						882.1	882.0953	44.2				1250	71	71	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	18887	13C2-PFDoA	146966	1250	Avg	0.659525		243.57	5	1.13	1	1.0777	1.0777	44.2	2.4	2.4	Yes							
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C8-PFOSA	SESI-0107	803650	13C4-PFOS	630163	2500	Avg	1.926242						1655.17	1655.1723	44.2				2500	66	66	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	113231	13C2-PFDA	313031	1250	Avg	0.514737						878.42	878.4208	44.2				1250	70	70	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1843507	13C4-PFOS	630163	2500	Avg	0.747197						9788.06	9788.0635	44.2				25000	39	39	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	92508	13C4-PFOS	630163	2500	Avg	0.468708						783	783.0041	44.2				2500	31	31	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2217959	13C4-PFOS	630163	2500	Avg	0.967764						9092.25	9092.2456	44.2				25000	36	36	Yes			
092524130.d	ZH22013-057	CACMW-CO-4-081924	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	98520	13C4-PFOS	630163	2500	Avg	0.548881						712.09	712.0874	44.2				2500	28	28	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C4-PFBA	SESI-0111	2210624	13C3-PFBA	1264188	5000	Avg	1.136894						7690.48	7690.4765	42.4				10000	77	77	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C5-PFPeA	SESI-0112	850372	13C2-PFHxA	680040	2500	Avg	0.891167						3507.97	3507.9662	42.4				5000	70	70	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	110797	18O2-PFHxS	427638	2500	Avg	0.164935						3927.15	3927.1627	42.4				5000	79	79	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C5-PFHxA	SESI-0113	477834	13C2-PFHxA	680040	2500	Avg	0.967301						1816.02	1816.0214	42.4				2500	73	73	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C3-PFBS	SESI-0116	498321	18O2-PFHxS	427638	2500	Avg	1.453938						2003.67	2003.6738	42.4				2500	80	80	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	522236	13C2-PFHxA	680040	2500	Avg	0.256272						7491.53	7491.5416	42.4				10000	75	75	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C4-PFHpA	SESI-0114	473935	13C2-PFHxA	680040	2500	Avg	0.991907						1756.52	1756.5211	42.4				2500	70	70	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	159405	18O2-PFHxS	427638	2500	Avg	0.219087						4253.53	4253.5256	42.4				5000	85	85	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	318711	13C2-6:2FTS	159405	5000	Avg	2.148719		4652.49	5	1.18	1	19.714	19.7139	42.4	47	46	Yes							
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C8-PFOA	SESI-0097	572138	13C4-PFOA	158778	2500	Avg	4.175238						2157.59	2157.5916	42.4				2500	86	86	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	43025	13C8-PFOA	572138	2500	Avg	1.257832		149.46	5	1.18	1	0.63332	0.6333	42.4	1.5	1.5	Yes							
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C3-PFHxS	SESI-0096	354959	18O2-PFHxS	427638	2500	Avg	1.069919						1939.51	1939.5055	42.4				2500	78	78	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C9-PFNA	SESI-0099	175498	13C5-PFNA	330771	1250	Avg	0.749868						884.44	884.4432	42.4				1250	71	71	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	28709	13C9-PFNA	175498	1250	Avg	1.347846		151.71	5	1.18	1	0.64284	0.6428	42.4	1.5	1.5	Yes							
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	144804	18O2-PFHxS	427638	2500	Avg	0.206645						4096.56	4096.5605	42.4				5000	82	82	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	329701	13C4-PFOS	632264	2500	Avg	0.360298						3618.26	3618.2616	42.4				5000	72	72	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C6-PFDA	SESI-0115	224685	13C2-PFDA	346410	1250	Avg	0.917163						883.99	883.9896	42.4				1250	71	71	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	365072	13C4-PFOS	632264	2500	Avg	0.377269						3826.21	3826.2114	42.4				5000	77	77	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C8-PFOS	SESI-0098	483765	13C4-PFOS	632264	2500	Avg	0.93405						2047.89	2047.8865	42.4				2500	82	82	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C7-PFUnA	SESI-0117	207758	13C2-PFDA	346410	1250	Avg	0.734493						1020.68	1020.6802	42.4				1250	82	82	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	52616	13C7-PFUnA	207758	1250	Avg	0.968723		326.79	5	1.18	1	1.3847	1.3847	42.4	3.3	3.3	Yes							
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C2-PFDoA	SESI-0118	161855	13C2-PFDA	346410	1250	Avg	0.66531						877.85	877.8527	42.4				1250	70	70	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	18972	13C2-PFDoA	161855	1250	Avg	0.659525		222.16	5	1.18	1	0.94136	0.9414	42.4	2.2	2.2	Yes							
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C8-PFOSA	SESI-0107	847141	13C4-PFOS	632264	2500	Avg	1.926242						1738.95	1738.9472	42.4				2500	70	70	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	117465	13C2-PFDA	346410	1250	Avg	0.514737						823.46	823.4603	42.4				1250	66	66	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1955989	13C4-PFOS	632264	2500	Avg	0.747197						10351	10350.774	42.4				25000	41	41	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	95846	13C4-PFOS	632264	2500	Avg	0.468708						808.56	808.5617	42.4				2500	32	32	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2283523	13C4-PFOS	632264	2500	Avg	0.967764						9329.91	9329.9106	42.4				25000	37	37	Yes			
092524131.d	ZH22013-058	CACMW-CO-5-081924	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	99520	13C4-PFOS	632264	2500	Avg	0.548881						716.92	716.925	42.4				2500	29	29	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3485998	13C3-PFBA	1715532	5000	Avg	1.150256						8832.91	8832.91	100				10000	88	88	Yes			
092524A049.d	ZQ18112-001		Method_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2304	13C4-PFBA	3485998	10000	Avg	0.860777		7.6783	5	5	1	0.007678	0.0077	100	ND	0.008	Yes							
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1530691	13C2-PFHxA	1060875	2500	Avg	0.795934						4531.96	4531.9621	100				5000	91	91	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	207244	18O2-PFHxS	680930	2500	Avg	0.18253						4168.54	4168.5523	100				5000	83	83	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	1033096	13C2-PFHxA	1060875	2500	Avg	1.087908						2237.81	2237.8156	100				2500	90	90	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	738384	18O2-PFHxS	680930	2500	Avg	1.317939						2056.95	2056.9537	100				2500	82	82	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	747393	13C2-PFHxA	1060875	2500	Avg	0.192552						9146.96	9146.9601	100				10000	91	91	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	1189253	13C2-PFHxA	1060875	2500	Avg	1.191993						2351.13	2351.1284	100				2500	94	94	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	246417	18O2-PFHxS	680930	2500	Avg	0.205065						4411.8	4411.8086	100				5000	88	88	Yes			
092524A049.d	ZQ18112-001		Method_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1693	13C2-6:2FTS	246417	5000	Avg	2.126484		16.155	5	5	1	0.01615	0.0162	100	ND	0.016	Yes							
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1407756	13C4-PFOA	219639	2500	Avg	6.935128						2310.49	2310.4866	100				2500	92	92	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	700650	18O2-PFHxS	680930	2500	Avg	1.159703						2218.15	2218.155	100				2500	89	89	Yes			
092524A049.d	ZQ18112-001		Method_Blank	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3108	13C3-PFHxS	700650	2500	Avg	1.151233		9.6329	5	5	1	0.009633	0.0096	100	ND	0.01	Yes							
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	693133	13C5-PFNA	989112	1250	Avg	0.884789						990.01	990.0142	100				1250	79	79	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	231422	18O2-PFHxS	680930	2500	Avg	0.201772						4210.96	4210.9616	100				5000	84	84	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	747694	13C4-PFOS	838332	2500	Avg	0.460729						4839.52	4839.5202	100				5000	97	97	Yes			
092524A049.d	ZQ18112-001		Method_Blank	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	556	D3-NMeFOSAA	747694	5000	Avg	0.822512		4.5204	5	5	1	0.00452	0.0045	100	ND	0.005	Yes							
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	647991	13C2-PFDA	610896	1250	Avg	1.142396						1160.63	1160.6333	100				1250	93	93	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	537992	13C4-PFOS	838332	2500	Avg	0.363285						4416.23	4416.2364	100				5000	88	88	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	769659	13C4-PFOS	838332	2500	Avg	1.0092						2274.29	2274.286	100				2500	91	91	Yes			
092524A049.d	ZQ18112-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3332	13C8-PFOS	769659	2500	Avg	0.972082		11.134	5	5	1	0.01113	0.0111	100	ND	0.011	Yes							
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	539263	13C2-PFDA	610896	1250	Avg	1.021306						1080.41	1080.4072	100				1250	86	86	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	496552	13C2-PFDA	610896	1250	Avg	0.966171						1051.61	1051.607	100				1250	84	84	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	1065284	13C4-PFOS	838332	2500	Avg	1.46881						2162.84	2162.8368	100				2500	87	87	Yes			
092524A049.d	ZQ18112-001		Method_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	2728	13C8-PFOSA	1065284	2500	Avg	1.008917		6.3455	5	5	1	0.006345	0.0063	100	ND	0.006	Yes							
092524A049.d	ZQ18112-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	440815	13C2-PFDA	610896	1250	Avg	0.890895						1012.45	1012.4476	100				1250	81	81	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2829060	13C4-PFOS	838332	2500	Avg	0.602535						14002	14001.799	100				25000	56	56	Yes			
092524A049.d	ZQ18112-001		Method_Blank	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1947	D7-NMeFOSE	2829060	25000	Avg	1.021618		16.841	5	5	1	0.01684	0.0168	100	ND	0.017	Yes							
092524A049.d	ZQ18112-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	153222	13C4-PFOS	838332	2500	Avg	0.374254						1220.9	1220.8959	100				2500	49	49	Yes			
092524A049.d	ZQ18112-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2956686	13C4-PFOS	838332	2500	Avg	0.664194						13275	13274.991	100				25000	53	53	Yes			
092524A049.d	ZQ18112-001		Method_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	2598	D9-NEtFOSE	2956686	25000	Avg	1.107685		19.832	5	5	1	0.01983	0.0198	100	ND	0.02	Yes							
092524A049.d	ZQ18112-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	145299	13C4-PFOS	838332	2500	Avg	0.398062						1088.52	1088.5186	100				2500	44	44	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3611406	13C3-PFBA	1724757	5000	Avg	1.150256						9101.73	9101.7289	100				10000	91	91	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	3007241	13C4-PFBA	3611406	10000	Avg	0.860777		9673.89	5	5	1	9.6739	9.6739	100	9.7	9.7	Yes	9.6	101	100.8	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1529624	13C2-PFHxA	1133089	2500	Avg	0.795934						4240.17	4240.1734	100				5000	85	85	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1399259	13C5-PFPeA	1529624	5000	Avg	0.921502		4963.49	5	5	1	4.9635	4.9635	100	5	5	Yes	4.8	103	103.4	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	203367	18O2-PFHxS	603150	2500	Avg	0.18253						4618.07	4618.0742	100				5000	92	92	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	774118	13C2-4:2FTS	203367	5000	Avg	1.989363		9567.15	5	5	1	9.5672	9.5672	100	9.6	9.6	Yes	9.0	106	106.3	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	1094992	13C2-PFHxA	1133089	2500	Avg	1.087908						2220.72	2220.7249	100				2500	89	89	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	911104	13C5-PFHxA	1094992	2500	Avg	0.90903		2288.33	5	5	1	2.2883	2.2883	100	2.3	2.3	Yes	2.4	95	95.3	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	3756358	13C5-PFHxA	1094992	2500	Avg	0.163284		52523	5	5	1	52.523	52.5233	100	53	53	Yes	60	88	87.5	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	770441	18O2-PFHxS	603150	2500	Avg	1.317939						2423.03	2423.0298	100				2500	97	97	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	811814	13C3-PFBS	770441	2500	Avg	1.269173		2075.56	5	5	1	2.0756	2.0756	100	2.1	2.1	Yes	2.1	98	98.8	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	747818	13C2-PFHxA	1133089	2500	Avg	0.192552						8568.88	8568.8761	100				10000	86	86	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1156102	13C2-PFHxA	1133089	2500	Avg	1.191993						2139.93	2139.9244	100				2500	86	86	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1145360	13C4-PFHpA	1156102	2500	Avg	1.08709		2278.35	5	5	1	2.2783	2.2783	100	2.3	2.3	Yes	2.4	95	94.9	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	245292	18O2-PFHxS	603150	2500	Avg	0.205065						4957.99	4958	100				5000	99	99	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1020863	13C2-6:2FTS	245292	5000	Avg	2.126484		9785.7	5	5	1	9.7857	9.7857	100	9.8	9.8	Yes	9.1	107	107.5	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1422310	13C4-PFOA	213945	2500	Avg	6.935128						2396.5	2396.5012	100				2500	96	96	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1177955	13C8-PFOA	1422310	2500	Avg	0.884977		2339.6	5	5	1	2.3396	2.3396	100	2.3	2.3	Yes	2.4	97	97.5	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	679519	18O2-PFHxS	603150	2500	Avg	1.159703						2428.67	2428.6755	100				2500	97	97	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	724889	13C3-PFHxS	679519	2500	Avg	1.183053		2254.27	5	5	1	2.2543	2.2543	100	2.3	2.3	Yes	2.3	100	98.0	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	695626	13C3-PFHxS	679519	2500	Avg	1.151233		2223.06	5	5	1	2.2231	2.2231	100	2.2	2.2	Yes	2.2	102	101.1	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	685804	13C5-PFNA	908607	1250	Avg	0.884789						1066.34	1066.3364	100				1250	85	85	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	1139995	13C9-PFNA	685804	1250	Avg	0.839373		2475.47	5	5	1	2.4755	2.4755	100	2.5	2.5	Yes	2.4	103	103.1	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	216074	18O2-PFHxS	603150	2500	Avg	0.201772						4438.71	4438.7051	100				5000	89	89	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	796703	13C2-8:2FTS	216074	5000	Avg	1.818805		10136	5	5	1	10.136	10.1363	100	10	10	Yes	9.2	110	110.2	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	768233	13C4-PFOS	837377	2500	Avg	0.460729						4978.13	4978.1318	100				5000	100	100	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	288867	D3-NMeFOSAA	768233	5000	Avg	0.822512		2285.77	5	5	1	2.2858	2.2858	100	2.3	2.3	Yes	2.4	95	95.2	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	683183	13C2-PFDA	629707	1250	Avg	1.142396						1187.11	1187.1125	100				1250	95	95	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	1119638	13C6-PFDA	683183	1250	Avg	0.862667		2374.69	5	5	1	2.3747	2.3747	100	2.4	2.4	Yes	2.4	99	98.9	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	557472	13C4-PFOS	837377	2500	Avg	0.363285						4581.36	4581.3616	100				5000	92	92	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	300363	D5-NEtFOSAA	557472	5000	Avg	1.058985		2543.92	5	5	1	2.5439	2.5439	100	2.5	2.5	Yes	2.4	106	106.0	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	776269	13C4-PFOS	837377	2500	Avg	1.0092						2296.43	2296.4341	100				2500	92	92	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	624076	13C8-PFOS	776269	2500	Avg	0.875705		2295.13	5	5	1	2.2951	2.2951	100	2.3	2.3	Yes	2.3	101	99.8	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	672741	13C8-PFOS	776269	2500	Avg	0.972082		2228.81	5	5	1	2.2288	2.2288	100	2.2	2.2	Yes	2.2	100	101.3	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	764495	13C8-PFOS	776269	2500	Avg	1.079883		2279.95	5	5	1	2.28	2.28	100	2.3	2.3	Yes	2.3	99	99.1	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	720406	13C8-PFOS	776269	2500	Avg	0.978061		2372.13	5	5	1	2.3721	2.3721	100	2.4	2.4	Yes	2.3	103	103.1	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	613147	13C2-PFDA	629707	1250	Avg	1.021306						1191.74	1191.7364	100				1250	95	95	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	1045307	13C7-PFUnA	613147	1250	Avg	0.941499		2263.44	5	5	1	2.2634	2.2634	100	2.3	2.3	Yes	2.4	94	94.3	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	563317	13C2-PFDA	629707	1250	Avg	0.966171						1157.36	1157.365	100				1250	93	93	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1234720	13C2-PFDoA	563317	1250	Avg	1.182085		2317.81	5	5	1	2.3178	2.3178	100	2.3	2.3	Yes	2.4	97	96.6	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	760296	13C2-PFDoA	563317	1250	Avg	0.765454		2204.05	5	5	1	2.204	2.204	100	2.2	2.2	Yes	2.4	92	91.8	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	1039900	13C4-PFOS	837377	2500	Avg	1.46881						2113.71	2113.7077	100				1250	85	85	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	1016373	13C8-PFOSA	1039900	2500	Avg	1.008917		2421.84	5	5	1	2.4218	2.4218	100	2.4	2.4	Yes	2.4	101	100.9	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	463217	13C2-PFDA	629707	1250	Avg	0.890895						1032.12	1032.1183	100				2500	83	83	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	832686	13C2-PFTeDA	463217	1250	Avg	0.92374		2432.52	5	5	1	2.4325	2.4325	100	2.4	2.4	Yes	2.4	101	101.4	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2843791	13C4-PFOS	837377	2500	Avg	0.602535						14091	14090.759	100				25000	56	56	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	2830773	D7-NMeFOSE	2843791	25000	Avg	1.021618		24359	5	5	1	24.359	24.359	100	24	24	Yes	24	101	101.5	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	148010	13C4-PFOS	837377	2500	Avg	0.374254						1180.71	1180.7109	100				2500	47	47	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	139752	D3-NMeFOSA	148010	2500	Avg	0.961277		2455.6	5	5	1	2.4556	2.4556	100	2.5	2.5	Yes	2.4	102	102.3	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	3034943	13C4-PFOS	837377	2500	Avg	0.664194						13642	13641.891	100				25000	55	55	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	3336380	D9-NEtFOSE	3034943	25000	Avg	1.107685		24811	5	5	1	24.811	24.8113	100	25	25	Yes	24	103	103.4	Yes			
092524A050.d	ZQ18112-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	135574	13C4-PFOS	837377	2500	Avg	0.398062						1016.82	1016.8214	100				2500	41	41	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3636107	13C3-PFBA	1629117	5000	Avg	1.150256						9701.97	9701.9689	100				10000	97	97	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	240356	13C4-PFBA	3636107	10000	Avg	0.860777		767.94	5	5	1	0.76794	0.7679	100	0.77	0.77	Yes	0.8	96	96.0	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1563646	13C2-PFHxA	983637	2500	Avg	0.795934						4993.06	4993.0571	100				5000	100	100	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	109020	13C5-PFPeA	1563646	5000	Avg	0.921502		378.3	5	5	1	0.3783	0.3783	100	0.38	0.38	Yes	40	95	0.9	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	203195	18O2-PFHxS	567782	2500	Avg	0.18253						4901.58	4901.5919	100				5000	98	98	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	56385	13C2-4:2FTS	203195	5000	Avg	1.989363		697.44	5	5	1	0.69744	0.6974	100	0.7	0.7	Yes	0.75	93	93.0	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	1012661	13C2-PFHxA	983637	2500	Avg	1.087908						2365.79	2365.7948	100				2500	95	95	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	72179	13C5-PFHxA	1012661	2500	Avg	0.90903		196.02	5	5	1	0.19602	0.196	100	0.2	0.2	Yes	0.2	98	98.0	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	301690	13C5-PFHxA	1012661	2500	Avg	0.163284		4561.34	5	5	1	4.5613	4.5613	100	4.6	4.6	Yes	5	91	91.2	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	714944	18O2-PFHxS	567782	2500	Avg	1.317939						2388.55	2388.5542	100				2500	96	96	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	59916	13C3-PFBS	714944	2500	Avg	1.269173		165.08	5	5	1	0.16508	0.1651	100	0.17	0.17	Yes	0.17	97	97.1	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	772144	13C2-PFHxA	983637	2500	Avg	0.192552						10192	10191.906	100				10000	102	102	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1138376	13C2-PFHxA	983637	2500	Avg	1.191993						2427.27	2427.2649	100				2500	97	97	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	86514	13C4-PFHpA	1138376	2500	Avg	1.08709		174.77	5	5	1	0.17477	0.1748	100	0.17	0.17	Yes	0.2	87	87.4	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	241313	18O2-PFHxS	567782	2500	Avg	0.205065						5181.4	5181.4053	100				5000	104	104	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	73574	13C2-6:2FTS	241313	5000	Avg	2.126484		716.89	5	5	1	0.71689	0.7169	100	0.72	0.72	Yes	0.76	94	94.3	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1429069	13C4-PFOA	206999	2500	Avg	6.935128						2488.69	2488.6881	100				2500	100	100	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	88580	13C8-PFOA	1429069	2500	Avg	0.884977		175.1	5	5	1	0.1751	0.1751	100	0.18	0.18	Yes	0.2	88	87.6	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	646420	18O2-PFHxS	567782	2500	Avg	1.159703						2454.29	2454.2929	100				2500	98	98	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	53072	13C3-PFHxS	646420	2500	Avg	1.183053		173.49	5	5	1	0.17349	0.1735	100	0.17	0.17	Yes	0.18	96	96.4	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	56111	13C3-PFHxS	646420	2500	Avg	1.151233		188.5	5	5	1	0.1885	0.1885	100	0.19	0.19	Yes	0.18	105	104.7	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	685459	13C5-PFNA	858354	1250	Avg	0.884789						1128.2	1128.1981	100				1250	90	90	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	92564	13C9-PFNA	685459	1250	Avg	0.839373		201.1	5	5	1	0.2011	0.2011	100	0.2	0.2	Yes	0.2	101	100.6	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	252574	18O2-PFHxS	567782	2500	Avg	0.201772						5511.71	5511.7071	100				5000	110	110	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	60647	13C2-8:2FTS	252574	5000	Avg	1.818805		660.09	5	5	1	0.66009	0.6601	100	0.66	0.66	Yes	0.76	87	86.9	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	720778	13C4-PFOS	798489	2500	Avg	0.460729						4898.09	4898.0932	100				5000	98	98	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	23687	D3-NMeFOSAA	720778	5000	Avg	0.822512		199.77	5	5	1	0.19977	0.1998	100	0.2	0.2	Yes	0.2	100	99.9	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	665756	13C2-PFDA	563752	1250	Avg	1.142396						1292.17	1292.172	100				1250	103	103	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	71516	13C6-PFDA	665756	1250	Avg	0.862667		155.65	5	5	1	0.15565	0.1557	100	0.16	0.16	Yes	0.2	78	77.9	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	523046	13C4-PFOS	798489	2500	Avg	0.363285						4507.79	4507.7881	100				5000	90	90	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	22814	D5-NEtFOSAA	523046	5000	Avg	1.058985		205.94	5	5	1	0.20594	0.2059	100	0.21	0.21	Yes	0.2	103	103.0	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	750193	13C4-PFOS	798489	2500	Avg	1.0092						2327.38	2327.3775	100				2500	93	93	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	45809	13C8-PFOS	750193	2500	Avg	0.875705		174.33	5	5	1	0.17433	0.1743	100	0.17	0.17	Yes	0.19	92	91.7	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	56477	13C8-PFOS	750193	2500	Avg	0.972082		193.61	5	5	1	0.19361	0.1936	100	0.19	0.19	Yes	0.18	108	107.6	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	60797	13C8-PFOS	750193	2500	Avg	1.079883		187.62	5	5	1	0.18762	0.1876	100	0.19	0.19	Yes	0.19	99	98.7	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	53886	13C8-PFOS	750193	2500	Avg	0.978061		183.6	5	5	1	0.1836	0.1836	100	0.18	0.18	Yes	0.19	97	96.6	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	584904	13C2-PFDA	563752	1250	Avg	1.021306						1269.84	1269.8447	100				1250	102	102	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	74684	13C7-PFUnA	584904	1250	Avg	0.941499		169.52	5	5	1	0.16952	0.1695	100	0.17	0.17	Yes	0.2	85	84.8	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	520271	13C2-PFDA	563752	1250	Avg	0.966171						1193.98	1193.9813	100				1250	96	96	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	99564	13C2-PFDoA	520271	1250	Avg	1.182085		202.36	5	5	1	0.20236	0.2024	100	0.2	0.2	Yes	0.2	101	101.2	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	58357	13C2-PFDoA	520271	1250	Avg	0.765454		183.17	5	5	1	0.18317	0.1832	100	0.18	0.18	Yes	0.2	92	91.6	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	1029734	13C4-PFOS	798489	2500	Avg	1.46881						2194.98	2194.9797	100				2500	88	88	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	75633	13C8-PFOSA	1029734	2500	Avg	1.008917		182	5	5	1	0.182	0.182	100	0.18	0.18	Yes	0.2	91	91.0	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	429897	13C2-PFDA	563752	1250	Avg	0.890895						1069.94	1069.941	100				1250	86	86	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	58045	13C2-PFTeDA	429897	1250	Avg	0.92374		182.71	5	5	1	0.18271	0.1827	100	0.18	0.18	Yes	0.2	91	91.4	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2641445	13C4-PFOS	798489	2500	Avg	0.602535						13726	13725.569	100				25000	55	55	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	202869	D7-NMeFOSE	2641445	25000	Avg	1.021618		1879.43	5	5	1	1.8794	1.8794	100	1.9	1.9	Yes	2	94	94.0	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	138640	13C4-PFOS	798489	2500	Avg	0.374254						1159.83	1159.8269	100				2500	46	46	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	9688	D3-NMeFOSA	138640	2500	Avg	0.961277		181.73	5	5	1	0.18173	0.1817	100	0.18	0.18	Yes	0.2	91	90.9	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2873434	13C4-PFOS	798489	2500	Avg	0.664194						13545	13544.948	100				25000	54	54	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	226466	D9-NEtFOSE	2873434	25000	Avg	1.107685		1778.79	5	5	1	1.7788	1.7788	100	1.8	1.8	Yes	2	89	88.9	Yes			
092524A051.d	ZQ18112-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	130240	13C4-PFOS	798489	2500	Avg	0.398062						1024.39	1024.3886	100				2500	41	41	Yes			
092524A052.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C8-PFOS	SESI-0098	99347	13C4-PFOS	187112	500	Avg	1.0092						263.05	263.0546	35.6				500	53	53	Yes			
092524A052.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	7221672	13C8-PFOS	99347	500	Avg	0.972082		37390	5	14.05	5	66.529	66.5294	35.6	190	190	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C4-PFBA	SESI-0111	3058073	13C3-PFBA	2029831	5000	Avg	1.150256						6548.83	6548.8262	35.6				10000	65	65	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	131878	13C4-PFBA	3058073	10000	Avg	0.860777		501	5	14.05	1	0.17829	0.1783	35.6	0.5	0.5	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1240985	13C2-PFHxA	1212715	2500	Avg	0.795934						3214.18	3214.184	35.6				5000	64	64	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	884086	13C5-PFPeA	1240985	5000	Avg	0.921502		3865.46	5	14.05	1	1.3756	1.3756	35.6	3.9	3.9	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	203251	18O2-PFHxS	690406	2500	Avg	0.18253						4032.12	4032.1241	35.6				5000	81	81	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	30487	13C2-4:2FTS	203251	5000	Avg	1.989363		377	5	14.05	1	0.13416	0.1342	35.6	0.38	0.38	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C5-PFHxA	SESI-0113	840664	13C2-PFHxA	1212715	2500	Avg	1.087908						1592.98	1592.9845	35.6				2500	64	64	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	2928496	13C5-PFHxA	840664	2500	Avg	0.90903		9580.41	5	14.05	1	3.4094	3.4094	35.6	9.6	9.6	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C3-PFBS	SESI-0116	580570	18O2-PFHxS	690406	2500	Avg	1.317939						1595.13	1595.125	35.6				2500	64	64	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	1022537	13C3-PFBS	580570	2500	Avg	1.269173		3469.31	5	14.05	1	1.2346	1.2346	35.6	3.5	3.5	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	613866	13C2-PFHxA	1212715	2500	Avg	0.192552						6572.14	6572.14	35.6				10000	66	66	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C4-PFHpA	SESI-0114	893880	13C2-PFHxA	1212715	2500	Avg	1.191993						1545.92	1545.9191	35.6				2500	62	62	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1505630	13C4-PFHpA	893880	2500	Avg	1.08709		3873.59	5	14.05	1	1.3785	1.3785	35.6	3.9	3.9	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	193540	18O2-PFHxS	690406	2500	Avg	0.205065						3417.54	3417.5482	35.6				5000	68	68	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	5078179	13C2-6:2FTS	193540	5000	Avg	2.126484		61694	5	14.05	1	21.955	21.9553	35.6	62	62	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C8-PFOA	SESI-0097	981398	13C4-PFOA	253054	2500	Avg	6.935128						1398.03	1398.0332	35.6				2500	56	56	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	4708402	13C8-PFOA	981398	2500	Avg	0.884977		13553	5	14.05	1	4.8231	4.8231	35.6	14	14	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C3-PFHxS	SESI-0096	478792	18O2-PFHxS	690406	2500	Avg	1.159703						1494.98	1494.9806	35.6				2500	60	60	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	1214037	13C3-PFHxS	478792	2500	Avg	1.183053		5358.22	5	14.05	1	1.9068	1.9068	35.6	5.4	5.4	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1.1E+07	13C3-PFHxS	478792	2500	Avg	1.151233		48623	5	14.05	1	17.303	17.3035	35.6	49	49	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C9-PFNA	SESI-0099	473101	13C5-PFNA	1038801	1250	Avg	0.884789						643.42	643.4159	35.6				1250	51	51	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	645481	13C9-PFNA	473101	1250	Avg	0.839373		2031.82	5	14.05	1	0.72307	0.7231	35.6	2	2	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	149723	18O2-PFHxS	690406	2500	Avg	0.201772						2686.97	2686.9716	35.6				5000	54	54	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	259288	13C2-8:2FTS	149723	5000	Avg	1.818805		4760.78	5	14.05	1	1.6942	1.6942	35.6	4.8	4.8	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	529526	13C4-PFOS	856402	2500	Avg	0.460729						3355.09	3355.0892	35.6				5000	67	67	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	83363	D3-NMeFOSAA	529526	5000	Avg	0.822512		957	5	14.05	1	0.34057	0.3406	35.6	0.96	0.96	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C6-PFDA	SESI-0115	454073	13C2-PFDA	696050	1250	Avg	1.142396						713.8	713.8033	35.6				1250	57	57	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	86782	13C6-PFDA	454073	1250	Avg	0.862667		276.93	5	14.05	1	0.09855	0.0986	35.6	0.28	0.28	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	311663	13C4-PFOS	856402	2500	Avg	0.363285						2504.38	2504.3794	35.6				5000	50	50	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	105081	D5-NEtFOSAA	311663	5000	Avg	1.058985		1591.91	5	14.05	1	0.56652	0.5665	35.6	1.6	1.6	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C8-PFOS	SESI-0098	468559	13C4-PFOS	856402	2500	Avg	1.0092						1355.34	1355.3435	35.6				2500	54	54	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	584830	13C8-PFOS	468559	2500	Avg	0.875705		3563.26	5	14.05	1	1.2681	1.2681	35.6	3.6	3.6	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	6989	13C8-PFOS	468559	2500	Avg	1.079883		34.531	5	14.05	1	0.01229	0.0123	35.6	0.034	0.035	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C7-PFUnA	SESI-0117	387310	13C2-PFDA	696050	1250	Avg	1.021306						681.04	681.0397	35.6				1250	54	54	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	916089	13C7-PFUnA	387310	1250	Avg	0.941499		3140.28	5	14.05	1	1.1175	1.1175	35.6	3.1	3.1	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C2-PFDoA	SESI-0118	317543	13C2-PFDA	696050	1250	Avg	0.966171						590.23	590.2257	35.6				1250	47	47	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	20926	13C2-PFDoA	317543	1250	Avg	1.182085		69.686	5	14.05	1	0.0248	0.0248	35.6	0.069	0.07	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	321264	13C2-PFDoA	317543	1250	Avg	0.765454		1652.15	5	14.05	1	0.58796	0.588	35.6	1.7	1.7	Yes							
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C8-PFOSA	SESI-0107	725054	13C4-PFOS	856402	2500	Avg	1.46881						1441.01	1441.0102	35.6				2500	58	58	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	348455	13C8-PFOSA	725054	2500	Avg	1.008917		1190.86	5	14.05	1	0.42379	0.4238	35.6	1.2	1.2	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	210584	13C2-PFDA	696050	1250	Avg	0.890895						424.49	424.4909	35.6				1250	34	34	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	97222	13C4-PFOS	856402	2500	Avg	0.374254						758.33	758.3338	35.6				2500	30	30	Yes			
092524A053.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	79327	13C4-PFOS	856402	2500	Avg	0.398062						581.74	581.745	35.6				2500	23	23	Yes			
092524A087.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C8-PFOS	SESI-0098	47221	13C4-PFOS	85603	250	Avg	1.0092						136.65	136.6498	39.1				250	55	55	Yes			
092524A087.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	5388903	13C8-PFOS	47221	250	Avg	0.972082		29350	5	12.84	10	114.29	114.2897	39.1	290	290	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C4-PFBA	SESI-0111	2777009	13C3-PFBA	1905709	5000	Avg	1.150256						6334.27	6334.2646	39.1				10000	63	63	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	170559	13C4-PFBA	2777009	10000	Avg	0.860777		713.52	5	12.84	1	0.27785	0.2779	39.1	0.71	0.71	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1118847	13C2-PFHxA	1112241	2500	Avg	0.795934						3159.62	3159.6193	39.1				5000	63	63	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	954646	13C5-PFPeA	1118847	5000	Avg	0.921502		4629.62	5	12.84	1	1.8028	1.8028	39.1	4.6	4.6	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	159756	18O2-PFHxS	630259	2500	Avg	0.18253						3471.71	3471.7135	39.1				5000	69	69	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	13259	13C2-4:2FTS	159756	5000	Avg	1.989363		208.6	5	12.84	1	0.08123	0.0812	39.1	0.21	0.21	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C5-PFHxA	SESI-0113	723462	13C2-PFHxA	1112241	2500	Avg	1.087908						1494.74	1494.7366	39.1				2500	60	60	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	3411218	13C5-PFHxA	723462	2500	Avg	0.90903		12967	5	12.84	1	5.0496	5.0496	39.1	13	13	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C3-PFBS	SESI-0116	491162	18O2-PFHxS	630259	2500	Avg	1.317939						1478.26	1478.2586	39.1				2500	59	59	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	647725	13C3-PFBS	491162	2500	Avg	1.269173		2597.68	5	12.84	1	1.0116	1.0116	39.1	2.6	2.6	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	545180	13C2-PFHxA	1112241	2500	Avg	0.192552						6364.04	6364.0413	39.1				10000	64	64	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C4-PFHpA	SESI-0114	772070	13C2-PFHxA	1112241	2500	Avg	1.191993						1455.88	1455.875	39.1				2500	58	58	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1709084	13C4-PFHpA	772070	2500	Avg	1.08709		5090.74	5	12.84	1	1.9824	1.9824	39.1	5.1	5.1	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	140264	18O2-PFHxS	630259	2500	Avg	0.205065						2713.16	2713.1614	39.1				5000	54	54	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	4364663	13C2-6:2FTS	140264	5000	Avg	2.126484		73167	5	12.84	1	28.492	28.4916	39.1	73	73	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C8-PFOA	SESI-0097	894875	13C4-PFOA	221624	2500	Avg	6.935128						1455.56	1455.5634	39.1				2500	58	58	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	5465182	13C8-PFOA	894875	2500	Avg	0.884977		17252	5	12.84	1	6.7182	6.7182	39.1	17	17	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C3-PFHxS	SESI-0096	397822	18O2-PFHxS	630259	2500	Avg	1.159703						1360.7	1360.7018	39.1				2500	54	54	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	780666	13C3-PFHxS	397822	2500	Avg	1.183053		4146.79	5	12.84	1	1.6148	1.6148	39.1	4.1	4.1	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1E+07	13C3-PFHxS	397822	2500	Avg	1.151233		55890	5	12.84	1	21.764	21.7642	39.1	56	56	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C9-PFNA	SESI-0099	449992	13C5-PFNA	941991	1250	Avg	0.884789						674.88	674.8828	39.1				1250	54	54	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	1002462	13C9-PFNA	449992	1250	Avg	0.839373		3317.55	5	12.84	1	1.2919	1.2919	39.1	3.3	3.3	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	130127	18O2-PFHxS	630259	2500	Avg	0.201772						2558.16	2558.1586	39.1				5000	51	51	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	411805	13C2-8:2FTS	130127	5000	Avg	1.818805		8699.78	5	12.84	1	3.3878	3.3878	39.1	8.7	8.7	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	584015	13C4-PFOS	734742	2500	Avg	0.460729						4313.04	4313.0411	39.1				5000	86	86	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	209614	D3-NMeFOSAA	584015	5000	Avg	0.822512		2181.85	5	12.84	1	0.84963	0.8496	39.1	2.2	2.2	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C6-PFDA	SESI-0115	426372	13C2-PFDA	621632	1250	Avg	1.142396						750.5	750.4965	39.1				1250	60	60	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	155149	13C6-PFDA	426372	1250	Avg	0.862667		527.26	5	12.84	1	0.20532	0.2053	39.1	0.52	0.53	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	275704	13C4-PFOS	734742	2500	Avg	0.363285						2582.26	2582.2646	39.1				5000	52	52	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	195005	D5-NEtFOSAA	275704	5000	Avg	1.058985		3339.51	5	12.84	1	1.3004	1.3004	39.1	3.3	3.3	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C8-PFOS	SESI-0098	379639	13C4-PFOS	734742	2500	Avg	1.0092						1279.97	1279.9668	39.1				2500	51	51	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	584309	13C8-PFOS	379639	2500	Avg	0.875705		4393.94	5	12.84	1	1.711	1.711	39.1	4.4	4.4	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	41813	13C8-PFOS	379639	2500	Avg	1.079883		254.98	5	12.84	1	0.09929	0.0993	39.1	0.25	0.25	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C7-PFUnA	SESI-0117	346691	13C2-PFDA	621632	1250	Avg	1.021306						682.6	682.5954	39.1				1250	55	55	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	905260	13C7-PFUnA	346691	1250	Avg	0.941499		3466.74	5	12.84	1	1.35	1.35	39.1	3.5	3.5	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C2-PFDoA	SESI-0118	307016	13C2-PFDA	621632	1250	Avg	0.966171						638.97	638.9747	39.1				1250	51	51	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	27819	13C2-PFDoA	307016	1250	Avg	1.182085		95.817	5	12.84	1	0.03731	0.0373	39.1	0.095	0.095	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	359547	13C2-PFDoA	307016	1250	Avg	0.765454		1912.43	5	12.84	1	0.74472	0.7447	39.1	1.9	1.9	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C8-PFOSA	SESI-0107	638364	13C4-PFOS	734742	2500	Avg	1.46881						1478.79	1478.7948	39.1				2500	59	59	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	456326	13C8-PFOSA	638364	2500	Avg	1.008917		1771.3	5	12.84	1	0.68976	0.6898	39.1	1.8	1.8	Yes							
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	221785	13C2-PFDA	621632	1250	Avg	0.890895						500.59	500.5901	39.1				1250	40	40	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	83253	13C4-PFOS	734742	2500	Avg	0.374254						756.9	756.9001	39.1				2500	30	30	Yes			
092524A088.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	72421	13C4-PFOS	734742	2500	Avg	0.398062						619.04	619.0403	39.1				2500	25	25	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C4-PFBA	SESI-0111	2920957	13C3-PFBA	1938041	5000	Avg	1.150256						6551.46	6551.4541	38.9				10000	66	66	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	229423	13C4-PFBA	2920957	10000	Avg	0.860777		912.48	5	12.94	1	0.35258	0.3526	38.9	0.91	0.91	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1178459	13C2-PFHxA	1174658	2500	Avg	0.795934						3151.13	3151.1276	38.9				5000	63	63	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1554851	13C5-PFPeA	1178459	5000	Avg	0.921502		7158.93	5	12.94	1	2.7662	2.7662	38.9	7.1	7.1	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	224177	18O2-PFHxS	669603	2500	Avg	0.18253						4585.41	4585.4231	38.9				5000	92	92	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	26501	13C2-4:2FTS	224177	5000	Avg	1.989363		297.12	5	12.94	1	0.11481	0.1148	38.9	0.3	0.3	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C5-PFHxA	SESI-0113	803215	13C2-PFHxA	1174658	2500	Avg	1.087908						1571.33	1571.3329	38.9				2500	63	63	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	5895588	13C5-PFHxA	803215	2500	Avg	0.90903		20186	5	12.94	1	7.8	7.8	38.9	20	20	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	103401	13C5-PFHxA	803215	2500	Avg	0.163284		1971.01	5	12.94	1	0.7616	0.7616	38.9	2	2	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C3-PFBS	SESI-0116	543085	18O2-PFHxS	669603	2500	Avg	1.317939						1538.49	1538.4916	38.9				2500	62	62	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	1043728	13C3-PFBS	543085	2500	Avg	1.269173		3785.63	5	12.94	1	1.4628	1.4628	38.9	3.8	3.8	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	570597	13C2-PFHxA	1174658	2500	Avg	0.192552						6306.81	6306.8139	38.9				10000	63	63	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C4-PFHpA	SESI-0114	848513	13C2-PFHxA	1174658	2500	Avg	1.191993						1515	1515.0025	38.9				2500	61	61	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	3458203	13C4-PFHpA	848513	2500	Avg	1.08709		9372.74	5	12.94	1	3.6216	3.6216	38.9	9.3	9.3	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	211316	18O2-PFHxS	669603	2500	Avg	0.205065						3847.36	3847.3656	38.9				5000	77	77	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	6130179	13C2-6:2FTS	211316	5000	Avg	2.126484		68210	5	12.94	1	26.356	26.3563	38.9	68	68	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C8-PFOA	SESI-0097	1018839	13C4-PFOA	231855	2500	Avg	6.935128						1584.07	1584.0709	38.9				2500	63	63	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	9739608	13C8-PFOA	1018839	2500	Avg	0.884977		27005	5	12.94	1	10.435	10.4347	38.9	27	27	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C3-PFHxS	SESI-0096	452854	18O2-PFHxS	669603	2500	Avg	1.159703						1457.92	1457.9212	38.9				2500	58	58	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	1339134	13C3-PFHxS	452854	2500	Avg	1.183053		6248.87	5	12.94	1	2.4146	2.4146	38.9	6.2	6.2	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C9-PFNA	SESI-0099	439569	13C5-PFNA	997917	1250	Avg	0.884789						622.3	622.3045	38.9				1250	50	50	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	1523781	13C9-PFNA	439569	1250	Avg	0.839373		5162.38	5	12.94	1	1.9947	1.9947	38.9	5.1	5.1	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	210691	18O2-PFHxS	669603	2500	Avg	0.201772						3898.59	3898.5912	38.9				5000	78	78	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	817390	13C2-8:2FTS	210691	5000	Avg	1.818805		10665	5	12.94	1	4.121	4.121	38.9	11	11	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	573766	13C4-PFOS	781561	2500	Avg	0.460729						3983.52	3983.5144	38.9				5000	80	80	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	426077	D3-NMeFOSAA	573766	5000	Avg	0.822512		4514.21	5	12.94	1	1.7443	1.7443	38.9	4.5	4.5	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C6-PFDA	SESI-0115	461476	13C2-PFDA	696333	1250	Avg	1.142396						725.15	725.146	38.9				1250	58	58	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	273865	13C6-PFDA	461476	1250	Avg	0.862667		859.91	5	12.94	1	0.33227	0.3323	38.9	0.85	0.85	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	306982	13C4-PFOS	781561	2500	Avg	0.363285						2702.98	2702.9784	38.9				5000	54	54	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	342401	D5-NEtFOSAA	306982	5000	Avg	1.058985		5266.26	5	12.94	1	2.0349	2.0349	38.9	5.2	5.2	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C8-PFOS	SESI-0098	395229	13C4-PFOS	781561	2500	Avg	1.0092						1252.7	1252.7047	38.9				2500	50	50	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	997876	13C8-PFOS	395229	2500	Avg	0.875705		7207.92	5	12.94	1	2.7851	2.7851	38.9	7.2	7.2	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	98615	13C8-PFOS	395229	2500	Avg	1.079883		577.64	5	12.94	1	0.2232	0.2232	38.9	0.57	0.57	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	8235	13C8-PFOS	395229	2500	Avg	0.978061		53.259	5	12.94	1	0.02058	0.0206	38.9	0.053	0.053	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C7-PFUnA	SESI-0117	384179	13C2-PFDA	696333	1250	Avg	1.021306						675.26	675.2596	38.9				1250	54	54	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	979235	13C7-PFUnA	384179	1250	Avg	0.941499		3384.1	5	12.94	1	1.3076	1.3076	38.9	3.4	3.4	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C2-PFDoA	SESI-0118	330550	13C2-PFDA	696333	1250	Avg	0.966171						614.15	614.1525	38.9				1250	49	49	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	32157	13C2-PFDoA	330550	1250	Avg	1.182085		102.87	5	12.94	1	0.03975	0.0397	38.9	0.1	0.1	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	365668	13C2-PFDoA	330550	1250	Avg	0.765454		1806.51	5	12.94	1	0.69803	0.698	38.9	1.8	1.8	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	724879	13C4-PFOS	781561	2500	Avg	1.46881						1578.62	1578.6179	38.9				2500	63	63	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	879567	13C8-PFOSA	724879	2500	Avg	1.008917		3006.69	5	12.94	1	1.1618	1.1618	38.9	3	3	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	235632	13C2-PFDA	696333	1250	Avg	0.890895						474.79	474.7891	38.9				1250	38	38	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorotetradecanoic acid (PFTeDA)	376-06-7	7410	13C2-PFTeDA	235632	1250	Avg	0.92374		42.554	5	12.94	1	0.01644	0.0164	38.9	0.042	0.042	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	113599	13C4-PFOS	781561	2500	Avg	0.374254						970.93	970.9239	38.9				2500	39	39	Yes			
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1275	D3-NMeFOSA	113599	2500	Avg	0.961277		29.19	5	12.94	1	0.01128	0.0113	38.9	0.029	0.029	Yes							
092524A097.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	98825	13C4-PFOS	781561	2500	Avg	0.398062						794.13	794.133	38.9				2500	32	32	Yes			
092624018.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C8-PFOA	SESI-0097	62491	13C4-PFOA	18195	250	Avg	6.935128						123.81	123.8086	40.2				250	50	50	Yes			
092624018.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	333594	13C8-PFOA	62491	250	Avg	0.884977		1508.03	5	12.43	10	6.0661	6.0661	40.2	15	15	Yes							
092624027.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	EIS	13C8-PFOS	SESI-0098	140887	13C4-PFOS	171216	500	Avg	1.0092						407.68	407.6799	36				500	82	82	Yes			
092624027.d	ZH22013-033	CACMW-006-060-42.75-0817	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3424144	13C8-PFOS	140887	500	Avg	0.972082		12501	5	1.39	5	224.84	224.8399	36	620	620	Yes							
092624028.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C3-PFHxS	SESI-0096	38263	18O2-PFHxS	61421	250	Avg	1.159703						134.29	134.2936	38.9				250	54	54	Yes			
092624028.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1488038	13C3-PFHxS	38263	250	Avg	1.151233		8445.24	5	12.94	10	32.632	32.6323	38.9	84	84	Yes							
092624028.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	13C8-PFOS	SESI-0098	43011	13C4-PFOS	79123	250	Avg	1.0092						134.66	134.6603	38.9				250	54	54	Yes			
092624028.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	7378874	13C8-PFOS	43011	250	Avg	0.972082		44121	5	12.94	10	170.48	170.4839	38.9	440	440	Yes							
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3247183	13C3-PFBA	1473884	5000	Avg	1.143357						9634.55	9634.5539	100				10000	96	96	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1350000	13C2-PFHxA	844900	2500	Avg	0.801362						4984.71	4984.708	100				5000	100	100	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	167294	18O2-PFHxS	466611	2500	Avg	0.187001						4793.16	4793.155	100				5000	96	96	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	886673	13C2-PFHxA	844900	2500	Avg	1.059706						2475.79	2475.7842	100				2500	99	99	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	634675	18O2-PFHxS	466611	2500	Avg	1.358315						2503.43	2503.4328	100				2500	100	100	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	655543	13C2-PFHxA	844900	2500	Avg	0.193362						10031	10031.474	100				10000	100	100	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	992794	13C2-PFHxA	844900	2500	Avg	1.173055						2504.24	2504.2372	100				2500	100	100	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	175256	18O2-PFHxS	466611	2500	Avg	0.197889						4745.01	4745.0007	100				5000	95	95	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1129969	13C4-PFOA	156429	2500	Avg	7.712837						2341.4	2341.3973	100				2500	94	94	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	530706	18O2-PFHxS	466611	2500	Avg	1.176303						2417.24	2417.2403	100				2500	97	97	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	584082	13C5-PFNA	617106	1250	Avg	0.936058						1263.93	1263.925	100				1250	101	101	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	171245	18O2-PFHxS	466611	2500	Avg	0.18929						4847.03	4847.0251	100				5000	97	97	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	541754	13C4-PFOS	566532	2500	Avg	0.534223						4475.03	4475.0213	100				5000	90	90	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	494806	13C2-PFDA	526391	1250	Avg	1.172751						1001.91	1001.9146	100				1250	80	80	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	442580	13C4-PFOS	566532	2500	Avg	0.39747						4913.63	4913.6361	100				5000	98	98	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	504753	13C4-PFOS	566532	2500	Avg	1.055789						2109.68	2109.6837	100				2500	84	84	Yes			
100124B087.d	ZQ18303-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	5078	13C8-PFOS	504753	2500	Avg	0.969189		25.95	5	5	1	0.02595	0.026	100	0.026	0.026	Yes							
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	447283	13C2-PFDA	526391	1250	Avg	1.169063						908.54	908.5441	100				1250	73	73	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	410949	13C2-PFDA	526391	1250	Avg	1.008069						968.05	968.0532	100				1250	77	77	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	754037	13C4-PFOS	566532	2500	Avg	1.639541						2029.49	2029.4854	100				2500	81	81	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	309483	13C2-PFDA	526391	1250	Avg	0.905673						811.46	811.4597	100				1250	65	65	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2053812	13C4-PFOS	566532	2500	Avg	0.704162						12871	12870.744	100				25000	51	51	Yes			
100124B087.d	ZQ18303-001		Method_Blank	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1936	D7-NMeFOSE	2053812	25000	Avg	1.061282		22.205	5	5	1	0.02221	0.0222	100	ND	0.022	Yes							
100124B087.d	ZQ18303-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	73095	13C4-PFOS	566532	2500	Avg	0.42391						760.9	760.9035	100				2500	30	30	Yes			
100124B087.d	ZQ18303-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2106527	13C4-PFOS	566532	2500	Avg	0.766089						12134	12133.983	100				25000	49	49	Yes			
100124B087.d	ZQ18303-001		Method_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1591	D9-NEtFOSE	2106527	25000	Avg	1.162702		16.24	5	5	1	0.01624	0.0162	100	ND	0.016	Yes							
100124B087.d	ZQ18303-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	77358	13C4-PFOS	566532	2500	Avg	0.449382						759.64	759.6353	100				2500	30	30	Yes			
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C8-PFOA	SESI-0097	1007080	13C4-PFOA	179331	2500	Avg	7.712837						1820.26	1820.2643	39.3				2500	73	73	Yes			
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1472747	13C8-PFOA	1007080	2500	Avg	0.944212		3871.99	5	1.27	1	15.244	15.2441	39.3	39	39	Yes							
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C3-PFHxS	SESI-0096	572081	18O2-PFHxS	563638	2500	Avg	1.176303						2157.14	2157.1387	39.3				2500	86	86	Yes			
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2475627	13C3-PFHxS	572081	2500	Avg	1.190513		9087.27	5	1.27	1	35.777	35.7767	39.3	91	91	Yes							
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C6-PFDA	SESI-0115	501547	13C2-PFDA	550743	1250	Avg	1.172751						970.66	970.6594	39.3				1250	78	78	Yes			
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	46858	13C6-PFDA	501547	1250	Ln	0.808407	9.777264	132.37	5	1.27	1	0.52113	0.5211	39.3	1.3	1.3	Yes							
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C8-PFOS	SESI-0098	533662	13C4-PFOS	640543	2500	Avg	1.055789						1972.79	1972.79	39.3				2500	79	79	Yes			
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	15579	13C8-PFOS	533662	2500	Ln	1.144627	15.5564	50.169	5	1.27	1	0.19752	0.1975	39.3	0.47	0.5	Yes							
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C2-PFDoA	SESI-0118	405733	13C2-PFDA	550743	1250	Avg	1.008069						913.51	913.5054	39.3				1250	73	73	Yes			
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	52342	13C2-PFDoA	405733	1250	Avg	0.76641		210.41	5	1.27	1	0.82837	0.8284	39.3	2.1	2.1	Yes							
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2559294	13C4-PFOS	640543	2500	Avg	0.704162						14185	14185.326	39.3				25000	57	57	Yes			
100124B095.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2573215	13C4-PFOS	640543	2500	Avg	0.766089						13110	13109.574	39.3				25000	52	52	Yes			
100124B099.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2400060	13C4-PFOS	625373	2500	Avg	0.704162						13625	13625.436	35.6				25000	55	55	Yes			
100124B099.d	ZH22013-011	CACMW-002-160-137.5-0815	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2346361	13C4-PFOS	625373	2500	Avg	0.766089						12244	12243.807	35.6				25000	49	49	Yes			
100124B112.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2459592	13C4-PFOS	606618	2500	Avg	0.704162						14395	14395.117	39.1				25000	58	58	Yes			
100124B112.d	ZH22013-022	CACMW-003-110-108.5-0816	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2463492	13C4-PFOS	606618	2500	Avg	0.766089						13252	13252.464	39.1				25000	53	53	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	3345558	13C3-PFBA	1681762	5000	Avg	1.143357						8699.45	8699.4576	39.1				10000	87	87	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	1397877	13C2-PFHxA	954279	2500	Avg	0.801362						4569.88	4569.8806	39.1				5000	91	91	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	181399	18O2-PFHxS	566572	2500	Avg	0.187001						4280.32	4280.3163	39.1				5000	86	86	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	899880	13C2-PFHxA	954279	2500	Avg	1.059706						2224.66	2224.661	39.1				2500	89	89	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	650512	18O2-PFHxS	566572	2500	Avg	1.358315						2113.2	2113.1957	39.1				2500	85	85	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	664105	13C2-PFHxA	954279	2500	Avg	0.193362						8997.67	8997.6742	39.1				10000	90	90	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	1031766	13C2-PFHxA	954279	2500	Avg	1.173055						2304.24	2304.2388	39.1				2500	92	92	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	196803	18O2-PFHxS	566572	2500	Avg	0.197889						4388.29	4388.2864	39.1				5000	88	88	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	1139948	13C4-PFOA	172211	2500	Avg	7.712837						2145.61	2145.6062	39.1				2500	86	86	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1793691	13C8-PFOA	1139948	2500	Avg	0.944212		4166.13	5	1.28	1	16.274	16.274	39.1	42	42	Yes	24	70	70.3	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	604907	18O2-PFHxS	566572	2500	Avg	1.176303						2269.1	2269.1035	39.1				2500	91	91	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2483086	13C3-PFHxS	604907	2500	Avg	1.190513		8620.04	5	1.28	1	33.672	33.672	39.1	86	86	Yes	22	32	31.7	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	610996	13C5-PFNA	717287	1250	Avg	0.936058						1137.5	1137.5033	39.1				1250	91	91	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	960374	13C9-PFNA	610996	1250	Avg	0.822409		2389.04	5	1.28	1	9.3322	9.3322	39.1	24	24	Yes	24	80	80.3	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	188731	18O2-PFHxS	566572	2500	Avg	0.18929						4399.48	4399.4711	39.1				5000	88	88	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	772889	13C2-8:2FTS	188731	5000	Avg	1.994899		10264	5	1.28	1	40.094	40.0943	39.1	100	100	Yes	92	102	102.0	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	639213	13C4-PFOS	661867	2500	Avg	0.534223						4519.52	4519.5198	39.1				5000	90	90	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	254963	D3-NMeFOSAA	639213	5000	Avg	0.821894		2426.53	5	1.28	1	9.4786	9.4786	39.1	24	24	Yes	24	85	84.6	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	561609	13C2-PFDA	487245	1250	Avg	1.172751						1228.54	1228.5444	39.1				1250	98	98	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluorodecanoic acid (PFDA)	335-76-2	854388	13C6-PFDA	561609	1250	Ln	0.808407	9.777264	2340.25	5	1.28	1	9.1416	9.1416	39.1	23	23	Yes	24	95	94.6	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	461886	13C4-PFOS	661867	2500	Avg	0.39747						4389.34	4389.3451	39.1				5000	88	88	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	250994	D5-NEtFOSAA	461886	5000	Avg	1.094181		2483.19	5	1.28	1	9.6999	9.6999	39.1	25	25	Yes	24	83	83.0	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	574154	13C4-PFOS	661867	2500	Avg	1.055789						2054.09	2054.0951	39.1				2500	82	82	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	555942	13C8-PFOS	574154	2500	Avg	0.864668		2799.57	5	1.28	1	10.936	10.9358	39.1	28	28	Yes	23	95	94.6	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	9857343	13C8-PFOS	574154	2500	Avg	0.969189		44286	5	1.28	1	172.99	172.9908	39.1	440	440	Yes	22	-57	-57.7	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	614435	13C8-PFOS	574154	2500	Ln	1.144627	15.5564	2323.76	5	1.28	1	9.0772	9.0772	39.1	23	23	Yes	23	32	99.8	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	570166	13C8-PFOS	574154	2500	Avg	1.105585		2245.54	5	1.28	1	8.7716	8.7716	39.1	22	22	Yes	23	97	96.2	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	472503	13C2-PFDA	487245	1250	Avg	1.169063						1036.88	1036.8819	39.1				1250	83	83	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	1090674	13C7-PFUnA	472503	1250	Avg	0.943401		3058.47	5	1.28	1	11.947	11.9471	39.1	31	31	Yes	24	111	110.5	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	464805	13C2-PFDA	487245	1250	Avg	1.008069						1182.89	1182.8867	39.1				1250	95	95	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	959551	13C2-PFDoA	464805	1250	Avg	1.191025		2166.64	5	1.28	1	8.4634	8.4634	39.1	22	22	Yes	24	90	90.2	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	594014	13C2-PFDoA	464805	1250	Avg	0.76641		2084.37	5	1.28	1	8.1421	8.1421	39.1	21	21	Yes	24	79	78.6	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	914670	13C4-PFOS	661867	2500	Avg	1.639541						2107.23	2107.2275	39.1				2500	84	84	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	947453	13C8-PFOSA	914670	2500	Avg	1.005021		2576.67	5	1.28	1	10.065	10.0651	39.1	26	26	Yes	24	96	95.7	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	352624	13C2-PFDA	487245	1250	Avg	0.905673						998.86	998.8564	39.1				1250	80	80	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	2749293	13C4-PFOS	661867	2500	Avg	0.704162						14747	14747.477	39.1				25000	59	59	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	2413915	D7-NMeFOSE	2749293	25000	Avg	1.061282		20683	5	1.28	1	80.792	80.7923	39.1	210	210	Yes	240	86	86.1	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	117378	13C4-PFOS	661867	2500	Avg	0.42391						1045.88	1045.8811	39.1				2500	42	42	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	106788	D3-NMeFOSA	117378	2500	Avg	0.968682		2347.98	5	1.28	1	9.1718	9.1718	39.1	23	23	Yes	24	98	97.7	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	2795260	13C4-PFOS	661867	2500	Avg	0.766089						13782	13782.001	39.1				25000	55	55	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	2758630	D9-NEtFOSE	2795260	25000	Avg	1.162702		21220	5	1.28	1	82.89	82.8901	39.1	210	210	Yes	240	88	88.3	Yes			
100124B113.d	ZH22013-022MS	CACMW-003-110-108.5-0816	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	109564	13C4-PFOS	661867	2500	Avg	0.449382						920.92	920.9191	39.1				2500	37	37	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	2860137	13C3-PFBA	1513624	5000	Avg	1.143357						8263.36	8263.3658	39.1				10000	83	83	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	1207221	13C2-PFHxA	844781	2500	Avg	0.801362						4458.14	4458.1421	39.1				5000	89	89	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	155764	18O2-PFHxS	586436	2500	Avg	0.187001						3550.94	3550.9336	39.1				5000	71	71	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	781770	13C2-PFHxA	844781	2500	Avg	1.059706						2183.18	2183.1797	39.1				2500	87	87	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	581539	18O2-PFHxS	586436	2500	Avg	1.358315						1825.15	1825.1465	39.1				2500	73	73	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	582008	13C2-PFHxA	844781	2500	Avg	0.193362						8907.45	8907.4562	39.1				10000	89	89	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	874059	13C2-PFHxA	844781	2500	Avg	1.173055						2205.05	2205.049	39.1				2500	88	88	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	156620	18O2-PFHxS	586436	2500	Avg	0.197889						3374	3373.999	39.1				5000	67	67	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	1034128	13C4-PFOA	150895	2500	Avg	7.712837						2221.39	2221.3925	39.1				2500	89	89	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1859140	13C8-PFOA	1034128	2500	Avg	0.944212		4760.01	5	1.28	1	18.594	18.5938	39.1	48	48	Yes	24	95	95.0	Yes	13	13.3	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	491878	18O2-PFHxS	586436	2500	Avg	1.176303						1782.62	1782.6151	39.1				2500	71	71	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2336424	13C3-PFHxS	491878	2500	Avg	1.190513		9974.71	5	1.28	1	38.964	38.9637	39.1	100	100	Yes	22	94	93.2	Yes	15	14.6	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	498019	13C5-PFNA	684502	1250	Avg	0.936058						971.58	971.5797	39.1				1250	78	78	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	850988	13C9-PFNA	498019	1250	Avg	0.822409		2597.16	5	1.28	1	10.145	10.1452	39.1	26	26	Yes	24	89	89.0	Yes	8.3	8.3	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	177019	18O2-PFHxS	586436	2500	Avg	0.18929						3986.69	3986.682	39.1				5000	80	80	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	653059	13C2-8:2FTS	177019	5000	Avg	1.994899		9246.59	5	1.28	1	36.12	36.1195	39.1	92	92	Yes	92	91	90.9	Yes	10	10.4	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	574957	13C4-PFOS	606590	2500	Avg	0.534223						4435.66	4435.6528	39.1				5000	89	89	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	247327	D3-NMeFOSAA	574957	5000	Avg	0.821894		2616.92	5	1.28	1	10.222	10.2223	39.1	26	26	Yes	24	93	92.5	Yes	7.5	7.5	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	497671	13C2-PFDA	505691	1250	Avg	1.172751						1048.97	1048.9658	39.1				1250	84	84	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluorodecanoic acid (PFDA)	335-76-2	728950	13C6-PFDA	497671	1250	Ln	0.808407	9.777264	2252.73	5	1.28	1	8.7997	8.7997	39.1	22	23	Yes	24	91	91.0	Yes	3.8	3.8	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	391709	13C4-PFOS	606590	2500	Avg	0.39747						4061.66	4061.6637	39.1				5000	81	81	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	208673	D5-NEtFOSAA	391709	5000	Avg	1.094181		2434.35	5	1.28	1	9.5092	9.5092	39.1	24	24	Yes	24	81	81.0	Yes	2	2.0	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	507912	13C4-PFOS	606590	2500	Avg	1.055789						1982.7	1982.6959	39.1				2500	79	79	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	504788	13C8-PFOS	507912	2500	Avg	0.864668		2873.5	5	1.28	1	11.225	11.2246	39.1	29	29	Yes	23	99	97.8	Yes	2.6	2.6	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1.1E+07	13C8-PFOS	507912	2500	Avg	0.969189		53357	5	1.28	1	208.43	208.427	39.1	530	530	Yes	22	350	354.3	Yes	19	18.6	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	552934	13C8-PFOS	507912	2500	Ln	1.144627	15.5564	2364.13	5	1.28	1	9.2349	9.2349	39.1	24	24	Yes	23	101	101.3	Yes	1.7	1.7	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	476190	13C8-PFOS	507912	2500	Avg	1.105585		2120.02	5	1.28	1	8.2813	8.2813	39.1	21	21	Yes	23	92	92.1	Yes	5.8	5.8	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	421015	13C2-PFDA	505691	1250	Avg	1.169063						890.19	890.1935	39.1				1250	71	71	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	815234	13C7-PFUnA	421015	1250	Avg	0.943401		2565.66	5	1.28	1	10.022	10.0221	39.1	26	26	Yes	24	90	90.0	Yes	18	17.5	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	373652	13C2-PFDA	505691	1250	Avg	1.008069						916.22	916.2244	39.1				1250	73	73	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	843159	13C2-PFDoA	373652	1250	Avg	1.191025		2368.27	5	1.28	1	9.2511	9.2511	39.1	24	24	Yes	24	99	98.6	Yes	8.9	8.9	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	498437	13C2-PFDoA	373652	1250	Avg	0.76641		2175.66	5	1.28	1	8.4987	8.4987	39.1	22	22	Yes	24	82	82.4	Yes	4.3	4.3	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	778324	13C4-PFOS	606590	2500	Avg	1.639541						1956.51	1956.5137	39.1				2500	78	78	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	833326	13C8-PFOSA	778324	2500	Avg	1.005021		2663.3	5	1.28	1	10.404	10.4035	39.1	27	27	Yes	24	99	99.3	Yes	3.3	3.3	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	285859	13C2-PFDA	505691	1250	Avg	0.905673						780.2	780.1987	39.1				1250	62	62	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	2287609	13C4-PFOS	606590	2500	Avg	0.704162						13389	13389.18	39.1				25000	54	54	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	2020394	D7-NMeFOSE	2287609	25000	Avg	1.061282		20805	5	1.28	1	81.269	81.2687	39.1	210	210	Yes	240	86	86.6	Yes	0.59	0.6	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	103818	13C4-PFOS	606590	2500	Avg	0.42391						1009.36	1009.3546	39.1				2500	40	40	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	93552	D3-NMeFOSA	103818	2500	Avg	0.968682		2325.62	5	1.28	1	9.0845	9.0845	39.1	23	23	Yes	24	97	96.8	Yes	0.96	1.0	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	2212261	13C4-PFOS	606590	2500	Avg	0.766089						11902	11901.505	39.1				25000	48	48	Yes			
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	2236133	D9-NEtFOSE	2212261	25000	Avg	1.162702		21734	5	1.28	1	84.897	84.8971	39.1	220	220	Yes	240	91	90.5	Yes	2.4	2.4	Yes
100124B114.d	ZH22013-022MD	CACMW-003-110-108.5-0816	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	100484	13C4-PFOS	606590	2500	Avg	0.449382						921.57	921.5651	39.1				2500	37	37	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3354855	13C3-PFBA	1868704	5000	Avg	1.143357						7850.93	7850.9351	100				10000	79	79	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1336126	13C2-PFHxA	1085083	2500	Avg	0.801362						3841.45	3841.4547	100				5000	77	77	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	175268	18O2-PFHxS	649691	2500	Avg	0.187001						3606.55	3606.5492	100				5000	72	72	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	905144	13C2-PFHxA	1085083	2500	Avg	1.059706						1967.93	1967.9286	100				2500	79	79	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	658692	18O2-PFHxS	649691	2500	Avg	1.358315						1866.02	1866.0147	100				2500	75	75	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	680470	13C2-PFHxA	1085083	2500	Avg	0.193362						8108.02	8108.0217	100				10000	81	81	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	1053529	13C2-PFHxA	1085083	2500	Avg	1.173055						2069.21	2069.2129	100				2500	83	83	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	177849	18O2-PFHxS	649691	2500	Avg	0.197889						3458.31	3458.3021	100				5000	69	69	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1084984	13C4-PFOA	191954	2500	Avg	7.712837						1832.11	1832.112	100				2500	73	73	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	663740	18O2-PFHxS	649691	2500	Avg	1.176303						2171.26	2171.2606	100				2500	87	87	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	566045	13C5-PFNA	824867	1250	Avg	0.936058						916.38	916.3772	100				1250	73	73	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	167411	18O2-PFHxS	649691	2500	Avg	0.18929						3403.22	3403.2157	100				5000	68	68	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	580716	13C4-PFOS	754396	2500	Avg	0.534223						3602.32	3602.3163	100				5000	72	72	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	558139	13C2-PFDA	559723	1250	Avg	1.172751						1062.85	1062.8535	100				1250	85	85	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	401617	13C4-PFOS	754396	2500	Avg	0.39747						3348.48	3348.4851	100				5000	67	67	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	597560	13C4-PFOS	754396	2500	Avg	1.055789						1875.62	1875.6207	100				2500	75	75	Yes			
100124B123.d	ZQ18357-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1432	13C8-PFOS	597560	2500	Avg	0.969189		6.1815	5	5	1	0.006181	0.0062	100	ND	0.006	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	467268	13C2-PFDA	559723	1250	Avg	1.169063						892.62	892.6167	100				1250	71	71	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	406700	13C2-PFDA	559723	1250	Avg	1.008069						900.99	900.9917	100				1250	72	72	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	786849	13C4-PFOS	754396	2500	Avg	1.639541						1590.41	1590.4124	100				2500	64	64	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	314005	13C2-PFDA	559723	1250	Avg	0.905673						774.29	774.2871	100				1250	62	62	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1991601	13C4-PFOS	754396	2500	Avg	0.704162						9372.82	9372.8223	100				25000	37	37	Yes			
100124B123.d	ZQ18357-001		Method_Blank	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1788	D7-NMeFOSE	1991601	25000	Avg	1.061282		21.148	5	5	1	0.02115	0.0211	100	ND	0.021	Yes							
100124B123.d	ZQ18357-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	101009	13C4-PFOS	754396	2500	Avg	0.42391						789.64	789.6362	100				2500	32	32	Yes			
100124B123.d	ZQ18357-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2038062	13C4-PFOS	754396	2500	Avg	0.766089						8816.15	8816.1465	100				25000	35	35	Yes			
100124B123.d	ZQ18357-001		Method_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	3359	D9-NEtFOSE	2038062	25000	Avg	1.162702		35.438	5	5	1	0.03544	0.0354	100	ND	0.035	Yes							
100124B123.d	ZQ18357-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	93119	13C4-PFOS	754396	2500	Avg	0.449382						686.69	686.694	100				2500	27	27	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3325922	13C3-PFBA	1749057	5000	Avg	1.143357						8315.65	8315.6508	100				10000	83	83	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1414352	13C2-PFHxA	1037207	2500	Avg	0.801362						4254.06	4254.0573	100				5000	85	85	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	173245	18O2-PFHxS	555222	2500	Avg	0.187001						4171.49	4171.4796	100				5000	83	83	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	911329	13C2-PFHxA	1037207	2500	Avg	1.059706						2072.83	2072.8333	100				2500	83	83	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	653998	18O2-PFHxS	555222	2500	Avg	1.358315						2167.95	2167.95	100				2500	87	87	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	678628	13C2-PFHxA	1037207	2500	Avg	0.193362						8459.31	8459.3153	100				10000	85	85	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1120090	13C2-PFHxA	1037207	2500	Avg	1.173055						2301.49	2301.4901	100				2500	92	92	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	191738	18O2-PFHxS	555222	2500	Avg	0.197889						4362.75	4362.7455	100				5000	87	87	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1189004	13C4-PFOA	182548	2500	Avg	7.712837						2111.21	2111.2132	100				2500	84	84	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	549731	18O2-PFHxS	555222	2500	Avg	1.176303						2104.28	2104.2841	100				2500	84	84	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	605705	13C5-PFNA	848945	1250	Avg	0.936058						952.77	952.7717	100				1250	76	76	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	175202	18O2-PFHxS	555222	2500	Avg	0.18929						4167.59	4167.5875	100				5000	83	83	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	577780	13C4-PFOS	704941	2500	Avg	0.534223						3835.55	3835.5457	100				5000	77	77	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	549044	13C2-PFDA	559393	1250	Avg	1.172751						1046.15	1046.1509	100				1250	84	84	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	414605	13C4-PFOS	704941	2500	Avg	0.39747						3699.28	3699.2818	100				5000	74	74	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	530005	13C4-PFOS	704941	2500	Avg	1.055789						1780.29	1780.2872	100				2500	71	71	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	478607	13C8-PFOS	530005	2500	Avg	0.969189		2329.33	5	5	1	2.3293	2.3293	100	2.3	2.3	Yes	2.2	105	105.9	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	494671	13C2-PFDA	559393	1250	Avg	1.169063						945.52	945.5217	100				1250	76	76	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	424846	13C2-PFDA	559393	1250	Avg	1.008069						941.75	941.747	100				1250	75	75	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	772760	13C4-PFOS	704941	2500	Avg	1.639541						1671.51	1671.5124	100				1250	67	67	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	319941	13C2-PFDA	559393	1250	Avg	0.905673						789.39	789.3897	100				2500	63	63	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2001416	13C4-PFOS	704941	2500	Avg	0.704162						10080	10079.803	100				25000	40	40	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1750805	D7-NMeFOSE	2001416	25000	Avg	1.061282		20607	5	5	1	20.607	20.6068	100	21	21	Yes	24	86	85.9	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	99100	13C4-PFOS	704941	2500	Avg	0.42391						829.06	829.0624	100				2500	33	33	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2028789	13C4-PFOS	704941	2500	Avg	0.766089						9391.71	9391.7147	100				25000	38	38	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	2074162	D9-NEtFOSE	2028789	25000	Avg	1.162702		21983	5	5	1	21.983	21.9825	100	22	22	Yes	24	92	91.6	Yes			
100124B124.d	ZQ18357-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	91669	13C4-PFOS	704941	2500	Avg	0.449382						723.43	723.4259	100				2500	29	29	Yes			
100124B130.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2434889	13C4-PFOS	729420	2500	Avg	0.704162						11851	11851.38	38.9				25000	47	47	Yes			
100124B130.d	ZH22013-025	CACMW-003-110-98-081624-	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2353390	13C4-PFOS	729420	2500	Avg	0.766089						10529	10528.755	38.9				25000	42	42	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3100440	13C3-PFBA	1676541	5000	Avg	1.143357						8087.18	8087.1836	100				10000	81	81	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1358758	13C2-PFHxA	1044753	2500	Avg	0.801362						4057.32	4057.3246	100				5000	81	81	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	161611	18O2-PFHxS	650594	2500	Avg	0.187001						3320.91	3320.9088	100				5000	66	66	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	888040	13C2-PFHxA	1044753	2500	Avg	1.059706						2005.27	2005.273	100				2500	80	80	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	628587	18O2-PFHxS	650594	2500	Avg	1.358315						1778.26	1778.2583	100				2500	71	71	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	637405	13C2-PFHxA	1044753	2500	Avg	0.193362						7888.07	7888.0693	100				10000	79	79	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	954505	13C2-PFHxA	1044753	2500	Avg	1.173055						1947.09	1947.0908	100				2500	78	78	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	173264	18O2-PFHxS	650594	2500	Avg	0.197889						3364.47	3364.4698	100				5000	67	67	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	916612	13C4-PFOA	176384	2500	Avg	7.712837						1684.43	1684.427	100				2500	67	67	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	537150	18O2-PFHxS	650594	2500	Avg	1.176303						1754.71	1754.714	100				2500	70	70	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	526957	13C5-PFNA	763019	1250	Avg	0.936058						922.25	922.2466	100				1250	74	74	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	150968	18O2-PFHxS	650594	2500	Avg	0.18929						3064.7	3064.6945	100				5000	61	61	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	538171	13C4-PFOS	614164	2500	Avg	0.534223						4100.66	4100.6562	100				5000	82	82	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	432201	13C2-PFDA	560605	1250	Avg	1.172751						821.74	821.7373	100				1250	66	66	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	349477	13C4-PFOS	614164	2500	Avg	0.39747						3579.06	3579.0676	100				5000	72	72	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	549289	13C4-PFOS	614164	2500	Avg	1.055789						2117.77	2117.7731	100				2500	85	85	Yes			
100224112.d	ZQ18516-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	5720	13C8-PFOS	549289	2500	Avg	0.969189		26.861	5	5	1	0.02686	0.0269	100	0.027	0.027	Yes							
100224112.d	ZQ18516-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	432346	13C2-PFDA	560605	1250	Avg	1.169063						824.61	824.6062	100				1250	66	66	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	394291	13C2-PFDA	560605	1250	Avg	1.008069						872.13	872.1268	100				1250	70	70	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	728058	13C4-PFOS	614164	2500	Avg	1.639541						1807.59	1807.5876	100				2500	72	72	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	356657	13C2-PFDA	560605	1250	Avg	0.905673						878.08	878.0765	100				1250	70	70	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1983959	13C4-PFOS	614164	2500	Avg	0.704162						11469	11468.741	100				25000	46	46	Yes			
100224112.d	ZQ18516-001		Method_Blank	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	3347	D7-NMeFOSE	1983959	25000	Avg	1.061282		39.74	5	5	1	0.03974	0.0397	100	ND	0.04	Yes							
100224112.d	ZQ18516-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	82315	13C4-PFOS	614164	2500	Avg	0.42391						790.43	790.4256	100				2500	32	32	Yes			
100224112.d	ZQ18516-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2036334	13C4-PFOS	614164	2500	Avg	0.766089						10820	10819.955	100				25000	43	43	Yes			
100224112.d	ZQ18516-001		Method_Blank	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	2800	D9-NEtFOSE	2036334	25000	Avg	1.162702		29.565	5	5	1	0.02957	0.0296	100	ND	0.03	Yes							
100224112.d	ZQ18516-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	82191	13C4-PFOS	614164	2500	Avg	0.449382						744.5	744.4992	100				2500	30	30	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	2950999	13C3-PFBA	1577473	5000	Avg	1.143357						8180.79	8180.7906	100				10000	82	82	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1277261	13C2-PFHxA	949686	2500	Avg	0.801362						4195.76	4195.7623	100				5000	84	84	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	162325	18O2-PFHxS	526932	2500	Avg	0.187001						4118.39	4118.3848	100				5000	82	82	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	854332	13C2-PFHxA	949686	2500	Avg	1.059706						2122.27	2122.273	100				2500	85	85	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	571754	18O2-PFHxS	526932	2500	Avg	1.358315						1997.07	1997.074	100				2500	80	80	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	590317	13C2-PFHxA	949686	2500	Avg	0.193362						8036.63	8036.633	100				10000	80	80	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	915612	13C2-PFHxA	949686	2500	Avg	1.173055						2054.72	2054.722	100				2500	82	82	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	168399	18O2-PFHxS	526932	2500	Avg	0.197889						4037.42	4037.414	100				5000	81	81	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1068009	13C4-PFOA	168197	2500	Avg	7.712837						2058.18	2058.1761	100				2500	82	82	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	508461	18O2-PFHxS	526932	2500	Avg	1.176303						2050.8	2050.8027	100				2500	82	82	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	491531	13C5-PFNA	637846	1250	Avg	0.936058						1029.06	1029.0639	100				1250	82	82	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	155278	18O2-PFHxS	526932	2500	Avg	0.18929						3891.96	3891.9539	100				5000	78	78	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	505734	13C4-PFOS	650641	2500	Avg	0.534223						3637.46	3637.4594	100				5000	73	73	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	518472	13C2-PFDA	539468	1250	Avg	1.172751						1024.39	1024.3864	100				1250	82	82	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	343108	13C4-PFOS	650641	2500	Avg	0.39747						3316.84	3316.8442	100				5000	66	66	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	503887	13C4-PFOS	650641	2500	Avg	1.055789						1833.81	1833.8111	100				2500	73	73	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100224113.d	ZQ18516-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	452530	13C8-PFOS	503887	2500	Avg	0.969189		2316.57	5	5	1	2.3166	2.3166	100	2.3	2.3	Yes	2.2	104	105.3	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	516938	13C2-PFDA	539468	1250	Avg	1.169063						1024.58	1024.5776	100				1250	82	82	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	373444	13C2-PFDA	539468	1250	Avg	1.008069						858.38	858.3799	100				1250	69	69	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	931248	13C2-PFDoA	373444	1250	Avg	1.191025		2617.15	5	5	1	2.6172	2.6172	100	2.6	2.6	Yes	2.4	109	109.1	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	550523	13C2-PFDoA	373444	1250	Avg	0.76641		2404.36	5	5	1	2.4044	2.4044	100	2.4	2.4	Yes	2.4	100	100.2	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	701549	13C4-PFOS	650641	2500	Avg	1.639541						1644.12	1644.123	100				1250	66	66	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	303887	13C2-PFDA	539468	1250	Avg	0.905673						777.47	777.4725	100				2500	62	62	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1882740	13C4-PFOS	650641	2500	Avg	0.704162						10273	10273.451	100				25000	41	41	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1924846	D7-NMeFOSE	1882740	25000	Avg	1.061282		24083	5	5	1	24.083	24.0832	100	24	24	Yes	24	100	100.3	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	84254	13C4-PFOS	650641	2500	Avg	0.42391						763.69	763.6871	100				2500	31	31	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	1948245	13C4-PFOS	650641	2500	Avg	0.766089						9771.54	9771.538	100				25000	39	39	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	2232470	D9-NEtFOSE	1948245	25000	Avg	1.162702		24638	5	5	1	24.638	24.6385	100	25	25	Yes	24	103	102.7	Yes			
100224113.d	ZQ18516-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	82131	13C4-PFOS	650641	2500	Avg	0.449382						702.25	702.2472	100				2500	28	28	Yes			
100224128.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C8-PFOS	SESI-0098	547879	13C4-PFOS	660516	2500	Avg	1.055789						1964.1	1964.1027	40.2				2500	79	79	Yes			
100224128.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	5095253	13C8-PFOS	547879	2500	Avg	0.969189		23989	5	1.24	1	96.73	96.7299	40.2	240	240	Yes							
100224128.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	13C2-PFDoA	SESI-0118	426167	13C2-PFDA	542578	1250	Avg	1.008069						973.95	973.9516	40.2				1250	78	78	Yes			
100224128.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	46353	13C2-PFDoA	426167	1250	Avg	0.76641		177.4	5	1.24	1	0.71531	0.7153	40.2	1.8	1.8	Yes							
100224128.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2433999	13C4-PFOS	660516	2500	Avg	0.704162						13083	13082.914	40.2				25000	52	52	Yes			
100224128.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2554018	13C4-PFOS	660516	2500	Avg	0.766089						12618	12618.316	40.2				25000	50	50	Yes			
100224128.d	ZH22013-009	CACMW-002-110-92.75-0815	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	118899	13C4-PFOS	660516	2500	Avg	0.449382						1001.43	1001.4268	40.2				2500	40	40	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3265804	13C3-PFBA	1815911	5000	Avg	1.143357						7864.72	7864.728	100				10000	79	79	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1377321	13C2-PFHxA	1075363	2500	Avg	0.801362						3995.68	3995.6859	100				5000	80	80	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	179445	18O2-PFHxS	623520	2500	Avg	0.187001						3847.49	3847.486	100				5000	77	77	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	866001	13C2-PFHxA	1075363	2500	Avg	1.059706						1899.84	1899.8439	100				2500	76	76	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	631849	18O2-PFHxS	623520	2500	Avg	1.358315						1865.1	1865.1013	100				2500	75	75	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	647320	13C2-PFHxA	1075363	2500	Avg	0.193362						7782.74	7782.7452	100				10000	78	78	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1054709	13C2-PFHxA	1075363	2500	Avg	1.173055						2090.26	2090.2546	100				2500	84	84	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	178050	18O2-PFHxS	623520	2500	Avg	0.197889						3607.54	3607.5299	100				5000	72	72	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1179933	13C4-PFOA	163639	2500	Avg	7.712837						2337.2	2337.2027	100				2500	93	93	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	992524	13C8-PFOA	1179933	2500	Avg	0.944212		2227.17	5	5	1	2.2272	2.2272	100	2.2	2.2	Yes	2.4	93	92.8	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	572514	18O2-PFHxS	623520	2500	Avg	1.176303						1951.45	1951.4459	100				2500	78	78	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	562279	13C3-PFHxS	572514	2500	Avg	1.190513		2062.39	5	5	1	2.0624	2.0624	100	2.1	2.1	Yes	2.2	94	93.7	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	656835	13C5-PFNA	747611	1250	Avg	0.936058						1173.24	1173.2427	100				1250	94	94	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	887226	13C9-PFNA	656835	1250	Avg	0.822409		2053.05	5	5	1	2.0531	2.0531	100	2.1	2.1	Yes	2.4	86	85.5	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	179572	18O2-PFHxS	623520	2500	Avg	0.18929						3803.66	3803.6502	100				5000	76	76	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	677311	13C2-8:2FTS	179572	5000	Avg	1.994899		9453.63	5	5	1	9.4536	9.4536	100	9.5	9.5	Yes	9.2	103	102.8	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	665681	13C4-PFOS	749087	2500	Avg	0.534223						4158.64	4158.64	100				5000	83	83	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	185157	D3-NMeFOSAA	665681	5000	Avg	0.821894		1692.11	5	5	1	1.6921	1.6921	100	1.7	1.7	Yes	2.4	71	70.5	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	540219	13C2-PFDA	570192	1250	Avg	1.172751						1009.84	1009.8409	100				1250	81	81	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	951055	13C6-PFDA	540219	1250	Ln	0.808407	9.777264	2710.08	5	5	1	2.7101	2.7101	100	2.7	2.7	Yes	2.4	113	112.9	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	398877	13C4-PFOS	749087	2500	Avg	0.39747						3349.21	3349.2101	100				5000	67	67	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	629477	13C4-PFOS	749087	2500	Avg	1.055789						1989.8	1989.8048	100				2500	80	80	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	506870	13C8-PFOS	629477	2500	Avg	0.864668		2328.13	5	5	1	2.3281	2.3281	100	2.3	2.3	Yes	2.3	102	101.2	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	530634	13C8-PFOS	629477	2500	Avg	0.969189		2174.44	5	5	1	2.1744	2.1744	100	2.2	2.2	Yes	2.2	98	98.8	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	679638	13C8-PFOS	629477	2500	Ln	1.144627	15.5564	2344.57	5	5	1	2.3446	2.3446	100	2.3	2.3	Yes	2.3	102	101.9	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluorodecanesulfonic acid (PFDS)	335-77-3	575185	13C8-PFOS	629477	2500	Avg	1.105585		2066.22	5	5	1	2.0662	2.0662	100	2.1	2.1	Yes	2.3	89	89.8	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	531868	13C2-PFDA	570192	1250	Avg	1.169063						997.37	997.3666	100				1250	80	80	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	913924	13C7-PFUnA	531868	1250	Avg	0.943401		2276.77	5	5	1	2.2768	2.2768	100	2.3	2.3	Yes	2.4	95	94.9	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	423346	13C2-PFDA	570192	1250	Avg	1.008069						920.65	920.649	100				1250	74	74	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluorododecanoic acid (PFDoA)	307-55-1	1008506	13C2-PFDoA	423346	1250	Avg	1.191025		2500.19	5	5	1	2.5002	2.5002	100	2.5	2.5	Yes	2.4	104	104.2	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	560344	13C2-PFDoA	423346	1250	Avg	0.76641		2158.78	5	5	1	2.1588	2.1588	100	2.2	2.2	Yes	2.4	90	90.0	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	767128	13C4-PFOS	749087	2500	Avg	1.639541						1561.54	1561.5407	100				1250	62	62	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	759425	13C8-PFOSA	767128	2500	Avg	1.005021		2462.53	5	5	1	2.4625	2.4625	100	2.5	2.5	Yes	2.4	103	102.6	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	331311	13C2-PFDA	570192	1250	Avg	0.905673						801.96	801.9611	100				2500	64	64	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2163646	13C4-PFOS	749087	2500	Avg	0.704162						10255	10254.663	100				25000	41	41	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	2108293	D7-NMeFOSE	2163646	25000	Avg	1.061282		22954	5	5	1	22.954	22.9538	100	23	23	Yes	24	96	95.6	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	88648	13C4-PFOS	749087	2500	Avg	0.42391						697.92	697.9158	100				2500	28	28	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	85663	D3-NMeFOSA	88648	2500	Avg	0.968682		2493.92	5	5	1	2.4939	2.4939	100	2.5	2.5	Yes	2.4	104	103.9	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2170568	13C4-PFOS	749087	2500	Avg	0.766089						9455.88	9455.8793	100				25000	38	38	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	2456678	D9-NEtFOSE	2170568	25000	Avg	1.162702		24336	5	5	1	24.336	24.3358	100	24	24	Yes	24	101	101.4	Yes			
100324020.d	ZQ18303-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	87593	13C4-PFOS	749087	2500	Avg	0.449382						650.52	650.5212	100				2500	26	26	Yes			
100324046.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	EIS	13C8-PFOS	SESI-0098	111156	13C4-PFOS	146702	500	Avg	1.055789						358.83	358.8308	39.3				500	72	72	Yes			
100324046.d	ZH22013-005	CACMW-002-060-58.5-08152	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2610381	13C8-PFOS	111156	500	Avg	0.969189		12115	5	1.27	5	238.49	238.4892	39.3	610	610	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?

Key

	from quantitation report
	from reported calibration
	from lab report/SEDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
g	grams
IS	internal standard
mL	milliliters
ND	not detected
ng/g	nanograms per gram
ng/L	nanograms per liter
On Col.	on column
RF	response factor
RPD	relative percent difference

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3609345	13C3-PFBA	1754290	5000	Avg	1.14247						9004.35	9004.3467	100				10000	90	90	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1556177	13C2-PFHxA	1061047	2500	Avg	0.796557						4603.07	4603.0694	100				5000	92	92	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	176905	18O2-PFHxS	544462	2500	Avg	0.169955						4779.46	4779.4574	100				5000	96	96	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	984422	13C2-PFHxA	1061047	2500	Avg	1.046383						2216.64	2216.6444	100				2500	89	89	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	740185	18O2-PFHxS	544462	2500	Avg	1.319962						2574.85	2574.8462	100				2500	103	103	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	693038	13C2-PFHxA	1061047	2500	Avg	0.186581						8751.75	8751.7523	100				10000	88	88	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	1136780	13C2-PFHxA	1061047	2500	Avg	1.170685						2287.93	2287.9249	100				2500	92	92	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	196854	18O2-PFHxS	544462	2500	Avg	0.184115						4909.4	4909.3897	100				5000	98	98	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1396692	13C4-PFOA	190742	2500	Avg	7.728869						2368.53	2368.5272	100				2500	95	95	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	571164	18O2-PFHxS	544462	2500	Avg	1.171154						2239.34	2239.336	100				2500	90	90	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	614757	13C5-PFNA	745488	1250	Avg	0.935659						1101.68	1101.6794	100				1250	88	88	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	172218	18O2-PFHxS	544462	2500	Avg	0.170753						4631.08	4631.0837	100				5000	93	93	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	612084	13C4-PFOS	684908	2500	Avg	0.495989						4504.5	4504.5017	100				5000	90	90	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	545390	13C2-PFDA	535655	1250	Avg	1.232298						1032.8	1032.8001	100				1250	83	83	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	435406	13C4-PFOS	684908	2500	Avg	0.364519						4359.95	4359.955	100				5000	87	87	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	614455	13C4-PFOS	684908	2500	Avg	0.970887						2310.09	2310.0914	100				2500	92	92	Yes			
100724A019.d	ZQ18720-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4521	13C8-PFOS	614455	2500	Avg	1.054191		17.449	5	5	1	0.01745	0.0174	100	ND	0.017	Yes							
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	540655	13C2-PFDA	535655	1250	Avg	1.191252						1059.11	1059.1109	100				1250	85	85	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	466637	13C2-PFDA	535655	1250	Avg	1.01948						1068.13	1068.1329	100				1250	85	85	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	805722	13C4-PFOS	684908	2500	Avg	1.694128						1735.99	1735.9882	100				2500	69	69	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	332260	13C2-PFDA	535655	1250	Avg	0.871708						889.47	889.4712	100				1250	71	71	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2123501	13C4-PFOS	684908	2500	Avg	0.708623						10938	10938.178	100				25000	44	44	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	108162	13C4-PFOS	684908	2500	Avg	0.415479						950.24	950.2402	100				2500	38	38	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2260174	13C4-PFOS	684908	2500	Avg	0.758997						10870	10869.501	100				25000	43	43	Yes			
100724A019.d	ZQ18720-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	102941	13C4-PFOS	684908	2500	Avg	0.441246						851.56	851.5602	100				2500	34	34	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3299768	13C3-PFBA	1794960	5000	Avg	1.14247						8045.52	8045.5147	100				10000	80	80	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1425531	13C2-PFHxA	1092235	2500	Avg	0.796557						4096.23	4096.2243	100				5000	82	82	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1398310	13C5-PFPeA	1425531	5000	Avg	0.874543		5608.1	5	5	1	5.6081	5.6081	100	5.6	5.6	Yes	4.8	117	117	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	158627	18O2-PFHxS	605460	2500	Avg	0.169955						3853.88	3853.8758	100				5000	77	77	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	917001	13C2-PFHxA	1092235	2500	Avg	1.046383						2005.87	2005.8712	100				2500	80	80	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	902034	13C5-PFHxA	917001	2500	Avg	0.9029		2723.66	5	5	1	2.7237	2.7237	100	2.7	2.7	Yes	2.4	113	113	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	648545	18O2-PFHxS	605460	2500	Avg	1.319962						2028.77	2028.772	100				2500	81	81	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	766849	13C3-PFBS	648545	2500	Avg	1.207053		2448.97	5	5	1	2.449	2.449	100	2.4	2.4	Yes	2.1	116	117	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	651877	13C2-PFHxA	1092235	2500	Avg	0.186581						7996.91	7996.9091	100				10000	80	80	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	999146	13C2-PFHxA	1092235	2500	Avg	1.170685						1953.5	1953.4973	100				2500	78	78	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1222635	13C4-PFHpA	999146	2500	Avg	1.077361		2839.53	5	5	1	2.8395	2.8395	100	2.8	2.8	Yes	2.4	118	118	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	186019	18O2-PFHxS	605460	2500	Avg	0.184115						4171.8	4171.7924	100				5000	83	83	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	809121	13C2-6:2FTS	186019	5000	Avg	2.253868		9649.34	5	5	1	9.6493	9.6493	100	9.6	9.6	Yes	9.1	106	106	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1225460	13C4-PFOA	185697	2500	Avg	7.728869						2134.61	2134.6089	100				2500	85	85	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1107839	13C8-PFOA	1225460	2500	Ln	0.828626	32.8119	2687.86	5	5	1	2.6879	2.6879	100	2.7	2.7	Yes	2.4	112	112	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	547568	18O2-PFHxS	605460	2500	Avg	1.171154						1930.54	1930.5391	100				2500	77	77	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	703108	13C3-PFHxS	547568	2500	Avg	1.194012		2688.53	5	5	1	2.6885	2.6885	100	2.7	2.7	Yes	2.3	119	117	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	685502	13C3-PFHxS	547568	2500	Ln	1.119323	33.81	2765.91	5	5	1	2.7659	2.7659	100	2.8	2.8	Yes	2.2	126	126	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	538114	13C5-PFNA	752453	1250	Avg	0.935659						955.4	955.4046	100				1250	76	76	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	1043552	13C9-PFNA	538114	1250	Avg	0.837317		2895.08	5	5	1	2.8951	2.8951	100	2.9	2.9	Yes	2.4	121	121	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	153736	18O2-PFHxS	605460	2500	Avg	0.170753						3717.59	3717.5925	100				5000	74	74	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	689089	13C2-8:2FTS	153736	5000	Ln	1.94256	137	11466	5	5	1	11.466	11.4665	100	11	11	Yes	9.2	124	125	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	535525	13C4-PFOS	758705	2500	Avg	0.495989						3557.74	3557.7446	100				5000	71	71	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	228341	D3-NMeFOSAA	535525	5000	Avg	0.795786		2679.03	5	5	1	2.679	2.679	100	2.7	2.7	Yes	2.4	112	112	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	531415	13C2-PFDA	589373	1250	Avg	1.232298						914.61	914.614	100				1250	73	73	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	1004520	13C6-PFDA	531415	1250	Avg	0.819341		2883.83	5	5	1	2.8838	2.8838	100	2.9	2.9	Yes	2.4	120	120	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	403764	13C4-PFOS	758705	2500	Avg	0.364519						3649.84	3649.8455	100				5000	73	73	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	241155	D5-NEtFOSAA	403764	5000	Avg	1.162779		2568.28	5	5	1	2.5683	2.5683	100	2.6	2.6	Yes	2.4	107	107	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	557416	13C4-PFOS	758705	2500	Avg	0.970887						1891.81	1891.8113	100				2500	76	76	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	547907	13C8-PFOS	557416	2500	Avg	0.939894		2614.5	5	5	1	2.6145	2.6145	100	2.6	2.6	Yes	2.3	115	114	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	590303	13C8-PFOS	557416	2500	Avg	1.054191		2511.4	5	5	1	2.5114	2.5114	100	2.5	2.5	Yes	2.2	113	114	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	544993	13C2-PFDA	589373	1250	Avg	1.191252						970.3	970.3023	100				1250	78	78	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	878637	13C7-PFUnA	544993	1250	Avg	0.853896		2360.06	5	5	1	2.3601	2.3601	100	2.4	2.4	Yes	2.4	98	98.3	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	434948	13C2-PFDA	589373	1250	Avg	1.01948						904.85	904.8538	100				1250	72	72	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	726890	13C2-PFDoA	434948	1250	Avg	0.772781		2703.24	5	5	1	2.7032	2.7032	100	2.7	2.7	Yes	2.4	113	113	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	793496	13C4-PFOS	758705	2500	Avg	1.694128						1543.35	1543.3541	100				2500	62	62	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	866432	13C8-PFOSA	793496	2500	Avg	0.99659		2739.13	5	5	1	2.7391	2.7391	100	2.7	2.7	Yes	2.4	114	114	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	348973	13C2-PFDA	589373	1250	Avg	0.871708						849.06	849.0643	100				1250	68	68	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2154727	13C4-PFOS	758705	2500	Avg	0.708623						10019	10019.454	100				25000	40	40	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	106716	13C4-PFOS	758705	2500	Avg	0.415479						846.35	846.3452	100				2500	34	34	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2292067	13C4-PFOS	758705	2500	Avg	0.758997						9950.72	9950.7155	100				25000	40	40	Yes			
100724A020.d	ZQ18720-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	100661	13C4-PFOS	758705	2500	Avg	0.441246						751.7	751.7051	100				2500	30	30	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3385181	13C3-PFBA	1788474	5000	Avg	1.14247						8283.7	8283.7019	100				10000	83	83	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1444206	13C2-PFHxA	1063464	2500	Avg	0.796557						4262.16	4262.1576	100				5000	85	85	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	111770	13C5-PFPeA	1444206	5000	Avg	0.874543		442.47	5	5	1	0.44247	0.4425	100	0.44	0.44	Yes	0.4	111	111	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	165270	18O2-PFHxS	579287	2500	Avg	0.169955						4196.69	4196.6844	100				5000	84	84	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	931202	13C2-PFHxA	1063464	2500	Avg	1.046383						2092.04	2092.0422	100				2500	84	84	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	75251	13C5-PFHxA	931202	2500	Avg	0.9029		223.75	5	5	1	0.22375	0.2238	100	0.22	0.22	Yes	0.2	112	112	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	645326	18O2-PFHxS	579287	2500	Avg	1.319962						2109.91	2109.9101	100				2500	84	84	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	58837	13C3-PFBS	645326	2500	Avg	1.207053		188.84	5	5	1	0.18884	0.1888	100	0.19	0.19	Yes	0.17	111	111	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	666110	13C2-PFHxA	1063464	2500	Avg	0.186581						8392.58	8392.5851	100				10000	84	84	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1039325	13C2-PFHxA	1063464	2500	Avg	1.170685						2087.03	2087.0293	100				2500	83	83	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	94131	13C4-PFHpA	1039325	2500	Avg	1.077361		210.16	5	5	1	0.21016	0.2102	100	0.21	0.21	Yes	0.2	105	105.1	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	187259	18O2-PFHxS	579287	2500	Avg	0.184115						4389.35	4389.3454	100				5000	88	88	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	63118	13C2-6:2FTS	187259	5000	Avg	2.253868		747.74	5	5	1	0.74774	0.7477	100	0.75	0.75	Yes	0.76	98	98.4	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1095732	13C4-PFOA	183759	2500	Avg	7.728869						1928.77	1928.7671	100				2500	77	77	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	101929	13C8-PFOA	1095732	2500	Ln	0.828626	32.8119	241.06	5	5	1	0.24106	0.2411	100	0.24	0.24	Yes	0.2	121	120.6	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	547082	18O2-PFHxS	579287	2500	Avg	1.171154						2015.97	2015.9727	100				2500	81	81	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	50620	13C3-PFHxS	547082	2500	Avg	1.194012		193.73	5	5	1	0.19373	0.1937	100	0.19	0.19	Yes	0.18	108	107.6	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	52018	13C3-PFHxS	547082	2500	Ln	1.119323	33.81	182.16	5	5	1	0.18216	0.1822	100	0.18	0.18	Yes	0.18	101	101.2	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	558410	13C5-PFNA	776409	1250	Avg	0.935659						960.85	960.8488	100				1250	77	77	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	84485	13C9-PFNA	558410	1250	Avg	0.837317		225.86	5	5	1	0.22586	0.2259	100	0.23	0.23	Yes	0.2	113	113.0	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	152856	18O2-PFHxS	579287	2500	Avg	0.170753						3863.31	3863.3173	100				5000	77	77	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	42839	13C2-8:2FTS	152856	5000	Ln	1.94256	137	650.41	5	5	1	0.65041	0.6508	100	0.65	0.65	Yes	0.76	86	85.6	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	597838	13C4-PFOS	689102	2500	Avg	0.495989						4372.88	4372.8841	100				5000	87	87.0	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	16006	D3-NMeFOSAA	597838	5000	Avg	0.795786		168.22	5	5	1	0.16822	0.1682	100	0.17	0.17	Yes	0.2	84	84.1	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	498788	13C2-PFDA	570970	1250	Avg	1.232298						886.13	886.1291	100				1250	71	71.0	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	79806	13C6-PFDA	498788	1250	Avg	0.819341		244.1	5	5	1	0.2441	0.2441	100	0.24	0.24	Yes	0.2	122	122	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	392037	13C4-PFOS	689102	2500	Avg	0.364519						3901.78	3901.7855	100				5000	78	78.0	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	20139	D5-NEtFOSAA	392037	5000	Avg	1.162779		220.89	5	5	1	0.22089	0.2209	100	0.22	0.22	Yes	0.2	110	110	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	600039	13C4-PFOS	689102	2500	Avg	0.970887						2242.16	2242.1636	100				2500	90	90.0	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	41312	13C8-PFOS	600039	2500	Avg	0.939894		183.13	5	5	1	0.18313	0.1831	100	0.18	0.18	Yes	0.19	96	96.4	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	42452	13C8-PFOS	600039	2500	Avg	1.054191		167.78	5	5	1	0.16778	0.1678	100	0.17	0.17	Yes	0.18	93	93.2	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	480155	13C2-PFDA	570970	1250	Avg	1.191252						882.42	882.4184	100				1250	71	71.0	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	72956	13C7-PFUnA	480155	1250	Avg	0.853896		222.43	5	5	1	0.22243	0.2224	100	0.22	0.22	Yes	0.2	111	111	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	398971	13C2-PFDA	570970	1250	Avg	1.01948						856.76	856.7603	100				1250	69	69.0	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	56207	13C2-PFDoA	398971	1250	Avg	0.772781		227.88	5	5	1	0.22788	0.2279	100	0.23	0.23	Yes	0.2	114	114	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	751424	13C4-PFOS	689102	2500	Avg	1.694128						1609.15	1609.1456	100				2500	64	64.0	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	64159	13C8-PFOSA	751424	2500	Avg	0.99659		214.19	5	5	1	0.21419	0.2142	100	0.21	0.21	Yes	0.2	107	107	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	325104	13C2-PFDA	570970	1250	Avg	0.871708						816.48	816.4846	100				1250	65	65.0	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2068979	13C4-PFOS	689102	2500	Avg	0.708623						10592	10592.472	100				25000	42	42	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	98286	13C4-PFOS	689102	2500	Avg	0.415479						858.22	858.2209	100				2500	34	34.0	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2149235	13C4-PFOS	689102	2500	Avg	0.758997						10273	10273.072	100				25000	41	41	Yes			
100724A021.d	ZQ18720-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	100448	13C4-PFOS	689102	2500	Avg	0.441246						825.88	825.8801	100				2500	33	33.0	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C4-PFBA	SESI-0111	3123540	13C3-PFBA	1754361	5000	Avg	1.14247						7792.08	7792.0783	39.8				10000	78	78.0	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1326556	13C2-PFHxA	1027238	2500	Avg	0.796557						4053.01	4053.0099	39.8				5000	81	81.0	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	100302	13C5-PFPeA	1326556	5000	Avg	0.874543		432.29	5	1.29	1	1.6755	1.6755	39.8	4.2	4.2	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	155652	18O2-PFHxS	588286	2500	Avg	0.169955						3892	3891.9948	39.8				5000	78	78.0	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C5-PFHxA	SESI-0113	859848	13C2-PFHxA	1027238	2500	Avg	1.046383						1999.86	1999.8616	39.8				2500	80	80	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	237786	13C5-PFHxA	859848	2500	Avg	0.9029		765.71	5	1.29	1	2.9679	2.9679	39.8	7.5	7.5	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C3-PFBS	SESI-0116	592961	18O2-PFHxS	588286	2500	Avg	1.319962						1909.04	1909.0451	39.8				2500	76	76.0	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	37851	13C3-PFBS	592961	2500	Avg	1.207053		132.21	5	1.29	1	0.51244	0.5124	39.8	1.3	1.3	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	619292	13C2-PFHxA	1027238	2500	Avg	0.186581						8077.87	8077.8723	39.8				10000	81	81.0	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C4-PFHpA	SESI-0114	926137	13C2-PFHxA	1027238	2500	Avg	1.170685						1925.33	1925.3253	39.8				2500	77	77	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	147803	13C4-PFHpA	926137	2500	Avg	1.077361		370.33	5	1.29	1	1.4354	1.4354	39.8	3.6	3.6	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	166316	18O2-PFHxS	588286	2500	Avg	0.184115						3838.81	3838.8077	39.8				5000	77	77	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	448290	13C2-6:2FTS	166316	5000	Avg	2.253868		5979.52	5	1.29	1	23.176	23.1764	39.8	58	58	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C8-PFOA	SESI-0097	1066387	13C4-PFOA	180082	2500	Avg	7.728869						1915.44	1915.4402	39.8				2500	77	77.0	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	358255	13C8-PFOA	1066387	2500	Ln	0.828626	32.8119	973.98	5	1.29	1	3.7751	3.7751	39.8	9.5	9.5	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C3-PFHxS	SESI-0096	587549	18O2-PFHxS	588286	2500	Avg	1.171154						2131.97	2131.9724	39.8				2500	85	85	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	47600	13C3-PFHxS	587549	2500	Avg	1.194012		169.63	5	1.29	1	0.65747	0.6575	39.8	1.7	1.7	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	610441	13C3-PFHxS	587549	2500	Ln	1.119323	33.81	2290.31	5	1.29	1	8.8772	8.8772	39.8	22	22	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C9-PFNA	SESI-0099	537002	13C5-PFNA	687762	1250	Avg	0.935659						1043.11	1043.1101	39.8				1250	83	83	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	97219	13C9-PFNA	537002	1250	Avg	0.837317		270.27	5	1.29	1	1.0476	1.0476	39.8	2.6	2.6	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	135643	18O2-PFHxS	588286	2500	Avg	0.170753						3375.83	3375.8298	39.8				5000	68	68	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	23301	13C2-8:2FTS	135643	5000	Ln	1.94256	137	371.2	5	1.29	1	1.4388	1.4404	39.8	3.6	3.6	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	542064	13C4-PFOS	680703	2500	Avg	0.495989						4013.85	4013.8475	39.8				5000	80	80	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	9203	D3-NMeFOSAA	542064	5000	Avg	0.795786		106.67	5	1.29	1	0.41346	0.4135	39.8	1	1	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C6-PFDA	SESI-0115	513646	13C2-PFDA	533802	1250	Avg	1.232298						976.06	976.0633	39.8				1250	78	78	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	10562	13C6-PFDA	513646	1250	Avg	0.819341		31.371	5	1.29	1	0.12159	0.1216	39.8	0.31	0.31	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	381922	13C4-PFOS	680703	2500	Avg	0.364519						3848.01	3848.0158	39.8				5000	77	77	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	11252	D5-NEtFOSAA	381922	5000	Avg	1.162779		126.69	5	1.29	1	0.49103	0.491	39.8	1.2	1.2	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C8-PFOS	SESI-0098	525887	13C4-PFOS	680703	2500	Avg	0.970887						1989.33	1989.3266	39.8				2500	80	80	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	28635	13C8-PFOS	525887	2500	Avg	0.939894		144.83	5	1.29	1	0.56137	0.5614	39.8	1.4	1.4	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2720313	13C8-PFOS	525887	2500	Avg	1.054191		12267	5	1.29	1	47.547	47.5475	39.8	120	120	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C7-PFUnA	SESI-0117	494674	13C2-PFDA	533802	1250	Avg	1.191252						972.4	972.4007	39.8				1250	78	78	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	124924	13C7-PFUnA	494674	1250	Avg	0.853896		369.69	5	1.29	1	1.4329	1.4329	39.8	3.6	3.6	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C2-PFDoA	SESI-0118	421309	13C2-PFDA	533802	1250	Avg	1.01948						967.72	967.7247	39.8				1250	77	77	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	52335	13C2-PFDoA	421309	1250	Avg	0.772781		200.93	5	1.29	1	0.7788	0.7788	39.8	2	2	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	839073	13C4-PFOS	680703	2500	Avg	1.694128						1819.01	1819.0133	39.8				2500	73	73	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	33851	13C8-PFOSA	839073	2500	Avg	0.99659		101.2	5	1.29	1	0.39226	0.3923	39.8	0.98	0.99	Yes							
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	280336	13C2-PFDA	533802	1250	Avg	0.871708						753.07	753.074	39.8				1250	60	60	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2406502	13C4-PFOS	680703	2500	Avg	0.708623						12473	12472.495	39.8				25000	50	50	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	135876	13C4-PFOS	680703	2500	Avg	0.415479						1201.09	1201.0913	39.8				2500	48	48	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2495793	13C4-PFOS	680703	2500	Avg	0.758997						12077	12076.771	39.8				25000	48	48	Yes			
100724A035.d	ZI12013-020	CACMW-008-060-27-090624-	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	123497	13C4-PFOS	680703	2500	Avg	0.441246						1027.92	1027.9168	39.8				2500	41	41	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	3222007	13C3-PFBA	1769494	5000	Avg	1.14247						7968.98	7968.9772	39.8				10000	80	80	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	1365887	13C2-PFHxA	1096586	2500	Avg	0.796557						3909.27	3909.266	39.8				5000	78	78	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1339315	13C5-PFPeA	1365887	5000	Avg	0.874543		5606.05	5	1.29	1	21.729	21.7289	39.8	55	55	Yes	47	108	107	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	153829	18O2-PFHxS	590174	2500	Avg	0.169955						3834.11	3834.1068	39.8				5000	77	77	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	868516	13C2-PFHxA	1096586	2500	Avg	1.046383						1892.28	1892.2759	39.8				2500	76	76	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1056944	13C5-PFHxA	868516	2500	Avg	0.9029		3369.57	5	1.29	1	13.06	13.0603	39.8	33	33	Yes	23	109	110	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	613557	18O2-PFHxS	590174	2500	Avg	1.319962						1969.03	1969.0349	39.8				2500	79	79	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	726062	13C3-PFBS	613557	2500	Avg	1.207053		2450.94	5	1.29	1	9.4998	9.4998	39.8	24	24	Yes	21	109	108	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	598686	13C2-PFHxA	1096586	2500	Avg	0.186581						7315.25	7315.2471	39.8				10000	73	73	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	976286	13C2-PFHxA	1096586	2500	Avg	1.170685						1901.23	1901.2285	39.8				2500	76	76	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1289406	13C4-PFHpA	976286	2500	Avg	1.077361		3064.72	5	1.29	1	11.879	11.8788	39.8	30	30	Yes	23	112	114	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	169103	18O2-PFHxS	590174	2500	Avg	0.184115						3890.66	3890.6492	39.8				5000	78	78	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1031444	13C2-6:2FTS	169103	5000	Avg	2.253868		13531	5	1.29	1	52.446	52.4465	39.8	130	130	Yes	89	83	82.6	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	1106836	13C4-PFOA	193160	2500	Avg	7.728869						1853.49	1853.4896	39.8				2500	74	74	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1197898	13C8-PFOA	1106836	2500	Ln	0.828626	32.8119	3225.66	5	1.29	1	12.503	12.5026	39.8	31	31	Yes	23	94	95.3	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	1130832	13C4-PFOA	198274	2500	Avg	7.728869						1904.3	1904.3	39.8				2500	76	76.2	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1224000	13C8-PFOA	1130832	2500	Ln	0.828626	32.8119	3298.19	5	1.27	1	12.987	12.9869	39.8	31	31	Yes	23	96	97.4	Yes	2.2	2.2	Yes
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	541690	18O2-PFHxS	590174	2500	Avg	1.171154						1959.28	1959.2811	39.8				2500	78	78	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	677943	13C3-PFHxS	541690	2500	Avg	1.194012		2620.44	5	1.29	1	10.157	10.1567	39.8	26	26	Yes	22	109	108	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1181464	13C3-PFHxS	541690	2500	Ln	1.119323	33.81	4841.2	5	1.29	1	18.764	18.7643	39.8	47	47	Yes	21	116	118	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	560352	13C5-PFNA	671340	1250	Avg	0.935659						1115.09	1115.0923	39.8				1250	89	89	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	1067618	13C9-PFNA	560352	1250	Avg	0.837317		2844.3	5	1.29	1	11.024	11.0244	39.8	28	28	Yes	23	107	109	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	151205	18O2-PFHxS	590174	2500	Avg	0.170753						3751.09	3751.0923	39.8				5000	75	75	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	698052	13C2-8:2FTS	151205	5000	Ln	1.94256	137	11812	5	1.29	1	45.782	45.7838	39.8	110	110	Yes	90	124	124	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	552539	13C4-PFOS	723571	2500	Avg	0.495989						3849.02	3849.0163	39.8				5000	77	77	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	214889	D3-NMeFOSAA	552539	5000	Avg	0.795786		2443.57	5	1.29	1	9.4712	9.4712	39.8	24	24	Yes	23	97	98.9	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	550017	13C2-PFDA	526221	1250	Avg	1.232298						1060.24	1060.2352	39.8				1250	85	85	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluorodecanoic acid (PFDA)	335-76-2	911268	13C6-PFDA	550017	1250	Avg	0.819341		2527.64	5	1.29	1	9.7971	9.7971	39.8	25	25	Yes	23	104	106	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	399993	13C4-PFOS	723571	2500	Avg	0.364519						3791.32	3791.3255	39.8				5000	76	76	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	271775	D5-NEtFOSAA	399993	5000	Avg	1.162779		2921.66	5	1.29	1	11.324	11.3243	39.8	28	28	Yes	23	116	118	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	563057	13C4-PFOS	723571	2500	Avg	0.970887						2003.75	2003.7454	39.8				2500	80	80	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	440802	13C8-PFOS	563057	2500	Avg	0.939894		2082.34	5	1.29	1	8.0711	8.0711	39.8	20	20	Yes	22	85	85.8	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3070712	13C8-PFOS	563057	2500	Avg	1.054191		12933	5	1.29	1	50.129	50.1288	39.8	130	130	Yes	22	30	29.5	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	495710	13C2-PFDA	526221	1250	Avg	1.191252						988.48	988.4754	39.8				1250	79	79	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	1020234	13C7-PFUnA	495710	1250	Avg	0.853896		3012.85	5	1.29	1	11.678	11.6777	39.8	29	29	Yes	23	110	112	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	445627	13C2-PFDA	526221	1250	Avg	1.01948						1038.33	1038.3281	39.8				1250	83	83	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	682175	13C2-PFDoA	445627	1250	Avg	0.772781		2476.16	5	1.29	1	9.5975	9.5975	39.8	24	24	Yes	23	95	96.3	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	894457	13C4-PFOS	723571	2500	Avg	1.694128						1824.2	1824.1985	39.8				2500	73	73	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	929694	13C8-PFOSA	894457	2500	Avg	0.99659		2607.38	5	1.29	1	10.106	10.1061	39.8	25	25	Yes	23	104	106	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	324232	13C2-PFDA	526221	1250	Avg	0.871708						883.54	883.5409	39.8				1250	71	71	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	2466416	13C4-PFOS	723571	2500	Avg	0.708623						12026	12025.688	39.8				25000	48	48	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	137651	13C4-PFOS	723571	2500	Avg	0.415479						1144.69	1144.6933	39.8				2500	46	46	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	2539995	13C4-PFOS	723571	2500	Avg	0.758997						11563	11562.498	39.8				25000	46	46	Yes			
100724A036.d	ZI12013-020MS	CACMW-008-060-27-090624-	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	123142	13C4-PFOS	723571	2500	Avg	0.441246						964.24	964.2381	39.8				2500	39	39	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	3307328	13C3-PFBA	1854471	5000	Avg	1.14247						7805.17	7805.171	39.8				10000	78	78	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	1390213	13C2-PFHxA	1024081	2500	Avg	0.796557						4260.6	4260.5943	39.8				5000	85	85	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1388211	13C5-PFPeA	1390213	5000	Avg	0.874543		5709.04	5	1.27	1	22.477	22.4765	39.8	56	56	Yes	47	110	111	Yes	3.4	3.38	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	153187	18O2-PFHxS	706595	2500	Avg	0.169955						3189.03	3189.0213	39.8				5000	64	64	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	877553	13C2-PFHxA	1024081	2500	Avg	1.046383						2047.33	2047.3325	39.8				2500	82	82	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1033337	13C5-PFHxA	877553	2500	Avg	0.9029		3260.39	5	1.27	1	12.836	12.8362	39.8	32	32	Yes	23	105	108	Yes	1.7	1.73	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	622912	18O2-PFHxS	706595	2500	Avg	1.319962						1669.69	1669.6857	39.8				2500	67	67.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	719531	13C3-PFBS	622912	2500	Avg	1.207053		2392.41	5	1.27	1	9.419	9.419	39.8	24	24	Yes	21	106	107	Yes	0.85	0.85	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	650448	13C2-PFHxA	1024081	2500	Avg	0.186581						8510.42	8510.4175	39.8				10000	85	85.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	1059995	13C2-PFHxA	1024081	2500	Avg	1.170685						2210.39	2210.3928	39.8				2500	88	88	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1321572	13C4-PFHpA	1059995	2500	Avg	1.077361		2893.12	5	1.27	1	11.39	11.3902	39.8	29	29	Yes	23.0	105	108.7	Yes	4.2	4.2	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	175516	18O2-PFHxS	706595	2500	Avg	0.184115						3372.86	3372.8497	39.8				5000	67	67	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1217712	13C2-6:2FTS	175516	5000	Avg	2.253868		15391	5	1.27	1	60.595	60.5948	39.8	150	150	Yes	89	104	105.6	Yes	14	14.4	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	1153801	13C4-PFOA	198274	2500	Avg	7.728869						1882.3	1882.3016	39.8				2500	75	75.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1397408	13C8-PFOA	1153801	2500	Ln	0.828626	32.8119	3614.44	5	1.27	1	14.23	14.2301	39.8	36	36	Yes	23	111	114	Yes	13	12.9	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	566338	18O2-PFHxS	706595	2500	Avg	1.171154						1710.93	1710.9257	39.8				2500	68	68.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	688012	13C3-PFHxS	566338	2500	Avg	1.194012		2543.62	5	1.27	1	10.014	10.0142	39.8	25	25	Yes	22	105	107	Yes	1.4	1.41	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1134699	13C3-PFHxS	566338	2500	Ln	1.119323	33.81	4444.76	5	1.27	1	17.499	17.499	39.8	44	44	Yes	21	100	103	Yes	7	6.98	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	597400	13C5-PFNA	718601	1250	Avg	0.935659						1110.63	1110.6311	39.8				1250	89	89.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	1083027	13C9-PFNA	597400	1250	Avg	0.837317		2706.41	5	1.27	1	10.655	10.6552	39.8	27	27	Yes	23	102	105	Yes	3.4	3.41	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	167935	18O2-PFHxS	706595	2500	Avg	0.170753						3479.7	3479.7042	39.8				5000	70	70.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	701529	13C2-8:2FTS	167935	5000	Ln	1.94256	137	10681	5	1.27	1	42.052	42.0541	39.8	110	110	Yes	90	112	113	Yes	8.5	8.49	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	569648	13C4-PFOS	672535	2500	Avg	0.495989						4269.33	4269.3293	39.8				5000	85	85.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	222673	D3-NMeFOSAA	569648	5000	Avg	0.795786		2456.04	5	1.27	1	9.6694	9.6694	39.8	24	24	Yes	23	98	101	Yes	2.1	2.07	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	515163	13C2-PFDA	604507	1250	Avg	1.232298						864.45	864.4455	39.8				1250	69	69.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluorodecanoic acid (PFDA)	335-76-2	948527	13C6-PFDA	515163	1250	Avg	0.819341		2808.99	5	1.27	1	11.059	11.059	39.8	28	28	Yes	23	116	119.5	Yes	12	12.1	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	382311	13C4-PFOS	672535	2500	Avg	0.364519						3898.71	3898.7173	39.8				5000	78	78	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	214352	D5-NEtFOSAA	382311	5000	Avg	1.162779		2410.92	5	1.27	1	9.4918	9.4918	39.8	24	24	Yes	23	95	98.3	Yes	18	17.6	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	576770	13C4-PFOS	672535	2500	Avg	0.970887						2208.31	2208.3052	39.8				2500	88	88	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	565808	13C8-PFOS	576770	2500	Avg	0.939894		2609.32	5	1.27	1	10.273	10.2729	39.8	26	26	Yes	22	108	110.9	Yes	24	24	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2906395	13C8-PFOS	576770	2500	Avg	1.054191		11950	5	1.27	1	47.048	47.0478	39.8	120	120	Yes	22	-6	-5.71	Yes	6.3	6.34	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	481580	13C2-PFDA	604507	1250	Avg	1.191252						835.94	835.9369	39.8				1250	67	67.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	1045262	13C7-PFUnA	481580	1250	Avg	0.853896		3177.33	5	1.27	1	12.509	12.5092	39.8	31	31	Yes	23	117	121	Yes	6.9	6.88	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	457479	13C2-PFDA	604507	1250	Avg	1.01948						927.9	927.8999	39.8				1250	74	74.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	698121	13C2-PFDoA	457479	1250	Avg	0.772781		2468.39	5	1.27	1	9.7181	9.7181	39.8	24	24	Yes	23	95	97.7	Yes	1.2	1.25	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	912894	13C4-PFOS	672535	2500	Avg	1.694128						2003.08	2003.0844	39.8				2500	80	80.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	975963	13C8-PFOSA	912894	2500	Avg	0.99659		2681.86	5	1.27	1	10.559	10.5585	39.8	27	27	Yes	23	108	111	Yes	4.4	4.38	Yes
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	332824	13C2-PFDA	604507	1250	Avg	0.871708						789.5	789.5003	39.8				1250	63	63.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	2815797	13C4-PFOS	672535	2500	Avg	0.708623						14771	14771.045	39.8				25000	59	59.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	150386	13C4-PFOS	672535	2500	Avg	0.415479						1345.5	1345.4992	39.8				2500	54	54.0	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	2962494	13C4-PFOS	672535	2500	Avg	0.758997						14509	14509.169	39.8				25000	58	58	Yes			
100724A037.d	ZI12013-020MD	CACMW-008-060-27-090624-	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	139964	13C4-PFOS	672535	2500	Avg	0.441246						1179.13	1179.1273	39.8				2500	47	47.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3700233	13C3-PFBA	1754906	5000	Avg	1.14247						9227.85	9227.8476	100				10000	92	92	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1595508	13C2-PFHxA	1064284	2500	Avg	0.796557						4705.06	4705.0539	100				5000	94	94.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	182725	18O2-PFHxS	588698	2500	Avg	0.169955						4565.75	4565.7431	100				5000	91	91.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	1060739	13C2-PFHxA	1064284	2500	Avg	1.046383						2381.22	2381.2245	100				2500	95	95	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	694457	18O2-PFHxS	588698	2500	Avg	1.319962						2234.25	2234.248	100				2500	89	89.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	644532	13C2-PFHxA	1064284	2500	Avg	0.186581						8114.46	8114.4585	100				10000	81	81	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	1153350	13C2-PFHxA	1064284	2500	Avg	1.170685						2314.21	2314.2141	100				2500	93	93.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	207234	18O2-PFHxS	588698	2500	Avg	0.184115						4779.91	4779.9052	100				5000	96	96	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1339315	13C4-PFOA	174511	2500	Avg	7.728869						2482.47	2482.4699	100				2500	99	99	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	526146	18O2-PFHxS	588698	2500	Avg	1.171154						1907.83	1907.8302	100				2500	76	76.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	615974	13C5-PFNA	714753	1250	Avg	0.935659						1151.33	1151.3273	100				1250	92	92	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100924110.d	ZQ18657-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	180525	18O2-PFHxS	588698	2500	Avg	0.170753						4489.69	4489.6911	100				5000	90	90	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	624462	13C4-PFOS	641143	2500	Avg	0.495989						4909.29	4909.2944	100				5000	98	98	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	645361	13C2-PFDA	512162	1250	Avg	1.232298						1278.17	1278.173	100				1250	102	102.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	475513	13C4-PFOS	641143	2500	Avg	0.364519						5086.59	5086.597	100				5000	102	102	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	540459	13C4-PFOS	641143	2500	Avg	0.970887						2170.6	2170.5969	100				2500	87	87.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3164	13C8-PFOS	540459	2500	Avg	1.054191		13.883	5	5	1	0.01388	0.0139	100	ND	0.014	Yes							
100924110.d	ZQ18657-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	524463	13C2-PFDA	512162	1250	Avg	1.191252						1074.52	1074.5184	100				1250.0	86	86.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	464336	13C2-PFDA	512162	1250	Avg	1.01948						1111.62	1111.6199	100				1250	89	89	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	909126	13C4-PFOS	641143	2500	Avg	1.694128						2092.49	2092.4879	100				2500	84	84.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	370508	13C2-PFDA	512162	1250	Avg	0.871708						1037.36	1037.3593	100				1250	83	83.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2347094	13C4-PFOS	641143	2500	Avg	0.708623						12915	12915.176	100				25000	52	52	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	103521	13C4-PFOS	641143	2500	Avg	0.415479						971.55	971.5485	100				2500	39	39.0	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2497676	13C4-PFOS	641143	2500	Avg	0.758997						12832	12831.61	100				25000	51	51	Yes			
100924110.d	ZQ18657-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	100734	13C4-PFOS	641143	2500	Avg	0.441246						890.18	890.1853	100				2500	36	36	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3452526	13C3-PFBA	1610356	5000	Avg	1.14247						9382.97	9382.9686	100				10000	94	94.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1507574	13C2-PFHxA	927290	2500	Avg	0.796557						5102.54	5102.5376	100				5000	102	102	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1300591	13C5-PFPeA	1507574	5000	Avg	0.874543		4932.32	5	5	1	4.9323	4.9323	100	4.9	4.9	Yes	4.8	103	102.8	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	172051	18O2-PFHxS	547872	2500	Avg	0.169955						4619.39	4619.385	100				5000	92	92	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	977401	13C2-PFHxA	927290	2500	Avg	1.046383						2518.29	2518.2946	100				2500	101	101.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	793172	13C5-PFHxA	977401	2500	Avg	0.9029		2246.96	5	5	1	2.247	2.247	100	2.2	2.2	Yes	2.4	94	93.6	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	656021	18O2-PFHxS	547872	2500	Avg	1.319962						2267.86	2267.8651	100				2500	91	91.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	691277	13C3-PFBS	656021	2500	Avg	1.207053		2182.47	5	5	1	2.1825	2.1825	100	2.2	2.2	Yes	2.1	103	103.9	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	672112	13C2-PFHxA	927290	2500	Avg	0.186581						9711.78	9711.7762	100				10000	97	97	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1018452	13C2-PFHxA	927290	2500	Avg	1.170685						2345.44	2345.4433	100				2500	94	94.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1158804	13C4-PFHpA	1018452	2500	Avg	1.077361		2640.27	5	5	1	2.6403	2.6403	100	2.6	2.6	Yes	2.4	110	110	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	177793	18O2-PFHxS	547872	2500	Avg	0.184115						4406.43	4406.4251	100				5000	88	88.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	781379	13C2-6:2FTS	177793	5000	Avg	2.253868		9749.64	5	5	1	9.7496	9.7496	100	9.7	9.7	Yes	9.1	107	107	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1188190	13C4-PFOA	190754	2500	Avg	7.728869						2014.82	2014.8202	100				2500	81	81.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	989095	13C8-PFOA	1188190	2500	Ln	0.828626	32.8119	2471.9	5	5	1	2.4719	2.4719	100	2.5	2.5	Yes	2.4	103	103	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	564137	18O2-PFHxS	547872	2500	Avg	1.171154						2198.02	2198.0192	100				2500	88	88.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	663013	13C3-PFHxS	564137	2500	Avg	1.194012		2460.76	5	5	1	2.4608	2.4608	100	2.5	2.5	Yes	2.3	109	107	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	602732	13C3-PFHxS	564137	2500	Ln	1.119323	33.81	2356.09	5	5	1	2.3561	2.3561	100	2.4	2.4	Yes	2.2	108	107.1	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	579957	13C5-PFNA	690607	1250	Avg	0.935659						1121.91	1121.908	100				1250	90	90	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	892219	13C9-PFNA	579957	1250	Avg	0.837317		2296.66	5	5	1	2.2967	2.2967	100	2.3	2.3	Yes	2.4	96	95.7	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	179255	18O2-PFHxS	547872	2500	Avg	0.170753						4790.31	4790.3124	100				5000	96	96.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	734004	13C2-8:2FTS	179255	5000	Ln	1.94256	137	10469	5	5	1	10.469	10.469	100	10	10	Yes	9.2	114	113.8	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	559281	13C4-PFOS	580577	2500	Avg	0.495989						4855.55	4855.5474	100				5000	97	97	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	223610	D3-NMeFOSAA	559281	5000	Avg	0.795786		2512.09	5	5	1	2.5121	2.5121	100	2.5	2.5	Yes	2.4	105	104.7	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	547673	13C2-PFDA	524466	1250	Avg	1.232298						1059.25	1059.2495	100				1250	85	85	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	903634	13C6-PFDA	547673	1250	Avg	0.819341		2517.19	5	5	1	2.5172	2.5172	100	2.5	2.5	Yes	2.4	105	104.9	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	462498	13C4-PFOS	580577	2500	Avg	0.364519						5463.48	5463.4865	100				5000	109	109.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	249397	D5-NEtFOSAA	462498	5000	Avg	1.162779		2318.75	5	5	1	2.3188	2.3188	100	2.3	2.3	Yes	2.4	97	96.6	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	553489	13C4-PFOS	580577	2500	Avg	0.970887						2454.83	2454.8247	100				2500	98	98.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	504317	13C8-PFOS	553489	2500	Avg	0.939894		2423.57	5	5	1	2.4236	2.4236	100	2.4	2.4	Yes	2.3	106	105	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	533265	13C8-PFOS	553489	2500	Avg	1.054191		2284.83	5	5	1	2.2848	2.2848	100	2.3	2.3	Yes	2.2	103	103.9	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	494379	13C2-PFDA	524466	1250	Avg	1.191252						989.12	989.1201	100				1250	79	79	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	803110	13C7-PFUnA	494379	1250	Avg	0.853896		2378.05	5	5	1	2.378	2.378	100	2.4	2.4	Yes	2.4	99	99.1	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	432454	13C2-PFDA	524466	1250	Avg	1.01948						1011.01	1011.0063	100				1250	81	81.0	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	620301	13C2-PFDoA	432454	1250	Avg	0.772781		2320.15	5	5	1	2.3202	2.3202	100	2.3	2.3	Yes	2.4	97	96.7	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	856970	13C4-PFOS	580577	2500	Avg	1.694128						2178.21	2178.2092	100				2500	87	87	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	849891	13C8-PFOSA	856970	2500	Avg	0.99659		2487.83	5	5	1	2.4878	2.4878	100	2.5	2.5	Yes	2.4	104	104	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	333710	13C2-PFDA	524466	1250	Avg	0.871708						912.41	912.4117	100				1250	73	73	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2131354	13C4-PFOS	580577	2500	Avg	0.708623						12952	12951.514	100				25000	52	52	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	89018	13C4-PFOS	580577	2500	Avg	0.415479						922.59	922.5904	100				2500	37	37	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2227592	13C4-PFOS	580577	2500	Avg	0.758997						12638	12637.925	100				25000	51	51	Yes			
100924111.d	ZQ18657-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	83278	13C4-PFOS	580577	2500	Avg	0.441246						812.7	812.6989	100				2500	33	33	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C4-PFBA	SESI-0111	3332553	13C3-PFBA	1581019	5000	Avg	1.14247						9224.98	9224.9745	30.5				10000	92	92	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1423610	13C2-PFHxA	900224	2500	Avg	0.796557						4963.22	4963.2208	30.5				5000	99	99	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	166981	18O2-PFHxS	573179	2500	Avg	0.169955						4285.32	4285.316	30.5				5000	86	86	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C5-PFHxA	SESI-0113	946692	13C2-PFHxA	900224	2500	Avg	1.046383						2512.51	2512.508	30.5				2500	101	101	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	12090	13C5-PFHxA	946692	2500	Avg	0.9029		35.36	5	1.64	1	0.10781	0.1078	30.5	0.35	0.35	Yes							
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C3-PFBS	SESI-0116	610722	18O2-PFHxS	573179	2500	Avg	1.319962						2018.05	2018.0498	30.5				2500	81	81	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	660997	13C2-PFHxA	900224	2500	Avg	0.186581						9838.33	9838.3324	30.5				10000	98	98	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1015545	13C2-PFHxA	900224	2500	Avg	1.170685						2409.07	2409.0651	30.5				2500	96	96	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	185045	18O2-PFHxS	573179	2500	Avg	0.184115						4383.68	4383.6707	30.5				5000	88	88	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	449758	13C2-6:2FTS	185045	5000	Avg	2.253868		5391.92	5	1.64	1	16.439	16.4388	30.5	54	54	Yes							
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C8-PFOA	SESI-0097	1191872	13C4-PFOA	184751	2500	Avg	7.728869						2086.73	2086.733	30.5				2500	83	83	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	72050	13C8-PFOA	1191872	2500	Ln	0.828626	32.8119	142.79	5	1.64	1	0.43532	0.4353	30.5	1.4	1.4	Yes							
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C3-PFHxS	SESI-0096	596530	18O2-PFHxS	573179	2500	Avg	1.171154						2221.61	2221.611	30.5				2500	89	89	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C9-PFNA	SESI-0099	550466	13C5-PFNA	656661	1250	Avg	0.935659						1119.91	1119.9063	30.5				1250	90	90	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	89277	13C9-PFNA	550466	1250	Avg	0.837317		242.12	5	1.64	1	0.73817	0.7382	30.5	2.4	2.4	Yes							
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	168535	18O2-PFHxS	573179	2500	Avg	0.170753						4304.98	4304.9836	30.5				5000	86	86	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	639774	13C4-PFOS	630991	2500	Avg	0.495989						5110.59	5110.5941	30.5				5000	102	102	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C6-PFDA	SESI-0115	557578	13C2-PFDA	493124	1250	Avg	1.232298						1146.95	1146.9481	30.5				1250	92	92	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	444778	13C4-PFOS	630991	2500	Avg	0.364519						4834.37	4834.3709	30.5				5000	97	97	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C8-PFOS	SESI-0098	594231	13C4-PFOS	630991	2500	Avg	0.970887						2424.95	2424.9538	30.5				2500	97	97	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C7-PFUnA	SESI-0117	518628	13C2-PFDA	493124	1250	Avg	1.191252						1103.59	1103.586	30.5				1250	88	88	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	141110	13C7-PFUnA	518628	1250	Avg	0.853896		398.3	5	1.64	1	1.2143	1.2143	30.5	4	4	Yes							
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C2-PFDoA	SESI-0118	484185	13C2-PFDA	493124	1250	Avg	1.01948						1203.89	1203.8891	30.5				1250	96	96	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	80360	13C2-PFDoA	484185	1250	Avg	0.772781		268.46	5	1.64	1	0.81848	0.8185	30.5	2.7	2.7	Yes							
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C8-PFOSA	SESI-0107	887085	13C4-PFOS	630991	2500	Avg	1.694128						2074.61	2074.6071	30.5				2500	83	83	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	375871	13C2-PFDA	493124	1250	Avg	0.871708						1093	1093.0038	30.5				1250	87	87	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2807565	13C4-PFOS	630991	2500	Avg	0.708623						15698	15697.534	30.5				25000	63	63	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	114599	13C4-PFOS	630991	2500	Avg	0.415479						1092.82	1092.8199	30.5				2500	44	44	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2934229	13C4-PFOS	630991	2500	Avg	0.758997						15317	15316.897	30.5				25000	61	61	Yes			
100924128.d	ZI12013-001	CACMW-CO-2-090924	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	110536	13C4-PFOS	630991	2500	Avg	0.441246						992.52	992.5212	30.5				2500	40	40	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C4-PFBA	SESI-0111	3726979	13C3-PFBA	1739274	5000	Avg	1.14247						9378.09	9378.0845	39.2				10000	94	94	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1595016	13C2-PFHxA	1026616	2500	Avg	0.796557						4876.19	4876.1849	39.2				5000	98	98	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	113837	13C5-PFPeA	1595016	5000	Avg	0.874543		408.04	5	1.27	1	1.6065	1.6065	39.2	4.1	4.1	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	206262	18O2-PFHxS	516183	2500	Avg	0.169955						5877.9	5877.8918	39.2				5000	118	118	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C5-PFHxA	SESI-0113	1042187	13C2-PFHxA	1026616	2500	Avg	1.046383						2425.42	2425.42	39.2				2500	97	97	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	379644	13C5-PFHxA	1042187	2500	Avg	0.9029		1008.63	5	1.27	1	3.971	3.971	39.2	10	10	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C3-PFBS	SESI-0116	703007	18O2-PFHxS	516183	2500	Avg	1.319962						2579.49	2579.4941	39.2				2500	103	103	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	65464	13C3-PFBS	703007	2500	Avg	1.207053		192.87	5	1.27	1	0.75932	0.7593	39.2	1.9	1.9	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	730879	13C2-PFHxA	1026616	2500	Avg	0.186581						9539.16	9539.1581	39.2				10000	95	95	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1084087	13C2-PFHxA	1026616	2500	Avg	1.170685						2255.05	2255.0494	39.2				2500	90	90	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	200107	13C4-PFHpA	1084087	2500	Avg	1.077361		428.33	5	1.27	1	1.6863	1.6863	39.2	4.3	4.3	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	209795	18O2-PFHxS	516183	2500	Avg	0.184115						5518.78	5518.7697	39.2				5000	110	110	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	526090	13C2-6:2FTS	209795	5000	Avg	2.253868		5562.97	5	1.27	1	21.901	21.9014	39.2	56	56	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C8-PFOA	SESI-0097	1373313	13C4-PFOA	178120	2500	Avg	7.728869						2493.91	2493.9107	39.2				2500	100	100	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	675447	13C8-PFOA	1373313	2500	Ln	0.828626	32.8119	1444.3	5	1.27	1	5.6862	5.6862	39.2	14	15	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C3-PFHxS	SESI-0096	652051	18O2-PFHxS	516183	2500	Avg	1.171154						2696.52	2696.5214	39.2				2500	108	108	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	90542	13C3-PFHxS	652051	2500	Avg	1.194012		290.74	5	1.27	1	1.1446	1.1446	39.2	2.9	2.9	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1231478	13C3-PFHxS	652051	2500	Ln	1.119323	33.81	4188.02	5	1.27	1	16.488	16.4883	39.2	42	42	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C9-PFNA	SESI-0099	655674	13C5-PFNA	693428	1250	Avg	0.935659						1263.22	1263.22	39.2				1250	101	101	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	119863	13C9-PFNA	655674	1250	Avg	0.837317		272.91	5	1.27	1	1.0744	1.0744	39.2	2.7	2.7	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	185139	18O2-PFHxS	516183	2500	Avg	0.170753						5251.29	5251.2885	39.2				5000	105	105	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	40252	13C2-8:2FTS	185139	5000	Ln	1.94256	137	488.65	5	1.27	1	1.9238	1.9255	39.2	4.9	4.9	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	711858	13C4-PFOS	647842	2500	Avg	0.495989						5538.5	5538.5009	39.2				5000	111	111	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	23534	D3-NMeFOSAA	711858	5000	Avg	0.795786		207.72	5	1.27	1	0.81779	0.8178	39.2	2.1	2.1	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C6-PFDA	SESI-0115	630603	13C2-PFDA	567183	1250	Avg	1.232298						1127.79	1127.787	39.2				1250	90	90	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	15746	13C6-PFDA	630603	1250	Avg	0.819341		38.094	5	1.27	1	0.14998	0.15	39.2	0.38	0.38	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	489691	13C4-PFOS	647842	2500	Avg	0.364519						5184.09	5184.0939	39.2				5000	104	104	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	26981	D5-NEtFOSAA	489691	5000	Avg	1.162779		236.92	5	1.27	1	0.93277	0.9328	39.2	2.4	2.4	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C8-PFOS	SESI-0098	599114	13C4-PFOS	647842	2500	Avg	0.970887						2381.29	2381.2867	39.2				2500	95	95	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	61231	13C8-PFOS	599114	2500	Avg	0.939894		271.85	5	1.27	1	1.0703	1.0703	39.2	2.7	2.7	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	5663379	13C8-PFOS	599114	2500	Avg	1.054191		22417	5	1.27	1	88.258	88.2578	39.2	230	230	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C7-PFUnA	SESI-0117	574182	13C2-PFDA	567183	1250	Avg	1.191252						1062.26	1062.2647	39.2				1250	85	85	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	126792	13C7-PFUnA	574182	1250	Avg	0.853896		323.26	5	1.27	1	1.2727	1.2727	39.2	3.2	3.2	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C2-PFDoA	SESI-0118	512257	13C2-PFDA	567183	1250	Avg	1.01948						1107.38	1107.3783	39.2				1250	89	89	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	54723	13C2-PFDoA	512257	1250	Avg	0.772781		172.8	5	1.27	1	0.6803	0.6803	39.2	1.7	1.7	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	1037414	13C4-PFOS	647842	2500	Avg	1.694128						2363.07	2363.0711	39.2				2500	95	95	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	59995	13C8-PFOSA	1037414	2500	Avg	0.99659		145.07	5	1.27	1	0.57115	0.5712	39.2	1.5	1.5	Yes							
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	376664	13C2-PFDA	567183	1250	Avg	0.871708						952.29	952.2915	39.2				1250	76	76	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	3091784	13C4-PFOS	647842	2500	Avg	0.708623						16837	16837.004	39.2				25000	67	67	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	143839	13C4-PFOS	647842	2500	Avg	0.415479						1335.98	1335.9755	39.2				2500	53	53	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	3214261	13C4-PFOS	647842	2500	Avg	0.758997						16342	16342.255	39.2				25000	65	65	Yes			
100924134.d	ZI12013-005	CACMW-002-110-77-090424-	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	139934	13C4-PFOS	647842	2500	Avg	0.441246						1223.81	1223.8082	39.2				2500	49	49	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	1706943	13C3-PFBA	876951	5000	Avg	1.118527						8700.96	8700.961	100				10000	87	87	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	678104	13C2-PFHxA	426090	2500	Avg	0.871653						4564.48	4564.4804	100				5000	91	91	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	91366	18O2-PFHxS	317683	2500	Avg	0.184152						3904.39	3904.3991	100				5000	78	78	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	361591	13C2-PFHxA	426090	2500	Avg	0.934444						2270.4	2270.4032	100				2500	91	91	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	386631	18O2-PFHxS	317683	2500	Avg	1.42701						2132.14	2132.1399	100				2500	85	85	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	408105	13C2-PFHxA	426090	2500	Avg	0.255897						9357.18	9357.1887	100				10000	94	94	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	367434	13C2-PFHxA	426090	2500	Avg	0.958996						2248.02	2248.0254	100				2500	90	90	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	122419	18O2-PFHxS	317683	2500	Avg	0.237031						4064.34	4064.337	100				5000	81	81	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	381156	13C4-PFOA	110913	2500	Avg	4.113993						2088.32	2088.3187	100				2500	84	84	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	264925	18O2-PFHxS	317683	2500	Avg	1.059286						1968.14	1968.1389	100				2500	79	79	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	128835	13C5-PFNA	197113	1250	Avg	0.708475						1153.2	1153.1985	100				1250	92	92	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	104138	18O2-PFHxS	317683	2500	Avg	0.22157						3698.66	3698.6591	100				5000	74	74	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	247018	13C4-PFOS	471923	2500	Avg	0.344978						3793.21	3793.2028	100				5000	76	76	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	143312	13C2-PFDA	194821	1250	Avg	0.946606						971.38	971.3764	100				1250	78	78	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	291519	13C4-PFOS	471923	2500	Avg	0.411975						3748.56	3748.5635	100				5000	75	75	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	366715	13C4-PFOS	471923	2500	Avg	0.970524						2001.66	2001.6644	100				2500	80	80	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	128569	13C2-PFDA	194821	1250	Avg	0.746662						1104.81	1104.8071	100				1250	88	88	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	104407	13C2-PFDA	194821	1250	Avg	0.682188						981.97	981.9735	100				1250	79	79	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	550733	13C4-PFOS	471923	2500	Avg	1.882752						1549.59	1549.5902	100				2500	62	62	Yes			
101124A136.d	ZQ18867-001		Method_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	13115	13C8-PFOSA	550733	2500	Avg	1.081611		55.042	5	5	1	0.05504	0.055	100	0.055	0.055	Yes							
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	85481	13C2-PFDA	194821	1250	Avg	0.517569						1059.68	1059.6821	100				1250	85	85	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1588764	13C4-PFOS	471923	2500	Avg	0.691275						12175	12175.237	100				25000	49	49	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	64326	13C4-PFOS	471923	2500	Avg	0.423406						804.82	804.8193	100				2500	32	32	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2043310	13C4-PFOS	471923	2500	Avg	0.876774						12346	12345.693	100				25000	49	49	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	73597	13C4-PFOS	471923	2500	Avg	0.49678						784.81	784.8106	100				2500	31	31	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C4-PFBA	SESI-0111	1723476	13C3-PFBA	915359	5000	Avg	1.118527						8416.62	8416.6122	39.3				10000	84	84	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C5-PFPeA	SESI-0112	682247	13C2-PFHxA	458643	2500	Avg	0.871653						4266.42	4266.4164	39.3				5000	85	85	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	38540	13C5-PFPeA	682247	5000	Avg	1.129824		249.99	5	1.27	1	0.98423	0.9842	39.3	2.5	2.5	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	99535	18O2-PFHxS	334661	2500	Avg	0.184152						4037.7	4037.7022	39.3				5000	81	81	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C5-PFHxA	SESI-0113	370133	13C2-PFHxA	458643	2500	Avg	0.934444						2159.08	2159.0851	39.3				2500	86	86	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	100689	13C5-PFHxA	370133	2500	Avg	1.272886		534.29	5	1.27	1	2.1035	2.1035	39.3	5.4	5.4	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C3-PFBS	SESI-0116	378884	18O2-PFHxS	334661	2500	Avg	1.42701						1983.42	1983.4176	39.3				2500	79	79	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	49282	13C3-PFBS	378884	2500	Avg	1.829947		177.7	5	1.27	1	0.6996	0.6996	39.3	1.8	1.8	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	386811	13C2-PFHxA	458643	2500	Avg	0.255897						8239.45	8239.4621	39.3				10000	82	82	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C4-PFHpA	SESI-0114	363366	13C2-PFHxA	458643	2500	Avg	0.958996						2065.34	2065.3456	39.3				2500	83	83	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	39828	13C4-PFHpA	363366	2500	Avg	1.238034		221.34	5	1.27	1	0.8714	0.8714	39.3	2.2	2.2	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	117092	18O2-PFHxS	334661	2500	Avg	0.237031						3690.26	3690.2601	39.3				5000	74	74	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	312855	13C2-6:2FTS	117092	5000	Avg	2.102409		6354.31	5	1.27	1	25.017	25.017	39.3	64	64	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C8-PFOA	SESI-0097	435966	13C4-PFOA	129659	2500	Avg	4.113993						2043.27	2043.2731	39.3				2500	82	82	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	137845	13C8-PFOA	435966	2500	Ln	1.093564	59.2597	668.64	5	1.27	1	2.6324	2.6324	39.3	6.7	6.7	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C3-PFHxS	SESI-0096	288416	18O2-PFHxS	334661	2500	Avg	1.059286						2033.95	2033.9535	39.3				2500	81	81	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	32111	13C3-PFHxS	288416	2500	Avg	1.15963		240.02	5	1.27	1	0.94498	0.945	39.3	2.4	2.4	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	270166	13C3-PFHxS	288416	2500	Avg	1.084036		2160.27	5	1.27	1	8.505	8.505	39.3	22	22	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C9-PFNA	SESI-0099	139804	13C5-PFNA	223788	1250	Avg	0.708475						1102.22	1102.22	39.3				1250	88	88	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	31017	13C9-PFNA	139804	1250	Avg	1.278701		216.88	5	1.27	1	0.85386	0.8539	39.3	2.2	2.2	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	95679	18O2-PFHxS	334661	2500	Avg	0.22157						3225.83	3225.8233	39.3				5000	65	65	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	233392	13C4-PFOS	490659	2500	Avg	0.344978						3447.11	3447.1073	39.3				5000	69	69	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C6-PFDA	SESI-0115	170875	13C2-PFDA	224333	1250	Avg	0.946606						1005.83	1005.8336	39.3				1250	80	80	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	296636	13C4-PFOS	490659	2500	Avg	0.411975						3668.71	3668.7087	39.3				5000	73	73	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	3915	D5-NEtFOSAA	296636	5000	Avg	0.909463		72.559	5	1.27	1	0.28567	0.2857	39.3	0.73	0.73	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C8-PFOS	SESI-0098	387228	13C4-PFOS	490659	2500	Avg	0.970524						2032.92	2032.922	39.3				2500	81	81	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	22216	13C8-PFOS	387228	2500	Ln	0.863557	26.3302	135.6	5	1.27	1	0.53386	0.5339	39.3	1.4	1.4	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1358454	13C8-PFOS	387228	2500	Avg	0.967431		9065.63	5	1.27	1	35.691	35.6915	39.3	91	91	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C7-PFUnA	SESI-0117	150240	13C2-PFDA	224333	1250	Avg	0.746662						1121.19	1121.1878	39.3				1250	90	90	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	44541	13C7-PFUnA	150240	1250	Avg	1.005752		368.46	5	1.27	1	1.4506	1.4506	39.3	3.7	3.7	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C2-PFDoA	SESI-0118	111818	13C2-PFDA	224333	1250	Avg	0.682188						913.32	913.3232	39.3				1250	73	73	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	14859	13C2-PFDoA	111818	1250	Avg	0.6804		244.13	5	1.27	1	0.96115	0.9611	39.3	2.4	2.4	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C8-PFOSA	SESI-0107	679782	13C4-PFOS	490659	2500	Avg	1.882752						1839.66	1839.6567	39.3				2500	74	74	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	16660	13C8-PFOSA	679782	2500	Avg	1.081611		56.647	5	1.27	1	0.22302	0.223	39.3	0.57	0.57	Yes							
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	97499	13C2-PFDA	224333	1250	Avg	0.517569						1049.66	1049.6603	39.3				1250	84	84	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1601865	13C4-PFOS	490659	2500	Avg	0.691275						11807	11806.884	39.3				25000	47	47	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	78383	13C4-PFOS	490659	2500	Avg	0.423406						943.25	943.2463	39.3				2500	38	38	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2005667	13C4-PFOS	490659	2500	Avg	0.876774						11656	11655.513	39.3				25000	47	47	Yes			
101124A149.d	ZI12013-026	CACMW-008-160-127-090624	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	84859	13C4-PFOS	490659	2500	Avg	0.49678						870.35	870.3502	39.3				2500	35	35	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C4-PFBA	SESI-0111	1849841	13C3-PFBA	915820	5000	Avg	1.118527						9029.17	9029.1696	42.3				10000	90	90	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C5-PFPeA	SESI-0112	727270	13C2-PFHxA	440757	2500	Avg	0.871653						4732.52	4732.5241	42.3				5000	95	95	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	106006	18O2-PFHxS	326948	2500	Avg	0.184152						4401.64	4401.6482	42.3				5000	88	88	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C5-PFHxA	SESI-0113	394522	13C2-PFHxA	440757	2500	Avg	0.934444						2394.74	2394.742	42.3				2500	96	96	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C3-PFBS	SESI-0116	412431	18O2-PFHxS	326948	2500	Avg	1.42701						2209.97	2209.9661	42.3				2500	88	88	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	433224	13C2-PFHxA	440757	2500	Avg	0.255897						9602.57	9602.5838	42.3				10000	96	96	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C4-PFHpA	SESI-0114	410513	13C2-PFHxA	440757	2500	Avg	0.958996						2428.01	2428.0125	42.3				2500	97	97	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	138605	18O2-PFHxS	326948	2500	Avg	0.237031						4471.31	4471.313	42.3				5000	89	89	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	250398	13C2-6:2FTS	138605	5000	Avg	2.102409		4296.4	5	1.18	1	18.205	18.2051	42.3	43	43	Yes							
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C8-PFOA	SESI-0097	467012	13C4-PFOA	113488	2500	Avg	4.113993						2500.66	2500.6595	42.3				2500	100	100	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	26908	13C8-PFOA	467012	2500	Ln	1.093564	59.2597	77.53	5	1.18	1	0.32852	0.3285	42.3	0.78	0.78	Yes							
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C3-PFHxS	SESI-0096	312912	18O2-PFHxS	326948	2500	Avg	1.059286						2258.76	2258.7612	42.3				2500	90	90	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C9-PFNA	SESI-0099	142789	13C5-PFNA	214022	1250	Avg	0.708475						1177.12	1177.1229	42.3				1250	94	94	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	26990	13C9-PFNA	142789	1250	Avg	1.278701		184.78	5	1.18	1	0.78296	0.783	42.3	1.9	1.9	Yes							
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	120271	18O2-PFHxS	326948	2500	Avg	0.22157						4150.61	4150.6039	42.3				5000	83	83	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	273830	13C4-PFOS	494030	2500	Avg	0.344978						4016.77	4016.764	42.3				5000	80	80	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C6-PFDA	SESI-0115	181175	13C2-PFDA	224145	1250	Avg	0.946606						1067.36	1067.3577	42.3				1250	85	85	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	328093	13C4-PFOS	494030	2500	Avg	0.411975						4030.07	4030.0718	42.3				5000	81	81	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C8-PFOS	SESI-0098	399749	13C4-PFOS	494030	2500	Avg	0.970524						2084.34	2084.3363	42.3				2500	83	83	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C7-PFUnA	SESI-0117	140444	13C2-PFDA	224145	1250	Avg	0.746662						1048.96	1048.9628	42.3				1250	84	84	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	41191	13C7-PFUnA	140444	1250	Avg	1.005752		364.52	5	1.18	1	1.5446	1.5446	42.3	3.7	3.7	Yes							
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C2-PFDoA	SESI-0118	123993	13C2-PFDA	224145	1250	Avg	0.682188						1013.62	1013.6174	42.3				1250	81	81	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	14912	13C2-PFDoA	123993	1250	Avg	0.6804		220.95	5	1.18	1	0.93621	0.9362	42.3	2.2	2.2	Yes							
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C8-PFOSA	SESI-0107	635809	13C4-PFOS	494030	2500	Avg	1.882752						1708.91	1708.9141	42.3				2500	68	68	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	92524	13C2-PFDA	224145	1250	Avg	0.517569						996.94	996.9356	42.3				1250	80	80	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1708770	13C4-PFOS	494030	2500	Avg	0.691275						12509	12508.909	42.3				25000	50	50	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	81930	13C4-PFOS	494030	2500	Avg	0.423406						979.2	979.2028	42.3				2500	39	39	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2176200	13C4-PFOS	494030	2500	Avg	0.876774						12560	12560.237	42.3				25000	50	50	Yes			
101124A151.d	ZI12013-028	CACMW-CO-1-090924	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	96767	13C4-PFOS	494030	2500	Avg	0.49678						985.71	985.7116	42.3				2500	39	39	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C4-PFBA	SESI-0111	1690694	13C3-PFBA	912155	5000	Avg	1.118527						8285.53	8285.5225	42.2				10000	83	83	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C5-PFPeA	SESI-0112	639022	13C2-PFHxA	445485	2500	Avg	0.871653						4114.14	4114.1404	42.2				5000	82	82	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	97676	18O2-PFHxS	314322	2500	Avg	0.184152						4218.67	4218.6807	42.2				5000	84	84	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C5-PFHxA	SESI-0113	344932	13C2-PFHxA	445485	2500	Avg	0.934444						2071.51	2071.5105	42.2				2500	83	83	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C3-PFBS	SESI-0116	379635	18O2-PFHxS	314322	2500	Avg	1.42701						2115.95	2115.9454	42.2				2500	85	85	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	391565	13C2-PFHxA	445485	2500	Avg	0.255897						8587.07	8587.0817	42.2				10000	86	86	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C4-PFHpA	SESI-0114	382578	13C2-PFHxA	445485	2500	Avg	0.958996						2238.77	2238.7733	42.2				2500	90	90	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	115201	18O2-PFHxS	314322	2500	Avg	0.237031						3865.6	3865.5948	42.2				5000	77	77	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	230741	13C2-6:2FTS	115201	5000	Avg	2.102409		4763.45	5	1.18	1	20.184	20.1841	42.2	48	48	Yes							
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C8-PFOA	SESI-0097	398630	13C4-PFOA	130882	2500	Avg	4.113993						1850.83	1850.8299	42.2				2500	74	74	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	27040	13C8-PFOA	398630	2500	Ln	1.093564	59.2597	100.88	5	1.18	1	0.42747	0.4275	42.2	1	1	Yes							
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C3-PFHxS	SESI-0096	270138	18O2-PFHxS	314322	2500	Avg	1.059286						2028.33	2028.3256	42.2				2500	81	81	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C9-PFNA	SESI-0099	122373	13C5-PFNA	199679	1250	Avg	0.708475						1081.28	1081.2813	42.2				1250	87	87	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	24521	13C9-PFNA	122373	1250	Avg	1.278701		195.88	5	1.18	1	0.83001	0.83	42.2	2	2	Yes							
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	103101	18O2-PFHxS	314322	2500	Avg	0.22157						3700.99	3700.9835	42.2				5000	74	74	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	251590	13C4-PFOS	460811	2500	Avg	0.344978						3956.58	3956.5727	42.2				5000	79	79	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C6-PFDA	SESI-0115	157955	13C2-PFDA	235756	1250	Avg	0.946606						884.73	884.7313	42.2				1250	71	71	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	305797	13C4-PFOS	460811	2500	Avg	0.411975						4026.98	4026.9805	42.2				5000	81	81	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C8-PFOS	SESI-0098	348112	13C4-PFOS	460811	2500	Avg	0.970524						1945.94	1945.942	42.2				2500	78	78	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C7-PFUnA	SESI-0117	136534	13C2-PFDA	235756	1250	Avg	0.746662						969.54	969.5362	42.2				1250	78	78	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	33949	13C7-PFUnA	136534	1250	Avg	1.005752		309.03	5	1.18	1	1.3095	1.3095	42.2	3.1	3.1	Yes							
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C2-PFDoA	SESI-0118	105117	13C2-PFDA	235756	1250	Avg	0.682188						816.99	816.9889	42.2				1250	65	65	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	13265	13C2-PFDoA	105117	1250	Avg	0.6804		231.84	5	1.18	1	0.98235	0.9824	42.2	2.3	2.3	Yes							
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C8-PFOSA	SESI-0107	592361	13C4-PFOS	460811	2500	Avg	1.882752						1706.91	1706.9096	42.2				2500	68	68	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	85071	13C2-PFDA	235756	1250	Avg	0.517569						871.49	871.4863	42.2				1250	70	70	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1614055	13C4-PFOS	460811	2500	Avg	0.691275						12667	12667.317	42.2				25000	51	51	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	59652	13C4-PFOS	460811	2500	Avg	0.423406						764.34	764.3375	42.2				2500	31	31	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2062410	13C4-PFOS	460811	2500	Avg	0.876774						12762	12761.582	42.2				25000	51	51	Yes			
101124A152.d	ZI12013-029	CACMW-CO-3-090924	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	66573	13C4-PFOS	460811	2500	Avg	0.49678						727.03	727.0281	42.2				2500	29	29	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C4-PFBA	SESI-0111	1689326	13C3-PFBA	950899	5000	Avg	1.118527						7941.5	7941.5012	41.5				10000	79	79	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C5-PFPeA	SESI-0112	647617	13C2-PFHxA	450648	2500	Avg	0.871653						4121.71	4121.7075	41.5				5000	82	82	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	90384	18O2-PFHxS	300038	2500	Avg	0.184152						4089.57	4089.5815	41.5				5000	82	82	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C5-PFHxA	SESI-0113	369530	13C2-PFHxA	450648	2500	Avg	0.934444						2193.81	2193.8099	41.5				2500	88	88	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C3-PFBS	SESI-0116	378413	18O2-PFHxS	300038	2500	Avg	1.42701						2209.55	2209.5446	41.5				2500	88	88	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	378973	13C2-PFHxA	450648	2500	Avg	0.255897						8215.71	8215.7201	41.5				10000	82	82	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C4-PFHpA	SESI-0114	378568	13C2-PFHxA	450648	2500	Avg	0.958996						2189.93	2189.9271	41.5				2500	88	88	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	109816	18O2-PFHxS	300038	2500	Avg	0.237031						3860.33	3860.3281	41.5				5000	77	77	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	240813	13C2-6:2FTS	109816	5000	Avg	2.102409		5215.15	5	1.2	1	21.73	21.7298	41.5	52	52	Yes							
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C8-PFOA	SESI-0097	394234	13C4-PFOA	131557	2500	Avg	4.113993						1821.03	1821.0278	41.5				2500	73	73	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	26143	13C8-PFOA	394234	2500	Ln	1.093564	59.2597	97.41	5	1.2	1	0.40587	0.4059	41.5	0.98	0.98	Yes							
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C3-PFHxS	SESI-0096	271498	18O2-PFHxS	300038	2500	Avg	1.059286						2135.59	2135.5864	41.5				2500	85	85	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C9-PFNA	SESI-0099	132583	13C5-PFNA	225022	1250	Avg	0.708475						1039.56	1039.5571	41.5				1250	83	83	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	28834	13C9-PFNA	132583	1250	Avg	1.278701		212.6	5	1.2	1	0.88582	0.8858	41.5	2.1	2.1	Yes							
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	116754	18O2-PFHxS	300038	2500	Avg	0.22157						4390.61	4390.6069	41.5				5000	88	88	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	242412	13C4-PFOS	485587	2500	Avg	0.344978						3617.73	3617.726	41.5				5000	72	72	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C6-PFDA	SESI-0115	164612	13C2-PFDA	235645	1250	Avg	0.946606						922.45	922.4525	41.5				1250	74	74	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	261977	13C4-PFOS	485587	2500	Avg	0.411975						3273.9	3273.8989	41.5				5000	65	65	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C8-PFOS	SESI-0098	343359	13C4-PFOS	485587	2500	Avg	0.970524						1821.44	1821.441	41.5				2500	73	73	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C7-PFUnA	SESI-0117	144039	13C2-PFDA	235645	1250	Avg	0.746662						1023.31	1023.3114	41.5				1250	82	82	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	37209	13C7-PFUnA	144039	1250	Avg	1.005752		321.06	5	1.2	1	1.3378	1.3378	41.5	3.2	3.2	Yes							
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C2-PFDoA	SESI-0118	110370	13C2-PFDA	235645	1250	Avg	0.682188						858.22	858.2202	41.5				1250	69	69	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	13732	13C2-PFDoA	110370	1250	Avg	0.6804		228.58	5	1.2	1	0.9524	0.9524	41.5	2.3	2.3	Yes							
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C8-PFOSA	SESI-0107	582208	13C4-PFOS	485587	2500	Avg	1.882752						1592.05	1592.0548	41.5				2500	64	64	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	81859	13C2-PFDA	235645	1250	Avg	0.517569						838.98	838.9768	41.5				1250	67	67	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1447159	13C4-PFOS	485587	2500	Avg	0.691275						10778	10778.004	41.5				25000	43	43	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	69147	13C4-PFOS	485587	2500	Avg	0.423406						840.79	840.7934	41.5				2500	34	34	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	1784126	13C4-PFOS	485587	2500	Avg	0.876774						10476	10476.37	41.5				25000	42	42	Yes			
101124A153.d	ZI12013-030	CACMW-CO-4-090924	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	76468	13C4-PFOS	485587	2500	Avg	0.49678						792.48	792.4805	41.5				2500	32	32	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	1655454	13C3-PFBA	881691	5000	Avg	1.116788						8406.2	8406.205	100				10000	84	84	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	656826	13C2-PFHxA	433511	2500	Avg	0.887028						4270.25	4270.246	100				5000	85	85	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	644823	13C5-PFPeA	656826	5000	Avg	1.112976		4410.36	5	5	1	4.4104	4.4104	100	4.4	4.4	Yes	4.8	92	91.9	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	91630	18O2-PFHxS	297332	2500	Avg	0.179213						4298.99	4298.991	100				5000	86	86	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	352521	13C2-PFHxA	433511	2500	Avg	0.975375						2084.27	2084.2666	100				2500	83	83	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	398128	13C5-PFHxA	352521	2500	Avg	1.223615		2307.45	5	5	1	2.3075	2.3075	100	2.3	2.3	Yes	2.4	96	96.1	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	347678	18O2-PFHxS	297332	2500	Avg	1.367759						2137.3	2137.3025	100				2500	85	85	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	535722	13C3-PFBS	347678	2500	Avg	1.891566		2036.48	5	5	1	2.0365	2.0365	100	2	2	Yes	2.1	96	97	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	385841	13C2-PFHxA	433511	2500	Avg	0.257147						8653	8653.0019	100				10000	87	87	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	344111	13C2-PFHxA	433511	2500	Avg	0.967611						2050.87	2050.8677	100				2500	82	82	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	369937	13C4-PFHpA	344111	2500	Avg	1.212737		2216.17	5	5	1	2.2162	2.2162	100	2.2	2.2	Yes	2.4	92	92.3	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	113386	18O2-PFHxS	297332	2500	Avg	0.232206						4105.68	4105.673	100				5000	82	82	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	438337	13C2-6:2FTS	113386	5000	Avg	2.171498		8901.42	5	5	1	8.9014	8.9014	100	8.9	8.9	Yes	9.1	98	97.8	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	373368	13C4-PFOA	120906	2500	Avg	4.201779						1837.37	1837.3676	100				2500	73	73	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	415659	13C8-PFOA	373368	2500	Avg	1.215147		2290.4	5	5	1	2.2904	2.2904	100	2.3	2.3	Yes	2.4	95	95.4	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	260437	18O2-PFHxS	297332	2500	Avg	1.040797						2103.95	2103.948	100				2500	84	84	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	276019	13C3-PFHxS	260437	2500	Avg	1.180174		2245.07	5	5	1	2.2451	2.2451	100	2.2	2.2	Yes	2.3	100	97.6	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	230887	13C3-PFHxS	260437	2500	Avg	1.06197		2087.01	5	5	1	2.087	2.087	100	2.1	2.1	Yes	2.2	95	94.9	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	121478	13C5-PFNA	223575	1250	Avg	0.748168						907.79	907.7898	100				1250	73	73	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	281519	13C9-PFNA	121478	1250	Avg	1.295141		2236.68	5	5	1	2.2367	2.2367	100	2.2	2.2	Yes	2.4	93	93.2	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	104509	18O2-PFHxS	297332	2500	Avg	0.224161						3920.06	3920.0535	100				5000	78	78	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	326172	13C2-8:2FTS	104509	5000	Avg	1.610689		9688.38	5	5	1	9.6884	9.6884	100	9.7	9.7	Yes	9.2	105	105	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	228817	13C4-PFOS	464498	2500	Avg	0.338626						3636.84	3636.8396	100				5000	73	73	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	86888	D3-NMeFOSAA	228817	5000	Ln	0.742503	-20.953047	2585.3	5	5	1	2.5853	2.5853	100	2.6	2.6	Yes	2.4	108	108	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	149540	13C2-PFDA	212846	1250	Avg	0.911902						963.06	963.0608	100				1250	77	77	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	270325	13C6-PFDA	149540	1250	Avg	1.073967		2104.01	5	5	1	2.104	2.104	100	2.1	2.1	Yes	2.4	88	87.7	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	295511	13C4-PFOS	464498	2500	Avg	0.420737						3780.23	3780.2377	100				5000	76	76	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	130538	D5-NEtFOSAA	295511	5000	Avg	0.923684		2391.17	5	5	1	2.3912	2.3912	100	2.4	2.4	Yes	2.4	100	99.6	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	324883	13C4-PFOS	464498	2500	Avg	0.946037						1848.31	1848.3109	100				2500	74	74	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	267913	13C8-PFOS	324883	2500	Avg	0.891049		2313.69	5	5	1	2.3137	2.3137	100	2.3	2.3	Yes	2.3	101	101	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	276637	13C8-PFOS	324883	2500	Avg	1.020053		2086.89	5	5	1	2.0869	2.0869	100	2.1	2.1	Yes	2.2	94	94.9	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	127918	13C2-PFDA	212846	1250	Avg	0.794666						945.35	945.3476	100				1250	76	76	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	221160	13C7-PFUnA	127918	1250	Avg	0.98673		2190.21	5	5	1	2.1902	2.1902	100	2.2	2.2	Yes	2.4	91	91.3	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	105241	13C2-PFDA	212846	1250	Avg	0.68959						896.27	896.2693	100				1250	72	72	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	135411	13C2-PFDoA	105241	1250	Avg	0.69735		2306.37	5	5	1	2.3064	2.3064	100	2.3	2.3	Yes	2.4	96	96.1	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	565971	13C4-PFOS	464498	2500	Avg	1.895178						1607.31	1607.3125	100				2500	64	64	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	580632	13C8-PFOSA	565971	2500	Avg	1.081003		2372.57	5	5	1	2.3726	2.3726	100	2.4	2.4	Yes	2.4	99	98.9	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	85897	13C2-PFDA	212846	1250	Avg	0.529413						952.86	952.8574	100				1250	76	76	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1580882	13C4-PFOS	464498	2500	Avg	0.681735						12481	12480.731	100				25000	50	50	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	67869	13C4-PFOS	464498	2500	Avg	0.427819						853.82	853.8224	100				2500	34	34	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	1987923	13C4-PFOS	464498	2500	Avg	0.859105						12454	12454.018	100				25000	50	50	Yes			
101424A084.d	ZQ18867-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	76139	13C4-PFOS	464498	2500	Avg	0.492801						831.56	831.5565	100				2500	33	33	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?

Key

	from quantitation report
	from reported calibration
	from lab report/SEDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
g	grams
IS	internal standard
mL	milliliters
ND	not detected
ng/g	nanograms per gram
ng/L	nanograms per liter
On Col.	on column
RF	response factor
RPD	relative percent difference

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100924138.d	ZQ18873-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	2790475	13C3-PFBA	1522606	5000	Avg	1.14247						8020.77	8020.7651	100				10000	80	80	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1199783	13C2-PFHxA	921227	2500	Avg	0.796557						4087.52	4087.5135	100				5000	82	82	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	142653	18O2-PFHxS	515024	2500	Avg	0.169955						4074.37	4074.361	100				5000	81	81	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	763751	13C2-PFHxA	921227	2500	Avg	1.046383						1980.77	1980.7719	100				2500	79	79	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	520174	18O2-PFHxS	515024	2500	Avg	1.319962						1912.93	1912.933	100				2500	77	77	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	532942	13C2-PFHxA	921227	2500	Avg	0.186581						7751.5	7751.5023	100				10000	78	78	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	833547	13C2-PFHxA	921227	2500	Avg	1.170685						1932.25	1932.2503	100				2500	77	77	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	140472	18O2-PFHxS	515024	2500	Avg	0.184115						3703.51	3703.5067	100				5000	74	74	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	893557	13C4-PFOA	160606	2500	Avg	7.728869						1799.64	1799.6355	100				2500	72	72	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	469897	18O2-PFHxS	515024	2500	Avg	1.171154						1947.61	1947.6065	100				2500	78	78	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	458937	13C5-PFNA	656666	1250	Avg	0.935659						933.69	933.6862	100				1250	75	75	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	142294	18O2-PFHxS	515024	2500	Avg	0.170753						4045.11	4045.1142	100				5000	81	81	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	446279	13C4-PFOS	594489	2500	Avg	0.495989						3783.82	3783.8211	100				5000	76	76	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	446113	13C2-PFDA	498677	1250	Avg	1.232298						907.44	907.444	100				1250	73	73	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	327682	13C4-PFOS	594489	2500	Avg	0.364519						3780.32	3780.3203	100				5000	76	76	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	469145	13C4-PFOS	594489	2500	Avg	0.970887						2032.05	2032.0509	100				2500	81	81	Yes			
100924138.d	ZQ18873-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	5117	13C8-PFOS	469145	2500	Avg	1.054191		25.866	5	5	1	0.02587	0.0259	100	0.026	0.026	Yes							
100924138.d	ZQ18873-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	367547	13C2-PFDA	498677	1250	Avg	1.191252						773.39	773.3924	100				1250	62	62	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	351317	13C2-PFDA	498677	1250	Avg	1.01948						863.8	863.7959	100				1250	69	69	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	639513	13C4-PFOS	594489	2500	Avg	1.694128						1587.45	1587.4474	100				2500	63	63	Yes			
100924138.d	ZQ18873-001		Method_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	15070	13C8-PFOSA	639513	2500	Avg	0.99659		59.114	5	5	1	0.05911	0.0591	100	0.059	0.059	Yes							
100924138.d	ZQ18873-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	269293	13C2-PFDA	498677	1250	Avg	0.871708						774.36	774.3632	100				1250	62	62	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2300973	13C4-PFOS	594489	2500	Avg	0.708623						13655	13655.024	100				25000	55	55	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	83548	13C4-PFOS	594489	2500	Avg	0.415479						845.64	845.6354	100				2500	34	34	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2479441	13C4-PFOS	594489	2500	Avg	0.758997						13738	13737.57	100				25000	55	55	Yes			
100924138.d	ZQ18873-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	86326	13C4-PFOS	594489	2500	Avg	0.441246						822.73	822.7294	100				2500	33	33	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3164693	13C3-PFBA	1562055	5000	Avg	1.14247						8866.67	8866.6684	100				10000	89	89	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2298586	13C4-PFBA	3164693	10000	Avg	0.846914		8576.1	5	5	1	8.5761	8.5761	100	8.6	8.6	Yes	9.6	89	89.3	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1375487	13C2-PFHxA	934400	2500	Avg	0.796557						4620.05	4620.0514	100				5000	92	92	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1016027	13C5-PFPeA	1375487	5000	Avg	0.874543		4223.16	5	5	1	4.2232	4.2232	100	4.2	4.2	Yes	4.8	88	88.0	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	152253	18O2-PFHxS	531748	2500	Avg	0.169955						4211.79	4211.7837	100				5000	84	84	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	846482	13C2-PFHxA	934400	2500	Avg	1.046383						2164.38	2164.3836	100				2500	87	87	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	635420	13C5-PFHxA	846482	2500	Avg	0.9029		2078.47	5	5	1	2.0785	2.0785	100	2.1	2.1	Yes	2.4	87	86.6	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	602366	18O2-PFHxS	531748	2500	Avg	1.319962						2145.52	2145.523	100				2500	86	86	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	554231	13C3-PFBS	602366	2500	Avg	1.207053		1905.65	5	5	1	1.9057	1.9057	100	1.9	1.9	Yes	2.1	90	90.7	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	595224	13C2-PFHxA	934400	2500	Avg	0.186581						8535.33	8535.3276	100				10000	85	85	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	956910	13C2-PFHxA	934400	2500	Avg	1.170685						2186.95	2186.9468	100				2500	87	87	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	872597	13C4-PFHpA	956910	2500	Avg	1.077361		2116.03	5	5	1	2.116	2.116	100	2.1	2.1	Yes	2.4	88	88.2	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	154166	18O2-PFHxS	531748	2500	Avg	0.184115						3936.72	3936.7114	100				5000	79	79	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	606681	13C2-6:2FTS	154166	5000	Avg	2.253868		8729.98	5	5	1	8.73	8.73	100	8.7	8.7	Yes	9.1	96	95.9	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1004589	13C4-PFOA	161176	2500	Avg	7.728869						2016.1	2016.1002	100				2500	81	81	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	781565	13C8-PFOA	1004589	2500	Ln	0.828626	32.8119	2307.64	5	5	1	2.3076	2.3076	100	2.3	2.3	Yes	2.4	96	96.2	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	580040	18O2-PFHxS	531748	2500	Avg	1.171154						2328.51	2328.5099	100				2500	93	93	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	490490	13C3-PFHxS	580040	2500	Avg	1.194012		1770.53	5	5	1	1.7705	1.7705	100	1.8	1.8	Yes	2.3	79	77.0	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	427156	13C3-PFHxS	580040	2500	Ln	1.119323	33.81	1614.59	5	5	1	1.6146	1.6146	100	1.6	1.6	Yes	2.2	74	73.4	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	508027	13C5-PFNA	651718	1250	Avg	0.935659						1041.4	1041.4046	100				1250	83	83	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	697259	13C9-PFNA	508027	1250	Avg	0.837317		2048.93	5	5	1	2.0489	2.0489	100	2	2	Yes	2.4	85	85.4	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	154329	18O2-PFHxS	531748	2500	Avg	0.170753						4249.26	4249.2604	100				5000	85	85	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	582746	13C2-8:2FTS	154329	5000	Ln	1.94256	137	9648.17	5	5	1	9.6482	9.6486	100	9.6	9.6	Yes	9.2	105	104.9	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	498786	13C4-PFOS	631112	2500	Avg	0.495989						3983.6	3983.6005	100				5000	80	80	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	183020	D3-NMeFOSAA	498786	5000	Avg	0.795786		2305.46	5	5	1	2.3055	2.3055	100	2.3	2.3	Yes	2.4	96	96.1	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	491012	13C2-PFDA	477926	1250	Avg	1.232298						1042.14	1042.1392	100				1250	83	83	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	657616	13C6-PFDA	491012	1250	Avg	0.819341		2043.27	5	5	1	2.0433	2.0433	100	2	2	Yes	2.4	85	85.1	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	366669	13C4-PFOS	631112	2500	Avg	0.364519						3984.62	3984.6263	100				5000	80	80	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	200789	D5-NEtFOSAA	366669	5000	Avg	1.162779		2354.72	5	5	1	2.3547	2.3547	100	2.4	2.4	Yes	2.4	98	98.1	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	487313	13C4-PFOS	631112	2500	Avg	0.970887						1988.26	1988.2587	100				2500	80	80	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	349978	13C8-PFOS	487313	2500	Avg	0.939894		1910.27	5	5	1	1.9103	1.9103	100	1.9	1.9	Yes	2.3	84	83.1	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	401236	13C8-PFOS	487313	2500	Avg	1.054191		1952.6	5	5	1	1.9526	1.9526	100	2	2	Yes	2.2	88	88.8	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	565400	13C8-PFOS	487313	2500	Avg	1.337317		2168.97	5	5	1	2.169	2.169	100	2.2	2.2	Yes	2.3	94	94.3	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	404499	13C2-PFDA	477926	1250	Avg	1.191252						888.1	888.1026	100				1250	71	71	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	610222	13C7-PFUnA	404499	1250	Avg	0.853896		2208.39	5	5	1	2.2084	2.2084	100	2.2	2.2	Yes	2.4	92	92.0	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	395453	13C2-PFDA	477926	1250	Avg	1.01948						1014.53	1014.5315	100				1250	81	81	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	545538	13C2-PFDoA	395453	1250	Avg	0.772781		2231.43	5	5	1	2.2314	2.2314	100	2.2	2.2	Yes	2.4	93	93.0	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	730103	13C4-PFOS	631112	2500	Avg	1.694128						1707.15	1707.1492	100				1250	68	68	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	704303	13C8-PFOSA	730103	2500	Avg	0.99659		2419.91	5	5	1	2.4199	2.4199	100	2.4	2.4	Yes	2.4	101	100.8	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	325635	13C2-PFDA	477926	1250	Avg	0.871708						977.03	977.0334	100				1250	78	78	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2759773	13C4-PFOS	631112	2500	Avg	0.708623						15427	15427.363	100				25000	62	62	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	120185	13C4-PFOS	631112	2500	Avg	0.415479						1145.87	1145.8684	100				2500	46	46	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	101925	D3-NMeFOSA	120185	2500	Avg	0.976696		2170.76	5	5	1	2.1708	2.1708	100	2.2	2.2	Yes	2.4	90	90.5	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	3037147	13C4-PFOS	631112	2500	Avg	0.758997						15851	15851.097	100				25000	63	63	Yes			
100924139.d	ZQ18873-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	122274	13C4-PFOS	631112	2500	Avg	0.441246						1097.71	1097.7082	100				2500	44	44	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C4-PFBA	SESI-0111	3148568	13C3-PFBA	1642620	5000	Avg	1.14247						8388.83	8388.8257	39.9				10000	84	84	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1355821	13C2-PFHxA	987624	2500	Avg	0.796557						4308.58	4308.5771	39.9				5000	86	86	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	90814	13C5-PFPeA	1355821	5000	Avg	0.874543		382.95	5	1.25	1	1.5318	1.5318	39.9	3.8	3.8	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	168415	18O2-PFHxS	554531	2500	Avg	0.169955						4467.47	4467.4634	39.9				5000	89	89	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C5-PFHxA	SESI-0113	889040	13C2-PFHxA	987624	2500	Avg	1.046383						2150.7	2150.6959	39.9				2500	86	86	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	268247	13C5-PFHxA	889040	2500	Avg	0.9029		835.44	5	1.25	1	3.3417	3.3417	39.9	8.4	8.4	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C3-PFBS	SESI-0116	581495	18O2-PFHxS	554531	2500	Avg	1.319962						1986.09	1986.0891	39.9				2500	79	79.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	47228	13C3-PFBS	581495	2500	Avg	1.207053		168.22	5	1.25	1	0.67286	0.6729	39.9	1.7	1.7	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	609396	13C2-PFHxA	987624	2500	Avg	0.186581						8267.62	8267.6209	39.9				10000	83	83.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1006986	13C2-PFHxA	987624	2500	Avg	1.170685						2177.37	2177.3676	39.9				2500	87	87	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	156997	13C4-PFHpA	1006986	2500	Avg	1.077361		361.78	5	1.25	1	1.4471	1.4471	39.9	3.6	3.6	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	180343	18O2-PFHxS	554531	2500	Avg	0.184115						4415.96	4415.9515	39.9				5000	88	88	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	509903	13C2-6:2FTS	180343	5000	Avg	2.253868		6272.34	5	1.25	1	25.089	25.0894	39.9	63	63	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C8-PFOA	SESI-0097	1085408	13C4-PFOA	190077	2500	Avg	7.728869						1847.09	1847.0877	39.9				2500	74	74.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	473939	13C8-PFOA	1085408	2500	Ln	0.828626	32.8119	1277.78	5	1.25	1	5.1111	5.1111	39.9	13	13	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C3-PFHxS	SESI-0096	562080	18O2-PFHxS	554531	2500	Avg	1.171154						2163.71	2163.7063	39.9				2500	87	87.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	66019	13C3-PFHxS	562080	2500	Avg	1.194012		245.92	5	1.25	1	0.9837	0.9837	39.9	2.5	2.5	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	805276	13C3-PFHxS	562080	2500	Ln	1.119323	33.81	3169.66	5	1.25	1	12.679	12.6786	39.9	32	32	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C9-PFNA	SESI-0099	528046	13C5-PFNA	694217	1250	Avg	0.935659						1016.18	1016.176	39.9				1250	81	81.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	104367	13C9-PFNA	528046	1250	Avg	0.837317		295.06	5	1.25	1	1.1802	1.1802	39.9	3	3	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	147371	18O2-PFHxS	554531	2500	Avg	0.170753						3890.97	3890.9699	39.9				5000	78	78.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	28153	13C2-8:2FTS	147371	5000	Ln	1.94256	137	420.75	5	1.25	1	1.683	1.6847	39.9	4.2	4.2	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	527773	13C4-PFOS	637586	2500	Avg	0.495989						4172.31	4172.308	39.9				5000	83	83.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	14350	D3-NMeFOSAA	527773	5000	Avg	0.795786		170.84	5	1.25	1	0.68334	0.6833	39.9	1.7	1.7	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C6-PFDA	SESI-0115	583635	13C2-PFDA	527430	1250	Avg	1.232298						1122.46	1122.4597	39.9				1250	90	90.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	20581	13C6-PFDA	583635	1250	Avg	0.819341		53.799	5	1.25	1	0.21519	0.2152	39.9	0.54	0.54	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	416999	13C4-PFOS	637586	2500	Avg	0.364519						4485.55	4485.5539	39.9				5000	90	90	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	18034	D5-NEtFOSAA	416999	5000	Avg	1.162779		185.96	5	1.25	1	0.74386	0.7439	39.9	1.9	1.9	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C8-PFOS	SESI-0098	552095	13C4-PFOS	637586	2500	Avg	0.970887						2229.7	2229.6996	39.9				2500	89	89	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	35973	13C8-PFOS	552095	2500	Avg	0.939894		173.31	5	1.25	1	0.69324	0.6932	39.9	1.7	1.7	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3556407	13C8-PFOS	552095	2500	Avg	1.054191		15276	5	1.25	1	61.105	61.1052	39.9	150	150	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C7-PFUnA	SESI-0117	444048	13C2-PFDA	527430	1250	Avg	1.191252						883.43	883.4286	39.9				1250	71	71.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	96061	13C7-PFUnA	444048	1250	Avg	0.853896		316.68	5	1.25	1	1.2667	1.2667	39.9	3.2	3.2	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C2-PFDoA	SESI-0118	416742	13C2-PFDA	527430	1250	Avg	1.01948						968.8	968.7991	39.9				1250	78	78.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	54664	13C2-PFDoA	416742	1250	Avg	0.772781		212.17	5	1.25	1	0.84869	0.8487	39.9	2.1	2.1	Yes							
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	858875	13C4-PFOS	637586	2500	Avg	1.694128						1987.86	1987.8563	39.9				2500	80	80.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	321628	13C2-PFDA	527430	1250	Avg	0.871708						874.44	874.4359	39.9				1250	70	70	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2475309	13C4-PFOS	637586	2500	Avg	0.708623						13697	13696.683	39.9				25000	55	55.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	105067	13C4-PFOS	637586	2500	Avg	0.415479						991.56	991.5588	39.9				2500	40	40.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2542836	13C4-PFOS	637586	2500	Avg	0.758997						13137	13136.496	39.9				25000	53	53.0	Yes			
100924143.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	99895	13C4-PFOS	637586	2500	Avg	0.441246						887.7	887.6959	39.9				2500	36	36	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	1746039	13C3-PFBA	957919	5000	Avg	1.117176						8157.81	8157.8095	100				10000	82	82.0	Yes			
100924A020.d	ZQ18871-001		Method_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	573	13C4-PFBA	1746039	10000	Avg	0.88036		3.7277	5	5	1	0.003728	0.0037	100	ND	0.004	Yes							
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	704534	13C2-PFHxA	528984	2500	Avg	0.842249						3953.29	3953.2923	100				5000	79	79.0	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	97169	18O2-PFHxS	348767	2500	Avg	0.16257						4284.41	4284.4191	100				5000	86	86.0	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	395466	13C2-PFHxA	528984	2500	Avg	0.957583						1951.78	1951.777	100				2500	78	78	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	416327	18O2-PFHxS	348767	2500	Avg	1.372263						2174.71	2174.7125	100				2500	87	87.0	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	410271	13C2-PFHxA	528984	2500	Avg	0.254727						7611.9	7611.9042	100				10000	76	76	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	363105	13C2-PFHxA	528984	2500	Avg	0.9296						1846.01	1846.008	100				2500	74	74.0	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	118006	18O2-PFHxS	348767	2500	Avg	0.216602						3905.24	3905.2267	100				5000	78	78	Yes			
100924A020.d	ZQ18871-001		Method_Blank	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	366	13C2-6:2FTS	118006	5000	Avg	2.166797		7.157	5	5	1	0.007157	0.0072	100	ND	0.007	Yes							
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	397717	13C4-PFOA	138781	2500	Avg	3.964715						1807.06	1807.0584	100				2500	72	72.0	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	284006	18O2-PFHxS	348767	2500	Avg	1.002875						2029.95	2029.95	100				2500	81	81	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	127945	13C5-PFNA	252361	1250	Avg	0.659201						961.38	961.3759	100				1250	77	77	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	107196	18O2-PFHxS	348767	2500	Avg	0.205874						3732.35	3732.3443	100				5000	75	75	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	215690	13C4-PFOS	549996	2500	Avg	0.281158						3487.07	3487.065	100				5000	70	70	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	140437	13C2-PFDA	213585	1250	Avg	0.924946						888.6	888.5962	100				1250	71	71	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	250613	13C4-PFOS	549996	2500	Avg	0.328751						3465.11	3465.1097	100				5000	69	69	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	414794	13C4-PFOS	549996	2500	Avg	0.948031						1988.8	1988.7968	100				2500	80	80	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	141179	13C2-PFDA	213585	1250	Avg	0.932642						885.92	885.9198	100				1250	71	71	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	111384	13C2-PFDA	213585	1250	Avg	0.761609						855.91	855.9138	100				1250	68	68	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	84782	13C2-PFDA	213585	1250	Avg	0.582576						851.71	851.7072	100				1250	68	68	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	586881	13C4-PFOS	549996	2500	Avg	1.831503						1456.54	1456.5416	100				2500	58	58	Yes			
100924A020.d	ZQ18871-001		Method_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	24549	13C8-PFOSA	586881	2500	Avg	1.090045		95.935	5	5	1	0.09594	0.0959	100	0.096	0.096	Yes							
100924A020.d	ZQ18871-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1836487	13C4-PFOS	549996	2500	Avg	0.656639						12713	12712.813	100				25000	51	51	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	71571	13C4-PFOS	549996	2500	Avg	0.403922						805.41	805.4156	100				2500	32	32	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2361432	13C4-PFOS	549996	2500	Avg	0.829443						12941	12941.046	100				25000	52	52	Yes			
100924A020.d	ZQ18871-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	82314	13C4-PFOS	549996	2500	Avg	0.466186						802.59	802.5922	100				2500	32	32	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	1561723	13C3-PFBA	802041	5000	Avg	1.117176						8714.77	8714.7683	100				10000	87	87	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1346879	13C4-PFBA	1561723	10000	Avg	0.88036		9796.36	5	5	1	9.7964	9.7963	100	9.8	9.8	Yes	9.6	102	102.0	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	625386	13C2-PFHxA	420503	2500	Avg	0.842249						4414.47	4414.4699	100				5000	88	88	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	677817	13C5-PFPeA	625386	5000	Avg	1.152335		4702.79	5	5	1	4.7028	4.7028	100	4.7	4.7	Yes	4.8	98	98.0	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	80566	18O2-PFHxS	289001	2500	Avg	0.16257						4286.98	4286.9859	100				5000	86	86	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	351218	13C2-PFHxA	420503	2500	Avg	0.957583						2180.58	2180.5761	100				2500	87	87	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	435797	13C5-PFHxA	351218	2500	Avg	1.266315		2449.66	5	5	1	2.4497	2.4497	100	2.4	2.4	Yes	2.4	102	102.1	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	355401	18O2-PFHxS	289001	2500	Avg	1.372263						2240.38	2240.3814	100				2500	90	90	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	579672	13C3-PFBS	355401	2500	Avg	1.799		2266.59	5	5	1	2.2666	2.2666	100	2.3	2.3	Yes	2.1	107	107.9	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	373698	13C2-PFHxA	420503	2500	Avg	0.254727						8722.01	8722.0125	100				10000	87	87	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	349506	13C2-PFHxA	420503	2500	Avg	0.9296						2235.27	2235.2671	100				2500	89	89	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	413690	13C4-PFHpA	349506	2500	Avg	1.231389		2403.06	5	5	1	2.4031	2.4031	100	2.4	2.4	Yes	2.4	100	100.1	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	108208	18O2-PFHxS	289001	2500	Avg	0.216602						4321.54	4321.5304	100				5000	86	86	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	411768	13C2-6:2FTS	108208	5000	Avg	2.166797		8781.02	5	5	1	8.781	8.781	100	8.8	8.8	Yes	9.1	96	96.5	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	367962	13C4-PFOA	117343	2500	Avg	3.964715						1977.31	1977.3057	100				2500	79	79	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	412640	13C8-PFOA	367962	2500	Avg	1.236771		2266.83	5	5	1	2.2668	2.2668	100	2.3	2.3	Yes	2.4	94	94.5	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	286506	18O2-PFHxS	289001	2500	Avg	1.002875						2471.31	2471.312	100				2500	99	99	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	298209	13C3-PFHxS	286506	2500	Avg	1.23834		2101.3	5	5	1	2.1013	2.1013	100	2.1	2.1	Yes	2.3	93	91.4	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	223748	13C3-PFHxS	286506	2500	Ln	1.045853	20.3871	1847.29	5	5	1	1.8473	1.8473	100	1.8	1.8	Yes	2.2	84	84.0	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	116435	13C5-PFNA	227751	1250	Avg	0.659201						969.43	969.4277	100				1250	78	78	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	301171	13C9-PFNA	116435	1250	Avg	1.215541		2659.93	5	5	1	2.6599	2.6599	100	2.7	2.7	Yes	2.4	111	110.8	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	102038	18O2-PFHxS	289001	2500	Avg	0.205874						4287.48	4287.47	100				5000	86	86	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	288252	13C2-8:2FTS	102038	5000	Avg	1.506758		9374.26	5	5	1	9.3743	9.3743	100	9.4	9.4	Yes	9.2	102	101.9	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	195087	13C4-PFOS	478271	2500	Avg	0.281158						3626.97	3626.969	100				5000	73	73	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	78837	D3-NMeFOSAA	195087	5000	Avg	0.843191		2396.33	5	5	1	2.3963	2.3963	100	2.4	2.4	Yes	2.4	100	99.8	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	138999	13C2-PFDA	178874	1250	Avg	0.924946						1050.17	1050.1663	100				1250	84	84	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	268796	13C6-PFDA	138999	1250	Avg	1.076644		2245.17	5	5	1	2.2452	2.2452	100	2.2	2.2	Yes	2.4	94	93.6	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	208387	13C4-PFOS	478271	2500	Avg	0.328751						3313.37	3313.3667	100				5000	66	66	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	100070	D5-NEtFOSAA	208387	5000	Avg	0.952208		2521.57	5	5	1	2.5216	2.5216	100	2.5	2.5	Yes	2.4	105	105.1	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	350261	13C4-PFOS	478271	2500	Avg	0.948031						1931.24	1931.2354	100				2500	77	77	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	273915	13C8-PFOS	350261	2500	Avg	0.82973		2356.28	5	5	1	2.3563	2.3563	100	2.4	2.4	Yes	2.3	103	102.4	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	319099	13C8-PFOS	350261	2500	Avg	0.985331		2311.49	5	5	1	2.3115	2.3115	100	2.3	2.3	Yes	2.2	104	105.1	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	313188	13C8-PFOS	350261	2500	Avg	0.943409		2369.48	5	5	1	2.3695	2.3695	100	2.4	2.4	Yes	2.3	103	103.0	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	133284	13C2-PFDA	178874	1250	Avg	0.932642						998.68	998.6788	100				1250	80	80	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	253997	13C7-PFUnA	133284	1250	Avg	1.011058		2356.05	5	5	1	2.3561	2.3561	100	2.4	2.4	Yes	2.4	98	98.2	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	113434	13C2-PFDA	178874	1250	Avg	0.761609						1040.82	1040.816	100				1250	83	83	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	153693	13C2-PFDoA	113434	1250	Ln	0.718295	33.9774	2310.56	5	5	1	2.3106	2.3106	100	2.3	2.3	Yes	2.4	96	96.3	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	81825	13C2-PFDA	178874	1250	Avg	0.582576						981.51	981.5134	100				1250	79	79	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	587469	13C4-PFOS	478271	2500	Avg	1.831503						1676.65	1676.6533	100				2500	67	67	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	669971	13C8-PFOSA	587469	2500	Avg	1.090045		2615.57	5	5	1	2.6156	2.6156	100	2.6	2.6	Yes	2.4	109	109.0	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1672931	13C4-PFOS	478271	2500	Avg	0.656639						13317	13317.335	100				25000	53	53	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	66607	13C4-PFOS	478271	2500	Avg	0.403922						861.96	861.9624	100				2500	34	34	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	86838	D3-NMeFOSA	66607	2500	Avg	1.222625		2665.86	5	5	1	2.6659	2.6659	100	2.7	2.7	Yes	2.4	111	111.1	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2109053	13C4-PFOS	478271	2500	Avg	0.829443						13291	13291.283	100				25000	53	53	Yes			
100924A021.d	ZQ18871-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	76495	13C4-PFOS	478271	2500	Avg	0.466186						857.71	857.7086	100				2500	34	34	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	1467187	13C3-PFBA	790698	5000	Avg	1.117176						8304.68	8304.6864	100				10000	83	83	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	124225	13C4-PFBA	1467187	10000	Avg	0.88036		961.75	5	5	1	0.96175	0.9618	100	0.96	0.96	Yes	0.8	120	120.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	604485	13C2-PFHxA	435934	2500	Avg	0.842249						4115.9	4115.895	100				5000	82	82	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	61674	13C5-PFPeA	604485	5000	Avg	1.152335		442.7	5	5	1	0.4427	0.4427	100	0.44	0.44	Yes	0.4	111	110.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	83408	18O2-PFHxS	315845	2500	Avg	0.16257						4061	4061.0029	100				5000	81	81	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	341645	13C2-PFHxA	435934	2500	Avg	0.957583						2046.06	2046.0578	100				2500	82	82	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	36464	13C5-PFHxA	341645	2500	Avg	1.266315		210.71	5	5	1	0.21071	0.2107	100	0.21	0.21	Yes	0.2	105	105.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	348515	18O2-PFHxS	315845	2500	Avg	1.372263						2010.25	2010.2502	100				2500	80	80	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	50958	13C3-PFBS	348515	2500	Avg	1.799		203.19	5	5	1	0.20319	0.2032	100	0.2	0.2	Yes	0.17	119	117.6	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	368422	13C2-PFHxA	435934	2500	Avg	0.254727						8294.49	8294.4929	100				10000	83	83	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	325415	13C2-PFHxA	435934	2500	Avg	0.9296						2007.52	2007.5239	100				2500	80	80	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	36471	13C4-PFHpA	325415	2500	Avg	1.231389		227.54	5	5	1	0.22754	0.2275	100	0.23	0.23	Yes	0.2	114	115.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	101747	18O2-PFHxS	315845	2500	Avg	0.216602						3718.14	3718.135	100				5000	74	74	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	34196	13C2-6:2FTS	101747	5000	Avg	2.166797		775.54	5	5	1	0.77554	0.7755	100	0.78	0.78	Yes	0.76	102	102.6	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	365427	13C4-PFOA	116338	2500	Avg	3.964715						1980.65	1980.647	100				2500	79	79	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	36072	13C8-PFOA	365427	2500	Avg	1.236771		199.54	5	5	1	0.19954	0.1995	100	0.2	0.2	Yes	0.2	100	100.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	233904	18O2-PFHxS	315845	2500	Avg	1.002875						1846.11	1846.1069	100				2500	74	74	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	32576	13C3-PFHxS	233904	2500	Avg	1.23834		281.16	5	5	1	0.28116	0.2812	100	0.28	0.28	Yes	0.18	156	155.6	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	21530	13C3-PFHxS	233904	2500	Ln	1.045853	20.3871	200.53	5	5	1	0.20053	0.2005	100	0.2	0.2	Yes	0.18	111	111.1	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	104571	13C5-PFNA	214381	1250	Avg	0.659201						924.95	924.9476	100				1250.0	74	74.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	23801	13C9-PFNA	104571	1250	Avg	1.215541		234.06	5	5	1	0.23406	0.2341	100	0.23	0.23	Yes	0.2	117	115.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	91583	18O2-PFHxS	315845	2500	Avg	0.205874						3521.11	3521.1082	100				5000	70	70.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	27068	13C2-8:2FTS	91583	5000	Avg	1.506758		980.77	5	5	1	0.98077	0.9808	100	0.98	0.98	Yes	0.76	129	128.9	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	189385	13C4-PFOS	469259	2500	Avg	0.281158						3588.58	3588.5792	100				5000	72	72	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	7655	D3-NMeFOSAA	189385	5000	Avg	0.843191		239.69	5	5	1	0.23969	0.2397	100	0.24	0.24	Yes	0.2	120	120.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	137465	13C2-PFDA	194453	1250	Avg	0.924946						955.37	955.369	100				1250	76	76	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	29801	13C6-PFDA	137465	1250	Avg	1.076644		251.7	5	5	1	0.2517	0.2517	100	0.25	0.25	Yes	0.2	126	125.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	196583	13C4-PFOS	469259	2500	Avg	0.328751						3185.71	3185.7103	100				5000	64	64.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	8932	D5-NEtFOSAA	196583	5000	Avg	0.952208		238.58	5	5	1	0.23858	0.2386	100	0.24	0.24	Yes	0.2	120	120.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	326497	13C4-PFOS	469259	2500	Avg	0.948031						1834.78	1834.7802	100				2500	73	73.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	26664	13C8-PFOS	326497	2500	Avg	0.82973		246.06	5	5	1	0.24606	0.2461	100	0.25	0.25	Yes	0.19	129	131.6	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	24461	13C8-PFOS	326497	2500	Avg	0.985331		190.09	5	5	1	0.19009	0.1901	100	0.19	0.19	Yes	0.18	106	105.6	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	27229	13C8-PFOS	326497	2500	Avg	0.943409		221	5	5	1	0.221	0.221	100	0.22	0.22	Yes	0.19	116	115.8	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	119392	13C2-PFDA	194453	1250	Avg	0.932642						822.92	822.9162	100				1250	66	66.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	24360	13C7-PFUnA	119392	1250	Avg	1.011058		252.25	5	5	1	0.25225	0.2523	100	0.25	0.25	Yes	0.2	126	125.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	98637	13C2-PFDA	194453	1250	Avg	0.761609						832.54	832.5363	100				1250	67	67	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	12329	13C2-PFDoA	98637	1250	Ln	0.718295	33.9774	170.22	5	5	1	0.17022	0.1702	100	0.17	0.17	Yes	0.2	85	85.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	74302	13C2-PFDA	194453	1250	Avg	0.582576						819.87	819.8668	100				1250	66	66	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	521295	13C4-PFOS	469259	2500	Avg	1.831503						1516.36	1516.3635	100				2500	61	61.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	74920	13C8-PFOSA	521295	2500	Avg	1.090045		329.62	5	5	1	0.32962	0.3296	100	0.33	0.33	Yes	0.2	165	165.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1520797	13C4-PFOS	469259	2500	Avg	0.656639						12339	12338.773	100				25000	49	49.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	54521	13C4-PFOS	469259	2500	Avg	0.403922						719.11	719.1073	100				2500	29	29	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	5682	D3-NMeFOSA	54521	2500	Avg	1.222625		213.1	5	5	1	0.2131	0.2131	100	0.21	0.21	Yes	0.2	107	105.0	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	1945701	13C4-PFOS	469259	2500	Avg	0.829443						12497	12497.322	100				25000	50	50	Yes			
100924A022.d	ZQ18871-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	65141	13C4-PFOS	469259	2500	Avg	0.466186						744.43	744.4278	100				2500	30	30.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C4-PFBA	SESI-0111	1513050	13C3-PFBA	881424	5000	Avg	1.117176						7682.75	7682.752	39.1				10000	77	77	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	18971	13C4-PFBA	1513050	10000	Avg	0.88036		142.42	5	1.28	1	0.55634	0.5563	39.1	1.4	1.4	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C5-PFPeA	SESI-0112	632806	13C2-PFHxA	455249	2500	Avg	0.842249						4125.92	4125.9228	39.1				5000	83	83.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	140856	13C5-PFPeA	632806	5000	Avg	1.152335		965.82	5	1.28	1	3.7727	3.7727	39.1	9.6	9.6	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	79148	18O2-PFHxS	353735	2500	Avg	0.16257						3440.81	3440.8165	39.1				5000	69	69	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C5-PFHxA	SESI-0113	353665	13C2-PFHxA	455249	2500	Avg	0.957583						2028.18	2028.1808	39.1				2500	81	81.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	410440	13C5-PFHxA	353665	2500	Avg	1.266315		2291.16	5	1.28	1	8.9499	8.9499	39.1	23	23	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C3-PFBS	SESI-0116	351453	18O2-PFHxS	353735	2500	Avg	1.372263						1810.05	1810.0554	39.1				2500	72	72.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	93075	13C3-PFBS	351453	2500	Avg	1.799		368.02	5	1.28	1	1.4376	1.4376	39.1	3.7	3.7	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	392551	13C2-PFHxA	455249	2500	Avg	0.254727						8462.76	8462.7618	39.1				10000	85	85	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C4-PFHpA	SESI-0114	342461	13C2-PFHxA	455249	2500	Avg	0.9296						2023.05	2023.0472	39.1				2500	81	81.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	178773	13C4-PFHpA	342461	2500	Avg	1.231389		1059.83	5	1.28	1	4.14	4.14	39.1	11	11	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	109271	18O2-PFHxS	353735	2500	Avg	0.216602						3565.38	3565.3686	39.1				5000	71	71.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	378571	13C2-6:2FTS	109271	5000	Avg	2.166797		7994.55	5	1.28	1	31.229	31.2287	39.1	80	80	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C8-PFOA	SESI-0097	356755	13C4-PFOA	108271	2500	Avg	3.964715						2077.72	2077.7149	39.1				2500	83	83	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	468454	13C8-PFOA	356755	2500	Avg	1.236771		2654.28	5	1.28	1	10.368	10.3683	39.1	26	27	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C3-PFHxS	SESI-0096	277412	18O2-PFHxS	353735	2500	Avg	1.002875						1954.97	1954.9714	39.1				2500	78	78	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	66107	13C3-PFHxS	277412	2500	Avg	1.23834		481.09	5	1.28	1	1.8792	1.8792	39.1	4.8	4.8	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	825620	13C3-PFHxS	277412	2500	Ln	1.045853	20.3871	7094.68	5	1.28	1	27.714	27.7136	39.1	71	71	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C9-PFNA	SESI-0099	122850	13C5-PFNA	231582	1250	Avg	0.659201						1005.92	1005.9179	39.1				1250	80	80.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	61193	13C9-PFNA	122850	1250	Avg	1.215541		512.23	5	1.28	1	2.0009	2.0009	39.1	5.1	5.1	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	98121	18O2-PFHxS	353735	2500	Avg	0.205874						3368.4	3368.3905	39.1				5000	67	67.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	32727	13C2-8:2FTS	98121	5000	Avg	1.506758		1106.8	5	1.28	1	4.3235	4.3235	39.1	11	11	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	204495	13C4-PFOS	481254	2500	Avg	0.281158						3778.32	3778.3128	39.1				5000.0	76	76.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	12877	D3-NMeFOSAA	204495	5000	Avg	0.843191		373.4	5	1.28	1	1.4586	1.4586	39.1	3.7	3.7	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C6-PFDA	SESI-0115	151512	13C2-PFDA	207498	1250	Avg	0.924946						986.79	986.7946	39.1				1250	79	79.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	15018	13C6-PFDA	151512	1250	Avg	1.076644		115.08	5	1.28	1	0.44953	0.4495	39.1	1.1	1.1	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	257700	13C4-PFOS	481254	2500	Avg	0.328751						4072.05	4072.049	39.1				5000	81	81	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	19045	D5-NEtFOSAA	257700	5000	Avg	0.952208		388.07	5	1.28	1	1.5159	1.5159	39.1	3.9	3.9	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C8-PFOS	SESI-0098	351139	13C4-PFOS	481254	2500	Avg	0.948031						1924.08	1924.0758	39.1				2500	77	77	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	55592	13C8-PFOS	351139	2500	Avg	0.82973		477.02	5	1.28	1	1.8634	1.8634	39.1	4.8	4.8	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4966545	13C8-PFOS	351139	2500	Avg	0.985331		35887	5	1.28	1	140.18	140.1823	39.1	360	360	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	5270	13C8-PFOS	351139	2500	Avg	0.943409		39.771	5	1.28	1	0.15536	0.1554	39.1	0.4	0.4	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C7-PFUnA	SESI-0117	138917	13C2-PFDA	207498	1250	Avg	0.932642						897.3	897.2976	39.1				1250	72	72.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	43920	13C7-PFUnA	138917	1250	Avg	1.011058		390.88	5	1.28	1	1.5269	1.5269	39.1	3.9	3.9	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C2-PFDoA	SESI-0118	109226	13C2-PFDA	207498	1250	Avg	0.761609						863.95	863.9529	39.1				1250	69	69.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	13467	13C2-PFDoA	109226	1250	Ln	0.718295	33.9774	167.26	5	1.28	1	0.65335	0.6534	39.1	1.7	1.7	Yes							
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	76386	13C2-PFDA	207498	1250	Avg	0.582576						789.87	789.873	39.1				1250	63	63.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	648952	13C4-PFOS	481254	2500	Avg	1.831503						1840.65	1840.6474	39.1				2500	74	74.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1625284	13C4-PFOS	481254	2500	Avg	0.656639						12858	12857.847	39.1				25000	51	51	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	74987	13C4-PFOS	481254	2500	Avg	0.403922						964.39	964.3932	39.1				2500	39	39.0	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	1970821	13C4-PFOS	481254	2500	Avg	0.829443						12343	12343.158	39.1				25000	49	49	Yes			
100924A041.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	80728	13C4-PFOS	481254	2500	Avg	0.466186						899.56	899.561	39.1				2500	36	36.0	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	1524016	13C3-PFBA	844190	5000	Avg	1.117176						8079.74	8079.7464	39.1				10000	81	81	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1329186	13C4-PFBA	1524016	10000	Avg	0.88036		9906.86	5	1.28	1	38.699	38.6987	39.1	99	99	Yes	96	102	101.6	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	611432	13C2-PFHxA	462881	2500	Avg	0.842249						3920.83	3920.8327	39.1				5000	78	78	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	822854	13C5-PFPeA	611432	5000	Avg	1.152335		5839.37	5	1.28	1	22.81	22.81	39.1	58	58	Yes	48	102	101.4	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	79543	18O2-PFHxS	303824	2500	Avg	0.16257						4026.05	4026.053	39.1				5000	81	81	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	358544	13C2-PFHxA	462881	2500	Avg	0.957583						2022.26	2022.2586	39.1				2500	81	81.0	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	836159	13C5-PFHxA	358544	2500	Avg	1.266315		4604.1	5	1.28	1	17.985	17.9848	39.1	46	46	Yes	24	96	96.28	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	343891	18O2-PFHxS	303824	2500	Avg	1.372263						2062.06	2062.0604	39.1				2500	82	82.0	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	639855	13C3-PFBS	343891	2500	Avg	1.799		2585.65	5	1.28	1	10.1	10.1002	39.1	26	26	Yes	21	104	105.5	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	381734	13C2-PFHxA	462881	2500	Avg	0.254727						8093.87	8093.8754	39.1				10000	81	81.0	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	367774	13C2-PFHxA	462881	2500	Avg	0.9296						2136.76	2136.7591	39.1				2500	85	85.5	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	603155	13C4-PFHpA	367774	2500	Avg	1.231389		3329.6	5	1.28	1	13.006	13.0063	39.1	33	33	Yes	24	95	94.5	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	105970	18O2-PFHxS	303824	2500	Avg	0.216602						4025.68	4025.6722	39.1				5000	81	81	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	797356	13C2-6:2FTS	105970	5000	Avg	2.166797		17363	5	1.28	1	67.824	67.8236	39.1	170	170	Yes	91	103	102.8	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	375903	13C4-PFOA	111583	2500	Avg	3.964715						2124.25	2124.2508	39.1				2500	85	85.0	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	939859	13C8-PFOA	375903	2500	Avg	1.236771		5054.03	5	1.28	1	19.742	19.7423	39.1	50	50	Yes	24	100	99.893	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	285715	18O2-PFHxS	303824	2500	Avg	1.002875						2344.25	2344.2513	39.1				2500	94	94.0	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	347905	13C3-PFHxS	285715	2500	Avg	1.23834		2458.26	5	1.28	1	9.6026	9.6026	39.1	25	25	Yes	23	88	85.882	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1100569	13C3-PFHxS	285715	2500	Ln	1.045853	20.3871	9188.26	5	1.28	1	35.892	35.8916	39.1	92	92	Yes	22	96	95.1	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	131238	13C5-PFNA	232257	1250	Avg	0.659201						1071.48	1071.4772	39.1				1250	86	86	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	378878	13C9-PFNA	131238	1250	Avg	1.215541		2968.8	5	1.28	1	11.597	11.5969	39.1	30	30	Yes	24	102	102.26	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	102472	18O2-PFHxS	303824	2500	Avg	0.205874						4095.64	4095.6387	39.1				5000	82	82.0	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	333215	13C2-8:2FTS	102472	5000	Avg	1.506758		10791	5	1.28	1	42.151	42.1508	39.1	110	110	Yes	92	105	105.16	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	215682	13C4-PFOS	469572	2500	Avg	0.281158						4084.15	4084.1461	39.1				5000	82	82	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	95869	D3-NMeFOSAA	215682	5000	Avg	0.843191		2635.78	5	1.28	1	10.296	10.296	39.1	26	26	Yes	24	94	94.175	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	151214	13C2-PFDA	185331	1250	Avg	0.924946						1102.65	1102.6497	39.1				1250	88	88	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorodecanoic acid (PFDA)	335-76-2	295747	13C6-PFDA	151214	1250	Avg	1.076644		2270.73	5	1.28	1	8.8701	8.8701	39.1	23	23	Yes	24	90	89.734	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	239875	13C4-PFOS	469572	2500	Avg	0.328751						3884.69	3884.6842	39.1				5000	78	78	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	128153	D5-NEtFOSAA	239875	5000	Avg	0.952208		2805.32	5	1.28	1	10.958	10.9583	39.1	28	28	Yes	24	101	100.62	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	353653	13C4-PFOS	469572	2500	Avg	0.948031						1986.06	1986.0612	39.1				2500	79	79	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	345615	13C8-PFOS	353653	2500	Avg	0.82973		2944.55	5	1.28	1	11.502	11.5021	39.1	29	29	Yes	23	108	107.18	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	5558884	13C8-PFOS	353653	2500	Avg	0.985331		39881	5	1.28	1	155.79	155.7859	39.1	400	400	Yes	22	179	181.4	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	312513	13C8-PFOS	353653	2500	Avg	0.943409		2341.7	5	1.28	1	9.1473	9.1473	39.1	23	23	Yes	23	100	99.988	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	132651	13C2-PFDA	185331	1250	Avg	0.932642						959.31	959.3068	39.1				1250	77	77	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	299186	13C7-PFUnA	132651	1250	Avg	1.011058		2788.46	5	1.28	1	10.892	10.8924	39.1	28	28	Yes	24	100	99.803	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	111268	13C2-PFDA	185331	1250	Avg	0.761609						985.37	985.3719	39.1				1250	79	79	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	156409	13C2-PFDoA	111268	1250	Ln	0.718295	33.9774	2398.94	5	1.28	1	9.3708	9.3708	39.1	24	24	Yes	24	93	92.896	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	78769	13C2-PFDA	185331	1250	Avg	0.582576						911.94	911.9367	39.1				1250	73	73	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	663422	13C4-PFOS	469572	2500	Avg	1.831503						1928.5	1928.5018	39.1				2500	77	77	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	798120	13C8-PFOSA	663422	2500	Avg	1.090045		2759.14	5	1.28	1	10.778	10.7779	39.1	28	28	Yes	24	102	102.16	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	1687678	13C4-PFOS	469572	2500	Avg	0.656639						13684	13683.611	39.1				25000	55	55	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	80828	13C4-PFOS	469572	2500	Avg	0.403922						1065.37	1065.3741	39.1				2500	43	43	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	95461	D3-NMeFOSA	80828	2500	Avg	1.222625		2414.97	5	1.28	1	9.4335	9.4335	39.1	24	24	Yes	24	101	100.53	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	2041871	13C4-PFOS	469572	2500	Avg	0.829443						13106	13106.284	39.1				25000	52	52	Yes			
100924A042.d	ZI12016-023MS	CACMW-003-060-27-090424-	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	80764	13C4-PFOS	469572	2500	Avg	0.466186						922.35	922.3514	39.1				2500	37	37	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	1593063	13C3-PFBA	837751	5000	Avg	1.117176						8510.72	8510.722	39.1				10000	85	85	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1371852	13C4-PFBA	1593063	10000	Avg	0.88036		9781.7	5	1.28	1	38.21	38.2097	39.1	98	98	Yes	96	100	100.31	Yes	1.3	1.27	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	647037	13C2-PFHxA	446383	2500	Avg	0.842249						4302.5	4302.5009	39.1				5000	86	86	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	825442	13C5-PFPeA	647037	5000	Avg	1.152335		5535.4	5	1.28	1	21.623	21.6226	39.1	55	55	Yes	48	95	95.108	Yes	5.3	5.34	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	88392	18O2-PFHxS	304937	2500	Avg	0.16257						4457.61	4457.6138	39.1				5000	89	89	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	367037	13C2-PFHxA	446383	2500	Avg	0.957583						2146.67	2146.6724	39.1				2500	86	86	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	800388	13C5-PFHxA	367037	2500	Avg	1.266315		4305.16	5	1.28	1	16.817	16.817	39.1	43	43	Yes	24	84	83.835	Yes	6.7	6.71	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	369407	18O2-PFHxS	304937	2500	Avg	1.372263						2206.98	2206.9762	39.1				2500	88	88	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	626042	13C3-PFBS	369407	2500	Avg	1.799		2355.09	5	1.28	1	9.1996	9.1996	39.1	24	24	Yes	21	93	94.532	Yes	9.3	9.33	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	385638	13C2-PFHxA	446383	2500	Avg	0.254727						8478.85	8478.8549	39.1				10000	85	85	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	353863	13C2-PFHxA	446383	2500	Avg	0.9296						2131.92	2131.9224	39.1				2500	85	85	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	552069	13C4-PFHpA	353863	2500	Avg	1.231389		3167.4	5	1.28	1	12.373	12.3727	39.1	32	32	Yes	24	88	87.731	Yes	5	4.99	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	107306	18O2-PFHxS	304937	2500	Avg	0.216602						4061.56	4061.5465	39.1				5000	81	81	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	804378	13C2-6:2FTS	107306	5000	Avg	2.166797		17298	5	1.28	1	67.569	67.5691	39.1	170	170	Yes	91	102	102.13	Yes	0.38	0.38	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	392832	13C4-PFOA	107790	2500	Avg	3.964715						2298.03	2298.0338	39.1				2500	92	92	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	928007	13C8-PFOA	392832	2500	Avg	1.236771		4775.24	5	1.28	1	18.653	18.6533	39.1	48	48	Yes	24	88	88.289	Yes	5.7	5.67	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	248538	18O2-PFHxS	304937	2500	Avg	1.002875						2031.78	2031.7762	39.1				2500	81	81	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	351572	13C3-PFHxS	248538	2500	Avg	1.23834		2855.76	5	1.28	1	11.155	11.1553	39.1	29	29	Yes	23	105	103.15	Yes	15	15	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1003979	13C3-PFHxS	248538	2500	Ln	1.045853	20.3871	9636.59	5	1.28	1	37.643	37.6429	39.1	96	96	Yes	22	116	115.43	Yes	4.8	4.76	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	123893	13C5-PFNA	243296	1250	Avg	0.659201						965.61	965.6149	39.1				1250	77	77	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	340398	13C9-PFNA	123893	1250	Avg	1.215541		2825.4	5	1.28	1	11.037	11.0367	39.1	28	28	Yes	24	96	96.289	Yes	4.9	4.95	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	101120	18O2-PFHxS	304937	2500	Avg	0.205874						4026.86	4026.8499	39.1				5000	81	81	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	340038	13C2-8:2FTS	101120	5000	Avg	1.506758		11159	5	1.28	1	43.589	43.589	39.1	110	110	Yes	92	109	109.16	Yes	3.4	3.35	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	201871	13C4-PFOS	483808	2500	Avg	0.281158						3710.14	3710.1413	39.1				5000	74	74	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	94212	D3-NMeFOSAA	201871	5000	Avg	0.843191		2767.43	5	1.28	1	10.81	10.8103	39.1	28	28	Yes	24	100	99.656	Yes	4.9	4.87	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	151742	13C2-PFDA	194836	1250	Avg	0.924946						1052.52	1052.5197	39.1				1250	84	84	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorodecanoic acid (PFDA)	335-76-2	296053	13C6-PFDA	151742	1250	Avg	1.076644		2265.17	5	1.28	1	8.8483	8.8483	39.1	23	23	Yes	24	90	89.501	Yes	0.24	0.25	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	233062	13C4-PFOS	483808	2500	Avg	0.328751						3663.3	3663.2904	39.1				5000	73	73	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	121011	D5-NEtFOSAA	233062	5000	Avg	0.952208		2726.41	5	1.28	1	10.65	10.65	39.1	27	27	Yes	24	97	97.337	Yes	2.9	2.85	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	351437	13C4-PFOS	483808	2500	Avg	0.948031						1915.54	1915.543	39.1				2500	77	77	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	301339	13C8-PFOS	351437	2500	Avg	0.82973		2583.52	5	1.28	1	10.092	10.0919	39.1	26	26	Yes	23	92	10.504	Yes	13	13.1	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	4832666	13C8-PFOS	351437	2500	Avg	0.985331		34890	5	1.28	1	136.29	136.2879	39.1	350	350	Yes	22	-45	-45.27	Yes	13	13.4	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	297681	13C8-PFOS	351437	2500	Avg	0.943409		2244.63	5	1.28	1	8.7681	8.7681	39.1	22	22	Yes	23	96	95.771	Yes	4.2	4.23	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	145671	13C2-PFDA	194836	1250	Avg	0.932642						1002.07	1002.072	39.1				1250	80	80	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	289916	13C7-PFUnA	145671	1250	Avg	1.011058		2460.56	5	1.28	1	9.6115	9.6115	39.1	25	25	Yes	24	86	86.153	Yes	12	12.5	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	116747	13C2-PFDA	194836	1250	Avg	0.761609						983.45	983.4549	39.1				1250	79	79	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	152539	13C2-PFDoA	116747	1250	Ln	0.718295	33.9774	2226.45	5	1.28	1	8.6971	8.6971	39.1	22	22	Yes	24	86	85.717	Yes	7.5	7.46	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	72160	13C2-PFDA	194836	1250	Avg	0.582576						794.67	794.6662	39.1				1250	64	64	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	676335	13C4-PFOS	483808	2500	Avg	1.831503						1908.19	1908.1881	39.1				2500	76	76	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	764753	13C8-PFOSA	676335	2500	Avg	1.090045		2593.31	5	1.28	1	10.13	10.1301	39.1	26	26	Yes	24	95	95.254	Yes	6.2	6.2	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	1762104	13C4-PFOS	483808	2500	Avg	0.656639						13867	13866.659	39.1				25000	55	55	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	79538	13C4-PFOS	483808	2500	Avg	0.403922						1017.52	1017.5227	39.1				2500	41	41	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	93363	D3-NMeFOSA	79538	2500	Avg	1.222625		2400.2	5	1.28	1	9.3758	9.3758	39.1	24	24	Yes	24	100	99.913	Yes	0.61	0.61	Yes
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	2139507	13C4-PFOS	483808	2500	Avg	0.829443						13329	13328.894	39.1				25000	53	53	Yes			
100924A043.d	ZI12016-023MD	CACMW-003-060-27-090424-	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	83339	13C4-PFOS	483808	2500	Avg	0.466186						923.75	923.7533	39.1				2500	37	37	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	944333	13C3-PFBA	881715	5000	Avg	1.117176						4793.42	4793.4185	100				10000	48	48	Yes			
100924A063.d	ZQ18874-001		Method_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	735	13C4-PFBA	944333	10000	Avg	0.88036		8.841	5	5	1	0.008841	0.0088	100	ND	0.009	Yes							
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	598705	13C2-PFHxA	465326	2500	Avg	0.842249						3819.05	3819.0476	100				5000	76	76	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	98956	18O2-PFHxS	334358	2500	Avg	0.16257						4551.24	4551.2429	100				5000	91	91	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	421373	13C2-PFHxA	465326	2500	Avg	0.957583						2364.14	2364.1388	100				2500	95	95	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	435057	18O2-PFHxS	334358	2500	Avg	1.372263						2370.48	2370.4844	100				2500	95	95	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	442514	13C2-PFHxA	465326	2500	Avg	0.254727						9333.29	9333.2892	100				10000	93	93	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	418897	13C2-PFHxA	465326	2500	Avg	0.9296						2420.99	2420.9946	100				2500	97	97	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	134488	18O2-PFHxS	334358	2500	Avg	0.216602						4642.48	4642.4727	100				5000	93	93	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	478269	13C4-PFOA	125201	2500	Avg	3.964715						2408.75	2408.7541	100				2500	96	96	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	303061	18O2-PFHxS	334358	2500	Avg	1.002875						2259.5	2259.4958	100				2500	90	90	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	153711	13C5-PFNA	236249	1250	Avg	0.659201						1233.75	1233.7499	100				1250	99	99	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	118607	18O2-PFHxS	334358	2500	Avg	0.205874						4307.62	4307.6173	100				5000	86	86	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	271377	13C4-PFOS	489969	2500	Avg	0.281158						4924.87	4924.8612	100				5000	98	98	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	180687	13C2-PFDA	197563	1250	Avg	0.924946						1235.99	1235.9899	100				1250	99	99	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	285523	13C4-PFOS	489969	2500	Avg	0.328751						4431.45	4431.4456	100				5000	89	89	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	419763	13C4-PFOS	489969	2500	Avg	0.948031						2259.19	2259.1914	100				2500	90	90	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	167008	13C2-PFDA	197563	1250	Avg	0.932642						1132.99	1132.9916	100				1250	91	91	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	136842	13C2-PFDA	197563	1250	Avg	0.761609						1136.82	1136.8201	100				1250	91	91	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	91108	13C2-PFDA	197563	1250	Avg	0.582576						989.48	989.483	100				1250	79	79	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	783740	13C4-PFOS	489969	2500	Avg	1.831503						2183.41	2183.4125	100				2500	87	87	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1729580	13C4-PFOS	489969	2500	Avg	0.656639						13440	13439.57	100				25000	54	54	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	106600	13C4-PFOS	489969	2500	Avg	0.403922						1346.58	1346.5767	100				2500	54	54	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2157423	13C4-PFOS	489969	2500	Avg	0.829443						13271	13271.505	100				25000	53	53	Yes			
100924A063.d	ZQ18874-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	108129	13C4-PFOS	489969	2500	Avg	0.466186						1183.46	1183.4621	100				2500	47	47	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	1680845	13C3-PFBA	878114	5000	Avg	1.117176						8566.93	8566.9291	100				10000	86	86	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1479528	13C4-PFBA	1680845	10000	Avg	0.88036		9998.51	5	5	1	9.999	9.9985	100	10	10	Yes	9.6	104	104.2	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	712266	13C2-PFHxA	469899	2500	Avg	0.842249						4499.22	4499.2197	100				5000	90	90	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	724186	13C5-PFPeA	712266	5000	Avg	1.152335		4411.63	5	5	1	4.4116	4.4116	100	4.4	4.4	Yes	4.8	92	91.9	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	91961	18O2-PFHxS	334787	2500	Avg	0.16257						4224.1	4224.105	100				5000	84	84	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	414217	13C2-PFHxA	469899	2500	Avg	0.957583						2301.37	2301.3728	100				2500	92	92	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	447491	13C5-PFHxA	414217	2500	Avg	1.266315		2132.82	5	5	1	2.1328	2.1328	100	2.1	2.1	Yes	2.4	89	88.9	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	406200	18O2-PFHxS	334787	2500	Avg	1.372263						2210.42	2210.4159	100				2500	88	88	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	600358	13C3-PFBS	406200	2500	Avg	1.799		2053.9	5	5	1	2.0539	2.0539	100	2.1	2.1	Yes	2.1	97	97.8	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	429790	13C2-PFHxA	469899	2500	Avg	0.254727						8976.7	8976.7021	100				10000	90	90	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	389858	13C2-PFHxA	469899	2500	Avg	0.9296						2231.24	2231.2376	100				2500	89	89	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	438333	13C4-PFHpA	389858	2500	Avg	1.231389		2282.67	5	5	1	2.2827	2.2827	100	2.3	2.3	Yes	2.4	95	95.1	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	116719	18O2-PFHxS	334787	2500	Avg	0.216602						4023.94	4023.9309	100				5000	80	80	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	475862	13C2-6:2FTS	116719	5000	Avg	2.166797		9407.87	5	5	1	9.4079	9.4079	100	9.4	9.4	Yes	9.1	103	103.4	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	422653	13C4-PFOA	116202	2500	Avg	3.964715						2293.5	2293.4981	100				2500	92	92	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	453402	13C8-PFOA	422653	2500	Avg	1.236771		2168.45	5	5	1	2.1685	2.1685	100	2.2	2.2	Yes	2.4	90	90.4	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	293518	18O2-PFHxS	334787	2500	Avg	1.002875						2185.54	2185.543	100				2500	87	87	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	350665	13C3-PFHxS	293518	2500	Avg	1.23834		2411.89	5	5	1	2.4119	2.4119	100	2.4	2.4	Yes	2.3	107	104.9	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	256412	13C3-PFHxS	293518	2500	Ln	1.045853	20.3871	2068.71	5	5	1	2.0687	2.0687	100	2.1	2.1	Yes	2.2	94	94.0	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	131845	13C5-PFNA	235895	1250	Avg	0.659201						1059.83	1059.8321	100				1250	85	85	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	316663	13C9-PFNA	131845	1250	Avg	1.215541		2469.87	5	5	1	2.4699	2.4699	100	2.5	2.5	Yes	2.4	103	102.9	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	108760	18O2-PFHxS	334787	2500	Avg	0.205874						3944.93	3944.9283	100				5000	79	79	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	341226	13C2-8:2FTS	108760	5000	Avg	1.506758		10411	5	5	1	10.411	10.4112	100	10	10	Yes	9.2	113	113.2	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	252579	13C4-PFOS	522062	2500	Avg	0.281158						4301.95	4301.9437	100				5000	86	86	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	91719	D3-NMeFOSAA	252579	5000	Avg	0.843191		2153.31	5	5	1	2.1533	2.1533	100	2.2	2.2	Yes	2.4	90	89.7	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	163631	13C2-PFDA	214295	1250	Avg	0.924946						1031.92	1031.9227	100				1250	83	83	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	311900	13C6-PFDA	163631	1250	Avg	1.076644		2213.03	5	5	1	2.213	2.213	100	2.2	2.2	Yes	2.4	92	92.2	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	254125	13C4-PFOS	522062	2500	Avg	0.328751						3701.68	3701.6746	100				5000	74	74	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	110340	D5-NEtFOSAA	254125	5000	Avg	0.952208		2279.94	5	5	1	2.2799	2.2799	100	2.3	2.3	Yes	2.4	95	95.0	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	414969	13C4-PFOS	522062	2500	Avg	0.948031						2096.1	2096.0954	100				2500	84	84	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	314105	13C8-PFOS	414969	2500	Avg	0.82973		2280.67	5	5	1	2.2807	2.2807	100	2.3	2.3	Yes	2.3	100	99.2	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	342340	13C8-PFOS	414969	2500	Avg	0.985331		2093.15	5	5	1	2.0931	2.0931	100	2.1	2.1	Yes	2.2	94	95.1	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	329512	13C8-PFOS	414969	2500	Avg	0.943409		2104.24	5	5	1	2.1042	2.1042	100	2.1	2.1	Yes	2.3	91	91.5	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	167044	13C2-PFDA	214295	1250	Avg	0.932642						1044.75	1044.7536	100				1250	84	84	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	317451	13C7-PFUnA	167044	1250	Avg	1.011058		2349.52	5	5	1	2.3495	2.3495	100	2.3	2.3	Yes	2.4	98	97.9	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	127873	13C2-PFDA	214295	1250	Avg	0.761609						979.37	979.3654	100				1250	78	78	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	170312	13C2-PFDoA	127873	1250	Ln	0.718295	33.9774	2270.49	5	5	1	2.2705	2.2705	100	2.3	2.3	Yes	2.4	95	94.6	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	99539	13C2-PFDA	214295	1250	Avg	0.582576						996.64	996.6408	100				1250	80	80	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	674003	13C4-PFOS	522062	2500	Avg	1.831503						1762.27	1762.2687	100				2500	70	70	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	713791	13C8-PFOSA	674003	2500	Avg	1.090045		2428.87	5	5	1	2.4289	2.4289	100	2.4	2.4	Yes	2.4	101	101.2	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1792824	13C4-PFOS	522062	2500	Avg	0.656639						13075	13074.615	100				25000	52	52	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	84310	13C4-PFOS	522062	2500	Avg	0.403922						999.54	999.5385	100				2500	40	40	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	97130	D3-NMeFOSA	84310	2500	Avg	1.222625		2355.71	5	5	1	2.3557	2.3557	100	2.4	2.4	Yes	2.4	98	98.2	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2256071	13C4-PFOS	522062	2500	Avg	0.829443						13025	13025.192	100				25000	52	52	Yes			
100924A064.d	ZQ18874-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	98905	13C4-PFOS	522062	2500	Avg	0.466186						1015.96	1015.9608	100				2500	41	41	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C4-PFBA	SESI-0111	1743237	13C3-PFBA	937409	5000	Avg	1.117176						8322.92	8322.9201	36.9				10000	83	83	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	19604	13C4-PFBA	1743237	10000	Avg	0.88036		127.74	5	1.38	1	0.46283	0.4628	36.9	1.3	1.3	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C5-PFPeA	SESI-0112	691499	13C2-PFHxA	492772	2500	Avg	0.842249						4165.29	4165.288	36.9				5000	83	83	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	177928	13C5-PFPeA	691499	5000	Avg	1.152335		1116.46	5	1.38	1	4.0452	4.0452	36.9	11	11	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	94867	18O2-PFHxS	344699	2500	Avg	0.16257						4232.28	4232.2835	36.9				5000	85	85	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C5-PFHxA	SESI-0113	414382	13C2-PFHxA	492772	2500	Avg	0.957583						2195.42	2195.4242	36.9				2500	88	88	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	558432	13C5-PFHxA	414382	2500	Avg	1.266315		2660.53	5	1.38	1	9.6396	9.6396	36.9	26	26	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C3-PFBS	SESI-0116	414970	18O2-PFHxS	344699	2500	Avg	1.372263						2193.2	2193.2055	36.9				2500	88	88	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	145330	13C3-PFBS	414970	2500	Avg	1.799		486.68	5	1.38	1	1.7633	1.7633	36.9	4.8	4.8	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	408571	13C2-PFHxA	492772	2500	Avg	0.254727						8137.41	8137.4165	36.9				10000	81	81	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C4-PFHpA	SESI-0114	380144	13C2-PFHxA	492772	2500	Avg	0.9296						2074.65	2074.6556	36.9				2500	83	83	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	255424	13C4-PFHpA	380144	2500	Avg	1.231389		1364.14	5	1.38	1	4.9425	4.9425	36.9	13	13	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	128742	18O2-PFHxS	344699	2500	Avg	0.216602						4310.81	4310.799	36.9				5000	86	86	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	490556	13C2-6:2FTS	128742	5000	Avg	2.166797		8792.66	5	1.38	1	31.857	31.8575	36.9	86	86	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C8-PFOA	SESI-0097	434329	13C4-PFOA	135384	2500	Avg	3.964715						2022.92	2022.9238	36.9				2500	81	81	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	830187	13C8-PFOA	434329	2500	Avg	1.236771		3863.74	5	1.38	1	13.999	13.9991	36.9	38	38	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C3-PFHxS	SESI-0096	311250	18O2-PFHxS	344699	2500	Avg	1.002875						2250.93	2250.9329	36.9				2500	90	90	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	111925	13C3-PFHxS	311250	2500	Avg	1.23834		725.97	5	1.38	1	2.6303	2.6303	36.9	7.1	7.1	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1461171	13C3-PFHxS	311250	2500	Ln	1.045853	20.3871	11202	5	1.38	1	40.588	40.5879	36.9	110	110	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C9-PFNA	SESI-0099	133982	13C5-PFNA	255444	1250	Avg	0.659201						994.59	994.5873	36.9				1250	80	80	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	89727	13C9-PFNA	133982	1250	Avg	1.215541		688.68	5	1.38	1	2.4952	2.4952	36.9	6.8	6.8	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	130056	18O2-PFHxS	344699	2500	Avg	0.205874						4581.73	4581.7235	36.9				5000	92	92	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	62145	13C2-8:2FTS	130056	5000	Avg	1.506758		1585.63	5	1.38	1	5.745	5.745	36.9	16	16	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	280800	13C4-PFOS	519274	2500	Avg	0.281158						4808.29	4808.2838	36.9				5000	96	96	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	31342	D3-NMeFOSAA	280800	5000	Avg	0.843191		661.87	5	1.38	1	2.3981	2.3981	36.9	6.5	6.5	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C6-PFDA	SESI-0115	179088	13C2-PFDA	226140	1250	Avg	0.924946						1070.24	1070.2438	36.9				1250	86	86	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	22118	13C6-PFDA	179088	1250	Avg	1.076644		143.39	5	1.38	1	0.51953	0.5195	36.9	1.4	1.4	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	328667	13C4-PFOS	519274	2500	Avg	0.328751						4813.19	4813.1838	36.9				5000	96	96	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	46516	D5-NEtFOSAA	328667	5000	Avg	0.952208		743.16	5	1.38	1	2.6926	2.6926	36.9	7.3	7.3	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C8-PFOS	SESI-0098	413433	13C4-PFOS	519274	2500	Avg	0.948031						2099.55	2099.5491	36.9				2500	84	84	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	110225	13C8-PFOS	413433	2500	Avg	0.82973		803.3	5	1.38	1	2.9105	2.9105	36.9	7.9	7.9	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	8613	13C8-PFOS	413433	2500	Avg	0.943409		55.206	5	1.38	1	0.20002	0.2	36.9	0.54	0.54	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C7-PFUnA	SESI-0117	183220	13C2-PFDA	226140	1250	Avg	0.932642						1085.9	1085.9018	36.9				1250	87	87	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	54623	13C7-PFUnA	183220	1250	Avg	1.011058		368.58	5	1.38	1	1.3355	1.3354	36.9	3.6	3.6	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C2-PFDoA	SESI-0118	142103	13C2-PFDA	226140	1250	Avg	0.761609						1031.34	1031.3446	36.9				1250	83	83	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	15285	13C2-PFDoA	142103	1250	Ln	0.718295	33.9774	139.88	5	1.38	1	0.50682	0.5068	36.9	1.4	1.4	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	87370	13C2-PFDA	226140	1250	Avg	0.582576						828.98	828.9768	36.9				1250	66	66	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C8-PFOSA	SESI-0107	782113	13C4-PFOS	519274	2500	Avg	1.831503						2055.92	2055.9157	36.9				2500	82	82	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	162852	13C8-PFOSA	782113	2500	Avg	1.090045		477.55	5	1.38	1	1.7303	1.7303	36.9	4.7	4.7	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2052072	13C4-PFOS	519274	2500	Avg	0.656639						15046	15045.595	36.9				25000	60	60	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	113118	13C4-PFOS	519274	2500	Avg	0.403922						1348.27	1348.2724	36.9				2500	54	54	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	877	D3-NMeFOSA	113118	2500	Avg	1.222625		15.853	5	1.38	1	0.05744	0.0574	36.9	0.16	0.16	Yes							
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2491719	13C4-PFOS	519274	2500	Avg	0.829443						14463	14462.919	36.9				25000	58	58	Yes			
100924A071.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	113351	13C4-PFOS	519274	2500	Avg	0.466186						1170.6	1170.6028	36.9				2500	47	47	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C4-PFBA	SESI-0111	3251127	13C3-PFBA	1681250	5000	Avg	1.14247						8463.05	8463.0486	29.4				10000	85	85	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1406323	13C2-PFHxA	951455	2500	Avg	0.796557						4638.96	4638.953	29.4				5000	93	93	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	166555	13C5-PFPeA	1406323	5000	Avg	0.874543		677.11	5	1.7	1	1.9915	1.9915	29.4	6.8	6.8	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	173971	18O2-PFHxS	572613	2500	Avg	0.169955						4469.12	4469.1169	29.4				5000	89	89	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C5-PFHxA	SESI-0113	889564	13C2-PFHxA	951455	2500	Avg	1.046383						2233.77	2233.7691	29.4				2500	89	89	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	491287	13C5-PFHxA	889564	2500	Avg	0.9029		1529.18	5	1.7	1	4.4976	4.4976	29.4	15	15	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C3-PFBS	SESI-0116	653111	18O2-PFHxS	572613	2500	Avg	1.319962						2160.25	2160.2518	29.4				2500	86	86	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	84244	13C3-PFBS	653111	2500	Avg	1.207053		267.16	5	1.7	1	0.78575	0.7858	29.4	2.7	2.7	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	621442	13C2-PFHxA	951455	2500	Avg	0.186581						8751.55	8751.5492	29.4				10000	88	88	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1026459	13C2-PFHxA	951455	2500	Avg	1.170685						2303.85	2303.8453	29.4				2500	92	92	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	299051	13C4-PFHpA	1026459	2500	Avg	1.077361		676.06	5	1.7	1	1.9884	1.9884	29.4	6.8	6.8	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	193356	18O2-PFHxS	572613	2500	Avg	0.184115						4585.09	4585.0839	29.4				5000	92	92	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	636834	13C2-6:2FTS	193356	5000	Avg	2.253868		7306.51	5	1.7	1	21.49	21.4897	29.4	73	73	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C8-PFOA	SESI-0097	1104555	13C4-PFOA	162589	2500	Avg	7.728869						2197.46	2197.4563	29.4				2500	88	88	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	858275	13C8-PFOA	1104555	2500	Ln	0.828626	32.8119	2304.74	5	1.7	1	6.7786	6.7787	29.4	23	23	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C3-PFHxS	SESI-0096	524437	18O2-PFHxS	572613	2500	Avg	1.171154						1955.05	1955.0511	29.4				2500	78	78	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	115391	13C3-PFHxS	524437	2500	Avg	1.194012		460.69	5	1.7	1	1.355	1.355	29.4	4.6	4.6	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1501853	13C3-PFHxS	524437	2500	Ln	1.119323	33.81	6365.95	5	1.7	1	18.723	18.7234	29.4	64	64	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C9-PFNA	SESI-0099	543100	13C5-PFNA	658715	1250	Avg	0.935659						1101.47	1101.475	29.4				1250	88	88	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	141982	13C9-PFNA	543100	1250	Avg	0.837317		390.28	5	1.7	1	1.1479	1.1479	29.4	3.9	3.9	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	177141	18O2-PFHxS	572613	2500	Avg	0.170753						4529.28	4529.284	29.4				5000	91	91	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	58351	13C2-8:2FTS	177141	5000	Ln	1.94256	137	776.91	5	1.7	1	2.285	2.2863	29.4	7.8	7.8	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	604662	13C4-PFOS	630569	2500	Avg	0.495989						4833.35	4833.3475	29.4				5000	97	97	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	33522	D3-NMeFOSAA	604662	5000	Avg	0.795786		348.33	5	1.7	1	1.0245	1.0245	29.4	3.5	3.5	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C6-PFDA	SESI-0115	507121	13C2-PFDA	627315	1250	Avg	1.232298						820.01	820.012	29.4				1250	66	66	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	23695	13C6-PFDA	507121	1250	Avg	0.819341		71.284	5	1.7	1	0.20966	0.2097	29.4	0.71	0.71	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	399245	13C4-PFOS	630569	2500	Avg	0.364519						4342.37	4342.3688	29.4				5000	87	87	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	35128	D5-NEtFOSAA	399245	5000	Avg	1.162779		378.34	5	1.7	1	1.1128	1.1128	29.4	3.8	3.8	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C8-PFOS	SESI-0098	528299	13C4-PFOS	630569	2500	Avg	0.970887						2157.34	2157.3395	29.4				2500	86	86	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	91711	13C8-PFOS	528299	2500	Avg	0.939894		461.75	5	1.7	1	1.3581	1.3581	29.4	4.6	4.6	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	7337193	13C8-PFOS	528299	2500	Avg	1.054191		32936	5	1.7	1	96.871	96.8706	29.4	330	330	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	11904	13C8-PFOS	528299	2500	Avg	1.337317		42.123	5	1.7	1	0.12389	0.1239	29.4	0.42	0.42	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C7-PFUnA	SESI-0117	454515	13C2-PFDA	627315	1250	Avg	1.191252						760.27	760.2719	29.4				1250	61	61	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	124387	13C7-PFUnA	454515	1250	Avg	0.853896		400.62	5	1.7	1	1.1783	1.1783	29.4	4	4	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C2-PFDoA	SESI-0118	391666	13C2-PFDA	627315	1250	Avg	1.01948						765.53	765.5287	29.4				1250	61	61	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	52466	13C2-PFDoA	391666	1250	Avg	0.772781		216.68	5	1.7	1	0.63729	0.6373	29.4	2.2	2.2	Yes							
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C8-PFOSA	SESI-0107	859595	13C4-PFOS	630569	2500	Avg	1.694128						2011.66	2011.6622	29.4				2500	80	80	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	292245	13C2-PFDA	627315	1250	Avg	0.871708						668.04	668.0368	29.4				1250	53	53	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2632738	13C4-PFOS	630569	2500	Avg	0.708623						14730	14729.9	29.4				25000	59	59	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	111893	13C4-PFOS	630569	2500	Avg	0.415479						1067.73	1067.7295	29.4				2500	43	43	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2761151	13C4-PFOS	630569	2500	Avg	0.758997						14423	14423.063	29.4				25000	58	58	Yes			
101024005.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	103598	13C4-PFOS	630569	2500	Avg	0.441246						930.85	930.8463	29.4				2500	37	37	Yes			
101024034.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	EIS	13C8-PFOS	SESI-0098	102047	13C4-PFOS	133977	500	Avg	0.970887						392.26	392.2575	36.9				500	78	78	Yes			
101024034.d	ZI12016-034	CACMW-004-060-32.25-0905	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2708036	13C8-PFOS	102047	500	Avg	1.054191		12586	5	1.38	5	228.02	228.0163	36.9	620	620	Yes							
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	1706943	13C3-PFBA	876951	5000	Avg	1.118527						8700.96	8700.961	100				10000	87	87	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	678104	13C2-PFHxA	426090	2500	Avg	0.871653						4564.48	4564.4804	100				5000	91	91	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	91366	18O2-PFHxS	317683	2500	Avg	0.184152						3904.39	3904.3991	100				5000	78	78	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	361591	13C2-PFHxA	426090	2500	Avg	0.934444						2270.4	2270.4032	100				2500	91	91	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	386631	18O2-PFHxS	317683	2500	Avg	1.42701						2132.14	2132.1399	100				2500	85	85	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	408105	13C2-PFHxA	426090	2500	Avg	0.255897						9357.18	9357.1887	100				10000	94	94	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	367434	13C2-PFHxA	426090	2500	Avg	0.958996						2248.02	2248.0254	100				2500	90	90	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	122419	18O2-PFHxS	317683	2500	Avg	0.237031						4064.34	4064.337	100				5000	81	81	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	381156	13C4-PFOA	110913	2500	Avg	4.113993						2088.32	2088.3187	100				2500	84	84	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	264925	18O2-PFHxS	317683	2500	Avg	1.059286						1968.14	1968.1389	100				2500	79	79	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	128835	13C5-PFNA	197113	1250	Avg	0.708475						1153.2	1153.1985	100				1250	92	92	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	104138	18O2-PFHxS	317683	2500	Avg	0.22157						3698.66	3698.6591	100				5000	74	74	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	247018	13C4-PFOS	471923	2500	Avg	0.344978						3793.21	3793.2028	100				5000	76	76	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	143312	13C2-PFDA	194821	1250	Avg	0.946606						971.38	971.3764	100				1250	78	78	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	291519	13C4-PFOS	471923	2500	Avg	0.411975						3748.56	3748.5635	100				5000	75	75	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	366715	13C4-PFOS	471923	2500	Avg	0.970524						2001.66	2001.6644	100				2500	80	80	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	128569	13C2-PFDA	194821	1250	Avg	0.746662						1104.81	1104.8071	100				1250	88	88	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	104407	13C2-PFDA	194821	1250	Avg	0.682188						981.97	981.9735	100				1250	79	79	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	550733	13C4-PFOS	471923	2500	Avg	1.882752						1549.59	1549.5902	100				2500	62	62	Yes			
101124A136.d	ZQ18867-001		Method_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	13115	13C8-PFOSA	550733	2500	Avg	1.081611		55.042	5	5	1	0.05504	0.055	100	0.055	0.055	Yes							
101124A136.d	ZQ18867-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	85481	13C2-PFDA	194821	1250	Avg	0.517569						1059.68	1059.6821	100				1250	85	85	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1588764	13C4-PFOS	471923	2500	Avg	0.691275						12175	12175.237	100				25000	49	49	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	64326	13C4-PFOS	471923	2500	Avg	0.423406						804.82	804.8193	100				2500	32	32	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2043310	13C4-PFOS	471923	2500	Avg	0.876774						12346	12345.693	100				25000	49	49	Yes			
101124A136.d	ZQ18867-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	73597	13C4-PFOS	471923	2500	Avg	0.49678						784.81	784.8106	100				2500	31	31	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	1658490	13C3-PFBA	832378	5000	Avg	1.117208						8917.19	8917.1943	100				10000	89	89	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	659670	13C2-PFHxA	422758	2500	Avg	0.877344						4446.36	4446.3638	100				5000	89	89	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	86262	18O2-PFHxS	291075	2500	Avg	0.180297						4109.29	4109.2837	100				5000	82	82	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	365222	13C2-PFHxA	422758	2500	Avg	0.966846						2233.82	2233.8181	100				2500	89	89	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	371473	18O2-PFHxS	291075	2500	Avg	1.392729						2290.85	2290.8452	100				2500	92	92	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	382391	13C2-PFHxA	422758	2500	Avg	0.261722						8640.03	8640.0371	100				10000	86	86	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	338066	13C2-PFHxA	422758	2500	Avg	0.967581						2066.15	2066.1523	100				2500	83	83	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	126488	18O2-PFHxS	291075	2500	Avg	0.230272						4717.83	4717.8409	100				5000	94	94	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	405396	13C4-PFOA	103892	2500	Avg	3.983884						2448.67	2448.6723	100				2500	98	98	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	266891	18O2-PFHxS	291075	2500	Avg	1.039477						2205.23	2205.2313	100				2500	88	88	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	114984	13C5-PFNA	216081	1250	Avg	0.703994						944.85	944.8479	100				1250	76	76	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	99653	18O2-PFHxS	291075	2500	Avg	0.22013						3888.18	3888.179	100				5000	78	78	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	207679	13C4-PFOS	426932	2500	Avg	0.311922						3898.77	3898.7724	100				5000	78	78	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	139865	13C2-PFDA	196890	1250	Avg	0.918284						966.98	966.982	100				1250	77	77	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	264847	13C4-PFOS	426932	2500	Avg	0.390921						3967.23	3967.2298	100				5000	79	79	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	351242	13C4-PFOS	426932	2500	Avg	0.935894						2197.66	2197.6629	100				2500	88	88	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	122055	13C2-PFDA	196890	1250	Avg	0.837816						924.9	924.8968	100				1250	74	74	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	111079	13C2-PFDA	196890	1250	Avg	0.786151						897.04	897.0411	100				1250	72	72	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	83759	13C2-PFDA	196890	1250	Avg	0.587286						905.46	905.4577	100				1250	72	72	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	466254	13C4-PFOS	426932	2500	Avg	1.82193						1498.55	1498.5533	100				2500	60	60	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1509046	13C4-PFOS	426932	2500	Avg	0.665118						13286	13285.72	100				25000	53	53	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	53354	13C4-PFOS	426932	2500	Avg	0.401684						777.79	777.7925	100				2500	31	31	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	1980172	13C4-PFOS	426932	2500	Avg	0.841004						13788	13787.52	100				25000	55	55	Yes			
101724A096.d	ZQ19251-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	66633	13C4-PFOS	426932	2500	Avg	0.472781						825.3	825.2977	100				2500	33	33	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	1607985	13C3-PFBA	796201	5000	Avg	1.117208						9038.48	9038.4767	100				10000	90	90	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1308763	13C4-PFBA	1607985	10000	Avg	0.88639		9182.36	5	5	1	9.1824	9.1824	100	9.2	9.2	Yes	9.6	96	95.7	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	652771	13C2-PFHxA	396466	2500	Avg	0.877344						4691.64	4691.6435	100				5000	94	94	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	616073	13C5-PFPeA	652771	5000	Avg	1.115612		4229.88	5	5	1	4.2299	4.2299	100	4.2	4.2	Yes	4.8	88	88.1	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	91912	18O2-PFHxS	281898	2500	Avg	0.180297						4520.98	4520.9711	100				5000	90	90	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	347581	13C2-PFHxA	396466	2500	Avg	0.966846						2266.9	2266.9022	100				2500	91	91	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	366057	13C5-PFHxA	347581	2500	Avg	1.270837		2071.78	5	5	1	2.0718	2.0718	100	2.1	2.1	Yes	2.4	86	86.3	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	369169	18O2-PFHxS	281898	2500	Avg	1.392729						2350.75	2350.751	100				2500	94	94	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	523034	13C3-PFBS	369169	2500	Avg	1.888315		1875.73	5	5	1	1.8757	1.8757	100	1.9	1.9	Yes	2.1	88	89.3	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	379846	13C2-PFHxA	396466	2500	Avg	0.261722						9151.68	9151.6918	100				10000	92	92	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	355999	13C2-PFHxA	396466	2500	Avg	0.967581						2320.04	2320.0402	100				2500	93	93	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	359146	13C4-PFHpA	355999	2500	Avg	1.249606		2018.32	5	5	1	2.0183	2.0183	100	2	2	Yes	2.4	84	84.1	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	110421	18O2-PFHxS	281898	2500	Avg	0.230272						4252.63	4252.6394	100				5000	85	85	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	383974	13C2-6:2FTS	110421	5000	Avg	1.993525		8721.65	5	5	1	8.7216	8.7216	100	8.7	8.7	Yes	9.1	96	95.8	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	352581	13C4-PFOA	107784	2500	Avg	3.983884						2052.76	2052.7588	100				2500	82	82	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	348419	13C8-PFOA	352581	2500	Avg	1.136187		2174.37	5	5	1	2.1744	2.1744	100	2.2	2.2	Yes	2.4	91	90.6	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	251037	18O2-PFHxS	281898	2500	Avg	1.039477						2141.76	2141.7603	100				2500	86	86	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	247058	13C3-PFHxS	251037	2500	Avg	1.186677		2073.33	5	5	1	2.0733	2.0733	100	2.1	2.1	Yes	2.3	92	90.1	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	202155	13C3-PFHxS	251037	2500	Avg	1.062503		1894.77	5	5	1	1.8948	1.8948	100	1.9	1.9	Yes	2.2	87	86.1	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	103808	13C5-PFNA	190458	1250	Avg	0.703994						967.77	967.7711	100				1250	77	77	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	233082	13C9-PFNA	103808	1250	Avg	1.297596		2162.96	5	5	1	2.163	2.163	100	2.2	2.2	Yes	2.4	90	90.1	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	91580	18O2-PFHxS	281898	2500	Avg	0.22013						3689.52	3689.5162	100				5000	74	74	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	228096	13C2-8:2FTS	91580	5000	Avg	1.554884		8009.2	5	5	1	8.0092	8.0092	100	8	8	Yes	9.2	87	87.1	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	200321	13C4-PFOS	433515	2500	Avg	0.311922						3703.53	3703.5341	100				5000	74	74	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	61302	D3-NMeFOSAA	200321	5000	Avg	0.757822		2019.07	5	5	1	2.0191	2.0191	100	2	2	Yes	2.4	84	84.1	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	130701	13C2-PFDA	177832	1250	Avg	0.918284						1000.47	1000.4652	100				1250	80	80	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	217047	13C6-PFDA	130701	1250	Avg	1.042575		1991.03	5	5	1	1.991	1.991	100	2	2	Yes	2.4	83	83.0	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	219824	13C4-PFOS	433515	2500	Avg	0.390921						3242.81	3242.8136	100				5000	65	65	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	93304	D5-NEtFOSAA	219824	5000	Avg	0.982019		2161.1	5	5	1	2.1611	2.1611	100	2.2	2.2	Yes	2.4	90	90.0	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	324894	13C4-PFOS	433515	2500	Avg	0.935894						2001.94	2001.9393	100				2500	80	80	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	233690	13C8-PFOS	324894	2500	Avg	0.890926		2018.35	5	5	1	2.0184	2.0184	100	2	2	Yes	2.3	89	87.8	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	246691	13C8-PFOS	324894	2500	Avg	0.971825		1953.28	5	5	1	1.9533	1.9533	100	2	2	Yes	2.2	88	88.8	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	246162	13C8-PFOS	324894	2500	Avg	1.039184		1822.75	5	5	1	1.8227	1.8227	100	1.8	1.8	Yes	2.3	79	79.2	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	99064	13C2-PFDA	177832	1250	Avg	0.837816						831.13	831.1268	100				1250	66	66	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	169265	13C7-PFUnA	99064	1250	Avg	0.968109		2206.16	5	5	1	2.2062	2.2062	100	2.2	2.2	Yes	2.4	92	91.9	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	85869	13C2-PFDA	177832	1250	Avg	0.786151						767.77	767.7689	100				1250	61	61	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	91259	13C2-PFDoA	85869	1250	Avg	0.645409		2058.33	5	5	1	2.0583	2.0583	100	2.1	2.1	Yes	2.4	86	85.8	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	65039	13C2-PFDA	177832	1250	Avg	0.587286						778.44	778.4385	100				1250	62	62	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	450172	13C4-PFOS	433515	2500	Avg	1.82193						1424.89	1424.8944	100				2500	57	57	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	456393	13C8-PFOSA	450172	2500	Avg	1.082718		2340.91	5	5	1	2.3409	2.3409	100	2.3	2.3	Yes	2.4	98	97.5	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	1399367	13C4-PFOS	433515	2500	Avg	0.665118						12133	12133.017	100				25000	49	49	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	68049	13C4-PFOS	433515	2500	Avg	0.401684						976.95	976.9517	100				2500	39	39	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	71136	D3-NMeFOSA	68049	2500	Avg	1.231179		2122.69	5	5	1	2.1227	2.1227	100	2.1	2.1	Yes	2.4	88	88.4	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	1925219	13C4-PFOS	433515	2500	Avg	0.841004						13201	13201.338	100				25000	53	53	Yes			
101724A097.d	ZQ19251-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	76967	13C4-PFOS	433515	2500	Avg	0.472781						938.82	938.8159	100				2500	38	38	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	2347068	13C3-PFBA	1142643	5000	Avg	1.129814						9090.3	9090.2989	100				10000	91	91	Yes			
102324091.d	ZQ19524-001		Method_Blank	Target	Perfluorobutanoic acid (PFBA)	375-22-4	1597	13C4-PFBA	2347068	10000	Avg	0.885929		7.6803	5	5	1	0.00768	0.0077	100	ND	0.008	Yes							
102324091.d	ZQ19524-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1108196	13C2-PFHxA	741539	2500	Avg	0.857148						4358.8	4358.7983	100				5000	87	87	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	131086	18O2-PFHxS	493136	2500	Avg	0.153383						4332.64	4332.6378	100				5000	87	87	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	629228	13C2-PFHxA	741539	2500	Avg	1.049515						2021.28	2021.275	100				2500	81	81	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	520652	18O2-PFHxS	493136	2500	Avg	1.230963						2144.25	2144.2521	100				2500	86	86	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	483512	13C2-PFHxA	741539	2500	Avg	0.198761						8201.31	8201.2886	100				10000	82	82	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	727540	13C2-PFHxA	741539	2500	Avg	1.180421						2077.91	2077.9063	100				2500	83	83	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	133385	18O2-PFHxS	493136	2500	Avg	0.174243						3880.82	3880.833	100				5000	78	78	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	754379	13C4-PFOA	157255	2500	Avg	5.565963						2154.69	2154.6901	100				2500	86	86	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	457983	18O2-PFHxS	493136	2500	Avg	1.152086						2015.29	2015.291	100				2500	81	81	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	365718	13C5-PFNA	550451	1250	Avg	0.879621						944.15	944.1524	100				1250	76	76	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	141546	18O2-PFHxS	493136	2500	Avg	0.179078						4007.09	4007.086	100				5000	80	80	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	330384	13C4-PFOS	659846	2500	Avg	0.403496						3102.25	3102.2529	100				5000	62	62	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	313495	13C2-PFDA	413705	1250	Avg	1.059721						893.84	893.837	100				1250	72	72	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	250600	13C4-PFOS	659846	2500	Avg	0.306761						3095.13	3095.1261	100				5000	62	62	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	486890	13C4-PFOS	659846	2500	Avg	1.00392						1837.51	1837.5077	100				2500	74	74	Yes			
102324091.d	ZQ19524-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	5701	13C8-PFOS	486890	2500	Avg	0.965687		30.313	5	5	1	0.03031	0.0303	100	0.03	0.03	Yes							
102324091.d	ZQ19524-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	268005	13C2-PFDA	413705	1250	Avg	1.028459						787.36	787.3633	100				1250	63	63	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	230316	13C2-PFDA	413705	1250	Avg	0.929658						748.55	748.5488	100				1250	60	60	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	538448	13C4-PFOS	659846	2500	Avg	1.575197						1295.11	1295.109	100				2500	52	52	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	215027	13C2-PFDA	413705	1250	Avg	0.817886						794.36	794.3638	100				1250	64	64	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	1658473	13C4-PFOS	659846	2500	Avg	0.538815						11662	11661.815	100				25000	47	47	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	98787	13C4-PFOS	659846	2500	Avg	0.392108						954.53	954.5342	100				2500	38	38	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2174435	13C4-PFOS	659846	2500	Avg	0.666639						12358	12358.141	100				25000	49	49	Yes			
102324091.d	ZQ19524-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	105340	13C4-PFOS	659846	2500	Avg	0.416058						959.26	959.2612	100				2500	38	38	Yes			
102324092.d	ZQ19524-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	530386	13C4-PFOS	723040	2500	Avg	1.575197						1164.22	1164.2195	100				1250	47	47.0	Yes			
102324092.d	ZQ19524-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	566080	13C8-PFOSA	530386	2500	Avg	1.018821		2618.95	5	5	1	2.619	2.619	100	2.6	2.6	Yes	2.4	109	108.3	Yes			
102324093.d	ZQ19524-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	561771	13C4-PFOS	655824	2500	Avg	1.575197						1359.49	1359.4935	100				2500	54	54	Yes			
102324093.d	ZQ19524-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	60098	13C8-PFOSA	561771	2500	Avg	1.018821		262.51	5	5	1	0.26251	0.2625	100	0.26	0.26	Yes	0.2	131	130.0	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C4-PFBA	SESI-0111	1472771	13C3-PFBA	841153	5000	Avg	1.117176						7836.25	7836.2563	33.4				10000	78	78	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C5-PFPeA	SESI-0112	599132	13C2-PFHxA	455960	2500	Avg	0.842249						3900.28	3900.2754	33.4				5000	78	78	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	51576	13C5-PFPeA	599132	5000	Avg	1.152335		373.52	5	1.5	1	1.2451	1.2451	33.4	3.7	3.7	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	83613	18O2-PFHxS	318674	2500	Avg	0.16257						4034.84	4034.8443	33.4				5000	81	81	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C5-PFHxA	SESI-0113	351358	13C2-PFHxA	455960	2500	Avg	0.957583						2011.81	2011.8087	33.4				2500	80	80	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	152447	13C5-PFHxA	351358	2500	Avg	1.266315		856.58	5	1.5	1	2.8553	2.8553	33.4	8.5	8.5	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C3-PFBS	SESI-0116	343034	18O2-PFHxS	318674	2500	Avg	1.372263						1961.07	1961.0704	33.4				2500	78	78	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	37907	13C3-PFBS	343034	2500	Avg	1.799		153.56	5	1.5	1	0.51188	0.5119	33.4	1.5	1.5	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	363165	13C2-PFHxA	455960	2500	Avg	0.254727						7817.04	7817.0388	33.4				10000	78	78	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C4-PFHpA	SESI-0114	313263	13C2-PFHxA	455960	2500	Avg	0.9296						1847.68	1847.6778	33.4				2500	74	74	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	52787	13C4-PFHpA	313263	2500	Avg	1.231389		342.11	5	1.5	1	1.1404	1.1404	33.4	3.4	3.4	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	102524	18O2-PFHxS	318674	2500	Avg	0.216602						3713.28	3713.2694	33.4				5000	74	74	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	257746	13C2-6:2FTS	102524	5000	Avg	2.166797		5801.21	5	1.5	1	19.337	19.3373	33.4	58	58	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C8-PFOA	SESI-0097	363565	13C4-PFOA	126181	2500	Avg	3.964715						1816.84	1816.8377	33.4				2500	73	73	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	214650	13C8-PFOA	363565	2500	Avg	1.236771		1193.44	5	1.5	1	3.9781	3.9781	33.4	12	12	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C3-PFHxS	SESI-0096	256815	18O2-PFHxS	318674	2500	Avg	1.002875						2008.94	2008.94	33.4				2500	80	80	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	26119	13C3-PFHxS	256815	2500	Avg	1.23834		205.32	5	1.5	1	0.68441	0.6844	33.4	2	2	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	303332	13C3-PFHxS	256815	2500	Ln	1.045853	20.3871	2803.87	5	1.5	1	9.3462	9.3462	33.4	28	28	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C9-PFNA	SESI-0099	117359	13C5-PFNA	231806	1250	Avg	0.659201						960.03	960.028	33.4				1250	77	77	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	27284	13C9-PFNA	117359	1250	Avg	1.215541		239.07	5	1.5	1	0.79691	0.7969	33.4	2.4	2.4	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	91616	18O2-PFHxS	318674	2500	Avg	0.205874						3491.11	3491.1073	33.4				5000	70	70	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	11245	13C2-8:2FTS	91616	5000	Avg	1.506758		407.3	5	1.5	1	1.3577	1.3577	33.4	4.1	4.1	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	211341	13C4-PFOS	471737	2500	Avg	0.281158						3983.58	3983.5785	33.4				5000	80	80	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	5718	D3-NMeFOSAA	211341	5000	Avg	0.843191		160.44	5	1.5	1	0.53479	0.5348	33.4	1.6	1.6	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C6-PFDA	SESI-0115	141260	13C2-PFDA	198504	1250	Avg	0.924946						961.71	961.7088	33.4				1250	77	77	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	247963	13C4-PFOS	471737	2500	Avg	0.328751						3997.24	3997.2367	33.4				5000	80	80	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	7291	D5-NEtFOSAA	247963	5000	Avg	0.952208		154.4	5	1.5	1	0.51466	0.5147	33.4	1.5	1.5	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C8-PFOS	SESI-0098	349470	13C4-PFOS	471737	2500	Avg	0.948031						1953.56	1953.563	33.4				2500	78	78	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	25876	13C8-PFOS	349470	2500	Avg	0.82973		223.1	5	1.5	1	0.74365	0.7437	33.4	2.2	2.2	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2115084	13C8-PFOS	349470	2500	Avg	0.985331		15356	5	1.5	1	51.186	51.1864	33.4	150	150	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C7-PFUnA	SESI-0117	128578	13C2-PFDA	198504	1250	Avg	0.932642						868.15	868.1454	33.4				1250	69	69	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	39046	13C7-PFUnA	128578	1250	Avg	1.011058		375.44	5	1.5	1	1.2515	1.2515	33.4	3.7	3.7	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C2-PFDoA	SESI-0118	111069	13C2-PFDA	198504	1250	Avg	0.761609						918.34	918.3359	33.4				1250	73	73	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	14451	13C2-PFDoA	111069	1250	Ln	0.718295	33.9774	179.12	5	1.5	1	0.59705	0.5971	33.4	1.8	1.8	Yes							
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	79727	13C2-PFDA	198504	1250	Avg	0.582576						861.77	861.7744	33.4				1250	69	69	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C8-PFOSA	SESI-0107	651841	13C4-PFOS	471737	2500	Avg	1.831503						1886.14	1886.1408	33.4				2500	75	75	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	1563338	13C4-PFOS	471737	2500	Avg	0.656639						12617	12617.296	33.4				25000	50	50	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	71355	13C4-PFOS	471737	2500	Avg	0.403922						936.2	936.1964	33.4				2500	37	37	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	1984612	13C4-PFOS	471737	2500	Avg	0.829443						12680	12680.289	33.4				25000	51	51	Yes			
100924A029.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	74349	13C4-PFOS	471737	2500	Avg	0.466186						845.19	845.1932	33.4				2500	34	34	Yes			
102324096.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	EIS	13C8-PFOSA	SESI-0107	575943	13C4-PFOS	545317	2500	Avg	1.575197						1676.24	1676.2377	33.4				2500	67	67	Yes			
102324096.d	ZI12016-013	CACMW-002-060-32.25-0904	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	32422	13C8-PFOSA	575943	2500	Avg	1.018821		138.13	5	1.5	1	0.46045	0.4604	33.4	1.4	1.4	Yes							
102324100.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	611093	13C4-PFOS	642166	2500	Avg	1.575197						1510.31	1510.3066	39.1				2500	60	60	Yes			
102324100.d	ZI12016-023	CACMW-003-060-27-090424-	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	82306	13C8-PFOSA	611093	2500	Avg	1.018821		330.5	5	1.28	1	1.291	1.291	39.1	3.3	3.3	Yes							
102324102.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	546122	13C4-PFOS	571417	2500	Avg	1.575197						1516.85	1516.8465	39.9				2500	61	61	Yes			
102324102.d	ZI12016-027	CACMW-003-110-77-090524-	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	34356	13C8-PFOSA	546122	2500	Avg	1.018821		154.37	5	1.25	1	0.61747	0.6175	39.9	1.5	1.5	Yes							
102324103.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	EIS	13C8-PFOSA	SESI-0107	615140	13C4-PFOS	661772	2500	Avg	1.575197						1475.27	1475.2673	29.4				2500	59	59	Yes			
102324103.d	ZI12016-028	CACMW-003-110-82.25-0905	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	50542	13C8-PFOSA	615140	2500	Avg	1.018821		201.61	5	1.7	1	0.59298	0.593	29.4	2	2	Yes							

Key

	from quantitation report
	from reported calibration
	from lab report/SEDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
g	grams
IS	internal standard
mL	milliliters
ND	not detected
ng/g	nanograms per gram
ng/L	nanograms per liter
On Col.	on column
RF	response factor
RPD	relative percent difference

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
101024009.d	ZQ18916-001		Method_Blank	EIS	13C4-PFBA	SESI-0111	3081300	13C3-PFBA	1692879	5000	Avg	1.14247						7965.87	7965.8709	100				10000	80	80	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C5-PFPeA	SESI-0112	1413013	13C2-PFHxA	997241	2500	Avg	0.796557						4447.02	4447.021	100				5000	89	89	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C2-4:2FTS	SESI-0104	171863	18O2-PFHxS	601804	2500	Avg	0.169955						4200.82	4200.8133	100				5000	84	84	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C5-PFHxA	SESI-0113	924006	13C2-PFHxA	997241	2500	Avg	1.046383						2213.73	2213.7267	100				2500	89	89	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C3-PFBS	SESI-0116	616174	18O2-PFHxS	601804	2500	Avg	1.319962						1939.22	1939.2191	100				2500	78	78	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C3-HFPO-DA	SESI-0121	638149	13C2-PFHxA	997241	2500	Avg	0.186581						8574.22	8574.2188	100				10000	86	86	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C4-PFHpA	SESI-0114	865994	13C2-PFHxA	997241	2500	Avg	1.170685						1854.45	1854.4482	100				2500	74	74	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C2-6:2FTS	SESI-0105	195458	18O2-PFHxS	601804	2500	Avg	0.184115						4410.12	4410.1079	100				5000	88	88	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C8-PFOA	SESI-0097	1106537	13C4-PFOA	181707	2500	Avg	7.728869						1969.78	1969.7828	100				2500	79	79	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C3-PFHxS	SESI-0096	540186	18O2-PFHxS	601804	2500	Avg	1.171154						1916.08	1916.0827	100				2500	77	77	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C9-PFNA	SESI-0099	542603	13C5-PFNA	765060	1250	Avg	0.935659						947.5	947.4998	100				1250	76	76	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C2-8:2FTS	SESI-0106	171938	18O2-PFHxS	601804	2500	Avg	0.170753						4183	4183.0058	100				5000	84	84	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	D3-NMeFOSAA	SESI-0102	564415	13C4-PFOS	696422	2500	Avg	0.495989						4085.02	4085.0185	100				5000	82	82	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C6-PFDA	SESI-0115	500820	13C2-PFDA	549640	1250	Avg	1.232298						924.27	924.2673	100				1250	74	74	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	D5-NEtFOSAA	SESI-0110	397079	13C4-PFOS	696422	2500	Avg	0.364519						3910.43	3910.4278	100				5000	78	78	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C8-PFOS	SESI-0098	544570	13C4-PFOS	696422	2500	Avg	0.970887						2013.5	2013.5043	100				2500	81	81	Yes			
101024009.d	ZQ18916-001		Method_Blank	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3419	13C8-PFOS	544570	2500	Avg	1.054191		14.889	5	5	1	0.01489	0.0149	100	ND	0.015	Yes							
101024009.d	ZQ18916-001		Method_Blank	EIS	13C7-PFUnA	SESI-0117	429161	13C2-PFDA	549640	1250	Avg	1.191252						819.31	819.3101	100				1250	66	66	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C2-PFDoA	SESI-0118	402667	13C2-PFDA	549640	1250	Avg	1.01948						898.25	898.2537	100				1250	72	72	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	13C8-PFOSA	SESI-0107	788357	13C4-PFOS	696422	2500	Avg	1.694128						1670.49	1670.4914	100				2500	67	67	Yes			
101024009.d	ZQ18916-001		Method_Blank	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	10653	13C8-PFOSA	788357	2500	Avg	0.99659		33.898	5	5	1	0.0339	0.0339	100	0.034	0.034	Yes							
101024009.d	ZQ18916-001		Method_Blank	EIS	13C2-PFTeDA	SESI-0119	337748	13C2-PFDA	549640	1250	Avg	0.871708						881.16	881.1573	100				1250	70	70	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	D7-NMeFOSE	SESI-0129	2463236	13C4-PFOS	696422	2500	Avg	0.708623						12478	12478.3828	100				25000	50	50	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	D3-NMeFOSA	SESI-0109	90404	13C4-PFOS	696422	2500	Avg	0.415479						781.1	781.099	100				2500	31	31	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	D9-NEtFOSE	SESI-0130	2662981	13C4-PFOS	696422	2500	Avg	0.758997						12595	12594.9235	100				25000	50	50	Yes			
101024009.d	ZQ18916-001		Method_Blank	EIS	D5-NEtFOSA	SESI-0108	97455	13C4-PFOS	696422	2500	Avg	0.441246						792.85	792.8497	100				2500	32	32	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3409581	13C3-PFBA	1565152	5000	Avg	1.14247						9533.88	9533.8802	100				10000	95	95	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2252956	13C4-PFBA	3409581	10000	Avg	0.846914		7802.11	5	5	1	7.8021	7.8021	100	7.8	7.8	Yes	9.6	81	81.3	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1560936	13C2-PFHxA	958971	2500	Avg	0.796557						5108.61	5108.6103	100				5000	102	102	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1045663	13C5-PFPeA	1560936	5000	Avg	0.874543		3829.97	5	5	1	3.83	3.83	100	3.8	3.8	Yes	4.8	80	79.8	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	176653	18O2-PFHxS	536917	2500	Avg	0.169955						4839.72	4839.7165	100				5000	97	97	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	967754	13C2-PFHxA	958971	2500	Avg	1.046383						2411.06	2411.0645	100				2500	96	96	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	646527	13C5-PFHxA	967754	2500	Avg	0.9029		1849.79	5	5	1	1.8498	1.8498	100	1.8	1.8	Yes	2.4	77	77.1	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	668905	18O2-PFHxS	536917	2500	Avg	1.319962						2359.59	2359.5863	100				2500	94	94	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	580152	13C3-PFBS	668905	2500	Avg	1.207053		1796.35	5	5	1	1.7964	1.7964	100	1.8	1.8	Yes	2.1	85	85.5	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	694380	13C2-PFHxA	958971	2500	Avg	0.186581						9702.07	9702.0682	100				10000	97	97	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	1084965	13C2-PFHxA	958971	2500	Avg	1.170685						2416.07	2416.0739	100				2500	97	97	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	918362	13C4-PFHpA	1084965	2500	Avg	1.077361		1964.16	5	5	1	1.9642	1.9642	100	2	2	Yes	2.4	82	81.8	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	175194	18O2-PFHxS	536917	2500	Avg	0.184115						4430.61	4430.6037	100				5000	89	89	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	637195	13C2-6:2FTS	175194	5000	Avg	2.253868		8068.53	5	5	1	8.0685	8.0685	100	8.1	8.1	Yes	9.1	88	88.7	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1234184	13C4-PFOA	177495	2500	Avg	7.728869						2249.15	2249.1471	100				2500	90	90	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	808578	13C8-PFOA	1234184	2500	Ln	0.828626	32.8119	1937.02	5	5	1	1.937	1.937	100	1.9	1.9	Yes	2.4	81	80.7	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	583460	18O2-PFHxS	536917	2500	Avg	1.171154						2319.69	2319.6899	100				2500	93	93	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	534109	13C3-PFHxS	583460	2500	Avg	1.194012		1916.68	5	5	1	1.9167	1.9167	100	1.9	1.9	Yes	2.3	85	83.3	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	465717	13C3-PFHxS	583460	2500	Ln	1.119323	33.81	1752.57	5	5	1	1.7526	1.7526	100	1.8	1.8	Yes	2.2	80	79.7	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	603475	13C5-PFNA	675121	1250	Avg	0.935659						1194.18	1194.1808	100				1250	96	96	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	759297	13C9-PFNA	603475	1250	Avg	0.837317		1878.33	5	5	1	1.8783	1.8783	100	1.9	1.9	Yes	2.4	78	78.3	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	180329	18O2-PFHxS	536917	2500	Avg	0.170753						4917.34	4917.3383	100				5000	98	98	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	539556	13C2-8:2FTS	180329	5000	Ln	1.94256	137	7630.39	5	5	1	7.6304	7.6308	100	7.6	7.6	Yes	9.2	83	82.9	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	570381	13C4-PFOS	634725	2500	Avg	0.495989						4529.47	4529.4702	100				1250	91	91	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	162138	D3-NMeFOSAA	570381	5000	Avg	0.795786		1786.05	5	5	1	1.786	1.786	100	1.8	1.8	Yes	2.4	74	74.4	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	544623	13C2-PFDA	495325	1250	Avg	1.232298						1115.32	1115.3213	100				5000	89	89	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	599188	13C6-PFDA	544623	1250	Avg	0.819341		1678.47	5	5	1	1.6785	1.6785	100	1.7	1.7	Yes	2.4	70	69.9	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	442277	13C4-PFOS	634725	2500	Avg	0.364519						4778.9	4778.9071	100				5000	96	96	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	199896	D5-NEtFOSAA	442277	5000	Avg	1.162779		1943.49	5	5	1	1.9435	1.9435	100	1.9	1.9	Yes	2.4	81	81.0	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	596405	13C4-PFOS	634725	2500	Avg	0.970887						2419.51	2419.5076	100				2500	97	97	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	385121	13C8-PFOS	596405	2500	Avg	0.939894		1717.58	5	5	1	1.7176	1.7176	100	1.7	1.7	Yes	2.3	75	74.7	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	431592	13C8-PFOS	596405	2500	Avg	1.054191		1716.14	5	5	1	1.7161	1.7161	100	1.7	1.7	Yes	2.2	77	78.0	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	563949	13C8-PFOS	596405	2500	Avg	1.337317		1767.68	5	5	1	1.7677	1.7677	100	1.8	1.8	Yes	2.3	77	76.9	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	438988	13C2-PFDA	495325	1250	Avg	1.191252						929.97	929.9696	100				1250	74	74	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	600842	13C7-PFUnA	438988	1250	Avg	0.853896		2003.61	5	5	1	2.0036	2.0036	100	2	2	Yes	2.4	83	83.5	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	429235	13C2-PFDA	495325	1250	Avg	1.01948						1062.52	1062.5177	100				1250	85	85	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	543807	13C2-PFDoA	429235	1250	Avg	0.772781		2049.29	5	5	1	2.0493	2.0493	100	2	2	Yes	2.4	85	85.4	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	884363	13C4-PFOS	634725	2500	Avg	1.694128						2056.07	2056.074	100				2500	82	82	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	733225	13C8-PFOSA	884363	2500	Avg	0.99659		2079.84	5	5	1	2.0798	2.0798	100	2.1	2.1	Yes	2.4	87	86.7	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	351828	13C2-PFDA	495325	1250	Avg	0.871708						1018.54	1018.5424	100				1250	81	81	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2524082	13C4-PFOS	634725	2500	Avg	0.708623						14030	14029.5138	100				25000	56	56	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	115578	13C4-PFOS	634725	2500	Avg	0.415479						1095.67	1095.6718	100				2500	44	44	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2738588	13C4-PFOS	634725	2500	Avg	0.758997						14212	14211.5369	100				25000	57	57	Yes			
101024010.d	ZQ18916-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	113970	13C4-PFOS	634725	2500	Avg	0.441246						1017.33	1017.3354	100				2500	41	41	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3247768	13C3-PFBA	1662505	5000	Avg	1.14247						8549.63	8549.6284	100				10000	85	85	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	212865	13C4-PFBA	3247768	10000	Avg	0.846914		773.89	5	5	1	0.77389	0.7739	100	0.77	0.77	Yes	0.8	97	96.7	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1408849	13C2-PFHxA	1062048	2500	Avg	0.796557						4163.36	4163.3551	100				5000	83	83	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	97115	13C5-PFPeA	1408849	5000	Avg	0.874543		394.1	5	5	1	0.3941	0.3941	100	0.39	0.39	Yes	0.4	99	98.5	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	174663	18O2-PFHxS	673792	2500	Avg	0.169955						3813.13	3813.1258	100				5000	76	76	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	892006	13C2-PFHxA	1062048	2500	Avg	1.046383						2006.66	2006.6562	100				2500	80	80	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	62772	13C5-PFHxA	892006	2500	Avg	0.9029		194.85	5	5	1	0.19485	0.1948	100	0.19	0.19	Yes	0.2	97	97.4	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	624543	18O2-PFHxS	673792	2500	Avg	1.319962						1755.56	1755.5576	100				2500	70	70	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	53923	13C3-PFBS	624543	2500	Avg	1.207053		178.82	5	5	1	0.17882	0.1788	100	0.18	0.18	Yes	0.17	105	105.2	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	629642	13C2-PFHxA	1062048	2500	Avg	0.186581						7943.69	7943.6872	100				10000	79	79	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	934822	13C2-PFHxA	1062048	2500	Avg	1.170685						1879.68	1879.6835	100				2500	75	75	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	84053	13C4-PFHpA	934822	2500	Avg	1.077361		208.64	5	5	1	0.20864	0.2086	100	0.21	0.21	Yes	0.2	104	104.3	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	185686	18O2-PFHxS	673792	2500	Avg	0.184115						3742.01	3742.0031	100				5000	75	75	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	58678	13C2-6:2FTS	185686	5000	Avg	2.253868		701.03	5	5	1	0.70103	0.701	100	0.7	0.7	Yes	0.76	92	92.2	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1138484	13C4-PFOA	197486	2500	Avg	7.728869						1864.72	1864.7245	100				2500	75	75	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	92070	13C8-PFOA	1138484	2500	Ln	0.828626	32.8119	204.39	5	5	1	0.20439	0.2044	100	0.2	0.2	Yes	0.2	102	102.2	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	542261	18O2-PFHxS	673792	2500	Avg	1.171154						1717.94	1717.9421	100				2500	69	69	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	49502	13C3-PFHxS	542261	2500	Avg	1.194012		191.14	5	5	1	0.19114	0.1911	100	0.19	0.19	Yes	0.18	106	106.2	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	47781	13C3-PFHxS	542261	2500	Ln	1.119323	33.81	166.6	5	5	1	0.1666	0.1666	100	0.17	0.17	Yes	0.18	93	92.6	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	547590	13C5-PFNA	668491	1250	Avg	0.935659						1094.34	1094.3402	100				1250	88	88	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	64222	13C9-PFNA	547590	1250	Avg	0.837317		175.08	5	5	1	0.17508	0.1751	100	0.18	0.18	Yes	0.2	88	87.6	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	159634	18O2-PFHxS	673792	2500	Avg	0.170753						3468.73	3468.7357	100				5000	69	69	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	54053	13C2-8:2FTS	159634	5000	Ln	1.94256	137	800.59	5	5	1	0.80059	0.801	100	0.8	0.8	Yes	0.76	105	105.4	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	558163	13C4-PFOS	682114	2500	Avg	0.495989						4124.51	4124.507	100				5000	82	82	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	17281	D3-NMeFOSAA	558163	5000	Avg	0.795786		194.53	5	5	1	0.19453	0.1945	100	0.19	0.19	Yes	0.2	97	97.3	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	481210	13C2-PFDA	469293	1250	Avg	1.232298						1040.12	1040.1233	100				1250	83	83	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	61555	13C6-PFDA	481210	1250	Avg	0.819341		195.15	5	5	1	0.19515	0.1952	100	0.2	0.2	Yes	0.2	98	97.6	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	366745	13C4-PFOS	682114	2500	Avg	0.364519						3687.46	3687.458	100				5000	74	74	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	19133	D5-NEtFOSAA	366745	5000	Avg	1.162779		224.33	5	5	1	0.22433	0.2243	100	0.22	0.22	Yes	0.2	112	112.2	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	546629	13C4-PFOS	682114	2500	Avg	0.970887						2063.51	2063.5121	100				2500	83	83	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	40699	13C8-PFOS	546629	2500	Avg	0.939894		198.04	5	5	1	0.19804	0.198	100	0.2	0.2	Yes	0.19	104	104.2	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	38573	13C8-PFOS	546629	2500	Avg	1.054191		167.34	5	5	1	0.16734	0.1673	100	0.17	0.17	Yes	0.18	93	92.9	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	50048	13C8-PFOS	546629	2500	Avg	1.337317		171.16	5	5	1	0.17116	0.1712	100	0.17	0.17	Yes	0.19	90	90.1	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	432147	13C2-PFDA	469293	1250	Avg	1.191252						966.26	966.2595	100				1250	77	77	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	57258	13C7-PFUnA	432147	1250	Avg	0.853896		193.96	5	5	1	0.19396	0.194	100	0.19	0.19	Yes	0.2	97	97.0	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	367138	13C2-PFDA	469293	1250	Avg	1.01948						959.22	959.2163	100				1250	77	77	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	41751	13C2-PFDoA	367138	1250	Avg	0.772781		183.95	5	5	1	0.18395	0.1839	100	0.18	0.18	Yes	0.2	92	92.0	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	810697	13C4-PFOS	682114	2500	Avg	1.694128						1753.86	1753.8619	100				2500	70	70	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	71101	13C8-PFOSA	810697	2500	Avg	0.99659		220.01	5	5	1	0.22001	0.22	100	0.22	0.22	Yes	0.2	110	110.0	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	299842	13C2-PFDA	469293	1250	Avg	0.871708						916.19	916.1938	100				1250	73	73	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2444611	13C4-PFOS	682114	2500	Avg	0.708623						12644	12643.7984	100				25000	51	51	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	113370	13C4-PFOS	682114	2500	Avg	0.415479						1000.07	1000.0739	100				2500	40	40	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	2602324	13C4-PFOS	682114	2500	Avg	0.758997						12566	12566.2112	100				25000	50	50	Yes			
101024011.d	ZQ18916-102		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	113876	13C4-PFOS	682114	2500	Avg	0.441246						945.88	945.8766	100				2500	38	38	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C4-PFBA	SESI-0111	3303848	13C3-PFBA	1523900	5000	Avg	1.139492						9513.11	9513.1055	36.2				10000	95	95	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	32688	13C4-PFBA	3303848	10000	Avg	0.862417		114.72	5	1.38	1	0.41566	0.4157	36.2	1.1	1.1	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1400231	13C2-PFHxA	846877	2500	Avg	0.8747						4725.64	4725.6356	36.2				5000	95	95	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	250201	13C5-PFPeA	1400231	5000	Avg	0.923358		967.59	5	1.38	1	3.5057	3.5057	36.2	9.7	9.7	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	165953	18O2-PFHxS	535339	2500	Avg	0.171095						4529.58	4529.5902	36.2				5000	91	91	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C5-PFHxA	SESI-0113	831864	13C2-PFHxA	846877	2500	Avg	1.027817						2389.22	2389.2203	36.2				2500	96	96	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	818363	13C5-PFHxA	831864	2500	Avg	0.967877		2541.05	5	1.38	1	9.2067	9.2067	36.2	25	25	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C3-PFBS	SESI-0116	645054	18O2-PFHxS	535339	2500	Avg	1.337567						2252.12	2252.1206	36.2				2500	90	90	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	126020	13C3-PFBS	645054	2500	Avg	1.164193		419.53	5	1.38	1	1.52	1.52	36.2	4.2	4.2	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	561670	13C2-PFHxA	846877	2500	Avg	0.187386						8848.4	8848.3798	36.2				10000	88	88	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1017529	13C2-PFHxA	846877	2500	Avg	1.233488						2435.18	2435.1826	36.2				2500	97	97	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	500180	13C4-PFHpA	1017529	2500	Avg	1.05664		1163.03	5	1.38	1	4.2139	4.2139	36.2	12	12	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	183306	18O2-PFHxS	535339	2500	Avg	0.189449						4518.51	4518.5125	36.2				5000	90	90	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	765031	13C2-6:2FTS	183306	5000	Avg	2.317932		9002.68	5	1.38	1	32.618	32.6184	36.2	90	90	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C8-PFOA	SESI-0097	1014676	13C4-PFOA	179044	2500	Avg	6.935343						2042.87	2042.8651	36.2				2500	82	82	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	1720057	13C8-PFOA	1014676	2500	Avg	0.942233		4497.77	5	1.38	1	16.296	16.2963	36.2	45	45	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C3-PFHxS	SESI-0096	574408	18O2-PFHxS	535339	2500	Avg	1.223059						2193.23	2193.2301	36.2				2500	88	88	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	215448	13C3-PFHxS	574408	2500	Avg	1.170077		801.4	5	1.38	1	2.9036	2.9036	36.2	8	8	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2951938	13C3-PFHxS	574408	2500	Avg	1.134147		11328	5	1.38	1	41.044	41.0439	36.2	110	110	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C9-PFNA	SESI-0099	507934	13C5-PFNA	581978	1250	Avg	0.970593						1124.02	1124.0188	36.2				1250	90	90	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	225294	13C9-PFNA	507934	1250	Avg	0.897503		617.76	5	1.38	1	2.2382	2.2382	36.2	6.2	6.2	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	221458	18O2-PFHxS	535339	2500	Avg	0.188821						5477.13	5477.1194	36.2				5000	110	110	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	130866	13C2-8:2FTS	221458	5000	Ln	2.07718	85.9208	1381.07	5	1.38	1	5.0039	5.0039	36.2	14	14	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C6-PFDA	SESI-0115	505850	13C2-PFDA	497367	1250	Avg	1.158659						1097.23	1097.2338	36.2				1250	88	88	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	49033	13C6-PFDA	505850	1250	Avg	0.88065		137.59	5	1.38	1	0.4985	0.4985	36.2	1.4	1.4	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	741147	13C4-PFOS	577582	2500	Avg	0.604638						5305.61	5305.6094	36.2				5000	106	106	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	86632	D3-NMeFOSAA	741147	5000	Avg	0.811858		719.89	5	1.38	1	2.6083	2.6083	36.2	7.2	7.2	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	503989	13C4-PFOS	577582	2500	Avg	0.464185						4699.55	4699.5504	36.2				5000	94	94	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	74230	D5-NEtFOSAA	503989	5000	Avg	1.016358		724.57	5	1.38	1	2.6253	2.6253	36.2	7.2	7.3	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C8-PFOS	SESI-0098	550767	13C4-PFOS	577582	2500	Avg	1.031655						2310.79	2310.7863	36.2				2500	92	92	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	154501	13C8-PFOS	550767	2500	Avg	0.936233		749.06	5	1.38	1	2.714	2.714	36.2	7.5	7.5	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	17133	13C8-PFOS	550767	2500	Avg	1.397808		55.636	5	1.38	1	0.20158	0.2016	36.2	0.56	0.56	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C7-PFUnA	SESI-0117	506080	13C2-PFDA	497367	1250	Avg	1.110582						1145.25	1145.2534	36.2				1250	92	92	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	121427	13C7-PFUnA	506080	1250	Ln	0.890162	24.9046	308.95	5	1.38	1	1.1194	1.1194	36.2	3.1	3.1	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C2-PFDoA	SESI-0118	484581	13C2-PFDA	497367	1250	Avg	1.123999						1083.51	1083.5114	36.2				1250	87	87	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	48477	13C2-PFDoA	484581	1250	Avg	0.728459		171.66	5	1.38	1	0.62196	0.622	36.2	1.7	1.7	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C8-PFOSA	SESI-0107	949291	13C4-PFOS	577582	2500	Avg	1.903232						2158.91	2158.9073	36.2				2500	86	86	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	176186	13C8-PFOSA	949291	2500	Ln	0.972205	16.879	459.9	5	1.38	1	1.6663	1.6663	36.2	4.6	4.6	Yes							
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	388907	13C2-PFDA	497367	1250	Avg	0.979484						997.89	997.8872	36.2				1250	80	80	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2711948	13C4-PFOS	577582	2500	Avg	0.787621						14904	14903.574	36.2				25000	60	60	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	122587	13C4-PFOS	577582	2500	Avg	0.473429						1120.77	1120.7685	36.2				2500	45	45	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2765505	13C4-PFOS	577582	2500	Avg	0.875607						13671	13670.7261	36.2				25000	55	55	Yes			
101124A034.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	119751	13C4-PFOS	577582	2500	Avg	0.517751						1001.12	1001.1164	36.2				2500	40	40	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C4-PFBA	SESI-0111	2649033	13C3-PFBA	1517069	5000	Avg	1.139492						7661.98	7661.9755	36.2				10000	77	77	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2201793	13C4-PFBA	2649033	10000	Avg	0.862417		9637.66	5	1.38	1	34.919	34.9191	36.2	96	96	Yes	96	99	99.3	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C5-PFPeA	SESI-0112	1130605	13C2-PFHxA	837952	2500	Avg	0.8747						3856.32	3856.3162	36.2				5000	77	77	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1263919	13C5-PFPeA	1130605	5000	Avg	0.923358		6053.53	5	1.38	1	21.933	21.9331	36.2	61	61	Yes	48	106	106.1	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C2-4:2FTS	SESI-0104	141367	18O2-PFHxS	539903	2500	Avg	0.171095						3825.9	3825.9121	36.2				5000	77	77	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C5-PFHxA	SESI-0113	699535	13C2-PFHxA	837952	2500	Avg	1.027817						2030.55	2030.5539	36.2				2500	81	81	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1545049	13C5-PFHxA	699535	2500	Avg	0.967877		5704.96	5	1.38	1	20.67	20.6701	36.2	57	57	Yes	24	132	131.9	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C3-PFBS	SESI-0116	529173	18O2-PFHxS	539903	2500	Avg	1.337567						1831.92	1831.9196	36.2				2500	73	73	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	677489	13C3-PFBS	529173	2500	Avg	1.164193		2749.28	5	1.38	1	9.9612	9.9612	36.2	27	28	Yes	21	109	111.0	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C3-HFPO-DA	SESI-0121	483328	13C2-PFHxA	837952	2500	Avg	0.187386						7695.32	7695.3022	36.2				10000	77	77	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C4-PFHpA	SESI-0114	811365	13C2-PFHxA	837952	2500	Avg	1.233488						1962.47	1962.4663	36.2				2500	78	78	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1260062	13C4-PFHpA	811365	2500	Avg	1.05664		3674.42	5	1.38	1	13.313	13.3131	36.2	37	37	Yes	24	105	104.7	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C2-6:2FTS	SESI-0105	152363	18O2-PFHxS	539903	2500	Avg	0.189449						3724.01	3724.0154	36.2				5000	74	74	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1403013	13C2-6:2FTS	152363	5000	Avg	2.317932		19863	5	1.38	1	71.969	71.9685	36.2	200	200	Yes	91	119	119.5	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C8-PFOA	SESI-0097	815694	13C4-PFOA	168505	2500	Avg	6.935343						1744.96	1744.9643	36.2				2500	70	70	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorooctanoic acid (PFOA)	335-67-1	2501871	13C8-PFOA	815694	2500	Avg	0.942233		8138.03	5	1.38	1	29.486	29.4856	36.2	81	81	Yes	24	152	151.8	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C3-PFHxS	SESI-0096	497255	18O2-PFHxS	539903	2500	Avg	1.223059						1882.59	1882.5912	36.2				2500	75	75	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	742838	13C3-PFHxS	497255	2500	Avg	1.170077		3191.84	5	1.38	1	11.565	11.5646	36.2	32	32	Yes	23	106	104.0	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3459968	13C3-PFHxS	497255	2500	Avg	1.134147		15338	5	1.38	1	55.572	55.5718	36.2	150	150	Yes	22	183	182.4	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C9-PFNA	SESI-0099	437375	13C5-PFNA	567507	1250	Avg	0.970593						992.56	992.5573	36.2				1250	79	79	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorononanoic acid (PFNA)	375-95-1	950591	13C9-PFNA	437375	1250	Avg	0.897503		3027.01	5	1.38	1	10.967	10.9674	36.2	30	30	Yes	24	100	100.5	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C2-8:2FTS	SESI-0106	177947	18O2-PFHxS	539903	2500	Avg	0.188821						4363.8	4363.7981	36.2				5000	87	87	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	875906	13C2-8:2FTS	177947	5000	Ln	2.07718	85.9208	11807	5	1.38	1	42.779	42.7794	36.2	120	120	Yes	92	113	113.4	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C6-PFDA	SESI-0115	443993	13C2-PFDA	517666	1250	Avg	1.158659						925.3	925.2964	36.2				1250	74	74	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorodecanoic acid (PFDA)	335-76-2	788729	13C6-PFDA	443993	1250	Avg	0.88065		2521.5	5	1.38	1	9.1359	9.1359	36.2	25	25	Yes	24	99	99.4	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	D3-NMeFOSAA	SESI-0102	582702	13C4-PFOS	562023	2500	Avg	0.604638						4286.84	4286.8372	36.2				5000	86	86	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	307904	D3-NMeFOSAA	582702	5000	Avg	0.811858		3254.31	5	1.38	1	11.791	11.791	36.2	33	33	Yes	24	106	105.7	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	D5-NEtFOSAA	SESI-0110	399609	13C4-PFOS	562023	2500	Avg	0.464185						3829.39	3829.3942	36.2				5000	77	77	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	280931	D5-NEtFOSAA	399609	5000	Avg	1.016358		3458.5	5	1.38	1	12.531	12.5308	36.2	35	35	Yes	24	114	114.0	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C8-PFOS	SESI-0098	428427	13C4-PFOS	562023	2500	Avg	1.031655						1847.26	1847.261	36.2				2500	74	74	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	603254	13C8-PFOS	428427	2500	Avg	0.936233		3759.93	5	1.38	1	13.623	13.6229	36.2	38	38	Yes	23	132	131.0	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	15646964	13C8-PFOS	428427	2500	Avg	1.036752		88068	5	1.38	1	319.09	319.0871	36.2	880	880	Yes	22	1120	1129.4	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	550921	13C8-PFOS	428427	2500	Avg	1.397808		2299.88	5	1.38	1	8.3329	8.3329	36.2	23	23	Yes	23	97	97.7	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C7-PFUnA	SESI-0117	375288	13C2-PFDA	517666	1250	Avg	1.110582						815.97	815.9704	36.2				1250	65	65	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	820289	13C7-PFUnA	375288	1250	Ln	0.890162	24.9046	3041.35	5	1.38	1	11.019	11.0194	36.2	30	30	Yes	24	114	114.0	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C2-PFDoA	SESI-0118	350559	13C2-PFDA	517666	1250	Avg	1.123999						753.11	753.1051	36.2				1250	60	60	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	531602	13C2-PFDoA	350559	1250	Avg	0.728459		2602.14	5	1.38	1	9.428	9.428	36.2	26	26	Yes	24	101	101.4	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C8-PFOSA	SESI-0107	780899	13C4-PFOS	562023	2500	Avg	1.903232						1825.11	1825.11	36.2				2500	73	73	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	957887	13C8-PFOSA	780899	2500	Ln	0.972205	16.879	3136.93	5	1.38	1	11.366	11.3657	36.2	31	31	Yes	24	112	111.6	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	13C2-PFTeDA	SESI-0119	299573	13C2-PFDA	517666	1250	Avg	0.979484						738.53	738.5258	36.2				1250	59	59	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	D7-NMeFOSE	SESI-0129	2038128	13C4-PFOS	562023	2500	Avg	0.787621						11511	11510.6563	36.2				25000	46	46	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	D3-NMeFOSA	SESI-0109	102081	13C4-PFOS	562023	2500	Avg	0.473429						959.13	959.1267	36.2				2500	38	38	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	D9-NEtFOSE	SESI-0130	2160813	13C4-PFOS	562023	2500	Avg	0.875607						10977	10977.2582	36.2				25000	44	44	Yes			
101124A035.d	ZI12017-006MS	CACMW-005-110-82.25-0905	Matrix_Spike	EIS	D5-NEtFOSA	SESI-0108	99356	13C4-PFOS	562023	2500	Avg	0.517751						853.61	853.6092	36.2				2500	34	34	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C4-PFBA	SESI-0111	2976003	13C3-PFBA	1370055	5000	Avg	1.139492						9531.35	9531.3427	36.2				10000	95	95	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2030464	13C4-PFBA	2976003	10000	Avg	0.862417		7911.24	5	1.38	1	28.664	28.6639	36.2	79	79	Yes	96	81	81.3	Yes	20	19.7	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C5-PFPeA	SESI-0112	1293512	13C2-PFHxA	730707	2500	Avg	0.8747						5059.51	5059.5055	36.2				5000.0	101	101	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1195052	13C5-PFPeA	1293512	5000	Avg	0.923358		5002.84	5	1.38	1	18.126	18.1262	36.2	50	50	Yes	48	84	84.1	Yes	19	19.0	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C2-4:2FTS	SESI-0104	155375	18O2-PFHxS	494219	2500	Avg	0.171095						4593.71	4593.7187	36.2				5000	92	92	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C5-PFHxA	SESI-0113	777410	13C2-PFHxA	730707	2500	Avg	1.027817						2587.8	2587.8021	36.2				2500	104	104	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1385726	13C5-PFHxA	777410	2500	Avg	0.967877		4604.13	5	1.38	1	16.682	16.6816	36.2	46	46	Yes	24	86	86.0	Yes	21	21.4	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C3-PFBS	SESI-0116	614367	18O2-PFHxS	494219	2500	Avg	1.337567						2323.45	2323.4477	36.2				2500	93	93	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	637925	13C3-PFBS	614367	2500	Avg	1.164193		2229.75	5	1.38	1	8.0788	8.0788	36.2	22	22	Yes	21	85	86.3	Yes	21	20.9	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C3-HFPO-DA	SESI-0121	555736	13C2-PFHxA	730707	2500	Avg	0.187386						10147	10146.7774	36.2				10000	101	101	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C4-PFHpA	SESI-0114	899779	13C2-PFHxA	730707	2500	Avg	1.233488						2495.73	2495.7304	36.2				2500	100	100	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	1193049	13C4-PFHpA	899779	2500	Avg	1.05664		3137.15	5	1.38	1	11.366	11.3665	36.2	31	31	Yes	24	82	82.3	Yes	16	15.8	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C2-6:2FTS	SESI-0105	168137	18O2-PFHxS	494219	2500	Avg	0.189449						4489.43	4489.4336	36.2				5000	90	90	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1222082	13C2-6:2FTS	168137	5000	Avg	2.317932		15679	5	1.38	1	56.806	56.8064	36.2	160	160	Yes	91	73	73.4	Yes	24	23.5	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C8-PFOA	SESI-0097	972432	13C4-PFOA	150802	2500	Avg	6.935343						2324.47	2324.4714	36.2				2500	93	93	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorooctanoic acid (PFOA)	335-67-1	2180852	13C8-PFOA	972432	2500	Avg	0.942233		5950.44	5	1.38	1	21.56	21.5595	36.2	59	60	Yes	24	61	60.6	Yes	31	31.1	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C3-PFHxS	SESI-0096	536805	18O2-PFHxS	494219	2500	Avg	1.223059						2220.19	2220.1878	36.2				2500	89	89	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	677500	13C3-PFHxS	536805	2500	Avg	1.170077		2696.61	5	1.38	1	9.7703	9.7703	36.2	27	27	Yes	23	84	82.5	Yes	17	16.8	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	3150244	13C3-PFHxS	536805	2500	Avg	1.134147		12936	5	1.38	1	46.869	46.8694	36.2	130	130	Yes	22	73	73.1	Yes	17	17.0	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C9-PFNA	SESI-0099	489095	13C5-PFNA	541238	1250	Avg	0.970593						1163.8	1163.7985	36.2				1250	93	93	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorononanoic acid (PFNA)	375-95-1	926767	13C9-PFNA	489095	1250	Avg	0.897503		2639.07	5	1.38	1	9.5619	9.5619	36.2	26	26	Yes	24	84	84.3	Yes	14	13.7	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C2-8:2FTS	SESI-0106	202442	18O2-PFHxS	494219	2500	Avg	0.188821						5423.4	5423.3908	36.2				5000	108	108	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	748292	13C2-8:2FTS	202442	5000	Ln	2.07718	85.9208	8856.1	5	1.38	1	32.087	32.0873	36.2	89	89	Yes	92	81	81.3	Yes	29	28.6	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C6-PFDA	SESI-0115	495623	13C2-PFDA	483231	1250	Avg	1.158659						1106.5	1106.499	36.2				1250	89	89	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorodecanoic acid (PFDA)	335-76-2	736363	13C6-PFDA	495623	1250	Avg	0.88065		2108.86	5	1.38	1	7.6408	7.6408	36.2	21	21	Yes	24	82	82.2	Yes	18	17.8	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	D3-NMeFOSAA	SESI-0102	638807	13C4-PFOS	531467	2500	Avg	0.604638						4969.79	4969.7888	36.2				5000	99	99	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	280688	D3-NMeFOSAA	638807	5000	Avg	0.811858		2706.1	5	1.38	1	9.8047	9.8047	36.2	27	27	Yes	24	83	82.8	Yes	18	18.4	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	D5-NEtFOSAA	SESI-0110	443478	13C4-PFOS	531467	2500	Avg	0.464185						4494.12	4494.1202	36.2				5000	90	90	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	249037	D5-NEtFOSAA	443478	5000	Avg	1.016358		2762.58	5	1.38	1	10.009	10.0094	36.2	28	28	Yes	24	85	85.0	Yes	22	22.4	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C8-PFOS	SESI-0098	485321	13C4-PFOS	531467	2500	Avg	1.031655						2212.88	2212.8822	36.2				2500	89	89	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	524900	13C8-PFOS	485321	2500	Avg	0.936233		2888.04	5	1.38	1	10.464	10.4639	36.2	29	29	Yes	23	94	93.1	Yes	26	26.2	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	13678109	13C8-PFOS	485321	2500	Avg	1.036752		67961	5	1.38	1	246.24	246.2368	36.2	680	680	Yes	22	212	214.7	Yes	26	25.8	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	554204	13C8-PFOS	485321	2500	Avg	1.397808		2042.36	5	1.38	1	7.3999	7.3999	36.2	20	20	Yes	23	86	86.5	Yes	12	11.9	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C7-PFUnA	SESI-0117	435583	13C2-PFDA	483231	1250	Avg	1.110582						1014.55	1014.5548	36.2				1250	81	81	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	748745	13C7-PFUnA	435583	1250	Ln	0.890162	24.9046	2385.84	5	1.38	1	8.6443	8.6443	36.2	24	24	Yes	24	87	86.6	Yes	24	24.2	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C2-PFDoA	SESI-0118	418100	13C2-PFDA	483231	1250	Avg	1.123999						962.21	962.2091	36.2				1250	77	77	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	490455	13C2-PFDoA	418100	1250	Avg	0.728459		2012.91	5	1.38	1	7.2931	7.2931	36.2	20	20	Yes	24	77	76.8	Yes	26	25.5	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C8-PFOSA	SESI-0107	861267	13C4-PFOS	531467	2500	Avg	1.903232						2128.68	2128.6771	36.2				2500	85	85	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	872655	13C8-PFOSA	861267	2500	Ln	0.972205	16.879	2588.11	5	1.38	1	9.3772	9.3772	36.2	26	26	Yes	24	89	88.8	Yes	19	19.2	Yes
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	13C2-PFTeDA	SESI-0119	316713	13C2-PFDA	483231	1250	Avg	0.979484						836.42	836.4188	36.2				1250	67	67	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	D7-NMeFOSE	SESI-0129	2249592	13C4-PFOS	531467	2500	Avg	0.787621						13435	13435.3869	36.2				25000	54	54	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	D3-NMeFOSA	SESI-0109	120013	13C4-PFOS	531467	2500	Avg	0.473429						1192.44	1192.4417	36.2				2500	48	48	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	D9-NEtFOSE	SESI-0130	2294368	13C4-PFOS	531467	2500	Avg	0.875607						12326	12325.8693	36.2				25000	49	49	Yes			
101124A036.d	ZI12017-006MD	CACMW-005-110-82.25-0905	Matrix_Spike_Duplicate	EIS	D5-NEtFOSA	SESI-0108	114103	13C4-PFOS	531467	2500	Avg	0.517751						1036.67	1036.6683	36.2				2500	41	41	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C4-PFBA	SESI-0111	3135542	13C3-PFBA	1605086	5000	Avg	1.139492						8571.82	8571.8199	100				10000	86	86	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	2601044	13C4-PFBA	3135542	10000	Avg	0.862417		9618.73	5	5	1	9.6187	9.6187	100	9.6	9.6	Yes	9.6	100	100.2	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C5-PFPeA	SESI-0112	1368990	13C2-PFHxA	911424	2500	Avg	0.8747						4293	4292.9981	100				5000	86	86	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	1210265	13C5-PFPeA	1368990	5000	Avg	0.923358		4787.19	5	5	1	4.7872	4.7872	100	4.8	4.8	Yes	4.8	100	99.7	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C2-4:2FTS	SESI-0104	149089	18O2-PFHxS	531026	2500	Avg	0.171095						4102.34	4102.3481	100				5000	82	82	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C5-PFHxA	SESI-0113	885103	13C2-PFHxA	911424	2500	Avg	1.027817						2362.1	2362.0961	100				2500	94	94	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	760766	13C5-PFHxA	885103	2500	Avg	0.967877		2220.12	5	5	1	2.2201	2.2201	100	2.2	2.2	Yes	2.4	93	92.5	Yes			

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C3-PFBS	SESI-0116	606739	18O2-PFHxS	531026	2500	Avg	1.337567						2135.55	2135.5542	100				2500.0	85	85	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	629610	13C3-PFBS	606739	2500	Avg	1.164193		2228.36	5	5	1	2.2284	2.2284	100	2.2	2.2	Yes	2.1	105	106.1	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C3-HFPO-DA	SESI-0121	616711	13C2-PFHxA	911424	2500	Avg	0.187386						9027.45	9027.4294	100				10000	90	90	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C4-PFHpA	SESI-0114	984353	13C2-PFHxA	911424	2500	Avg	1.233488						2188.95	2188.9482	100				2500	88	88	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	978191	13C4-PFHpA	984353	2500	Avg	1.05664		2351.18	5	5	1	2.3512	2.3512	100	2.4	2.4	Yes	2.4	98	98.0	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C2-6:2FTS	SESI-0105	147514	18O2-PFHxS	531026	2500	Avg	0.189449						3665.77	3665.7694	100				5000	73	73	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	668294	13C2-6:2FTS	147514	5000	Avg	2.317932		9772.46	5	5	1	9.7725	9.7725	100	9.8	9.8	Yes	9.1	107	107.4	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C8-PFOA	SESI-0097	1036662	13C4-PFOA	175924	2500	Avg	6.935343						2124.15	2124.145	100				2500	85	85	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	908027	13C8-PFOA	1036662	2500	Avg	0.942233		2324.04	5	5	1	2.324	2.324	100	2.3	2.3	Yes	2.4	97	96.8	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C3-PFHxS	SESI-0096	509061	18O2-PFHxS	531026	2500	Avg	1.223059						1959.51	1959.5062	100				2500	78	78	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	589801	13C3-PFHxS	509061	2500	Avg	1.170077		2475.49	5	5	1	2.4755	2.4755	100	2.5	2.5	Yes	2.3	110	107.6	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	479344	13C3-PFHxS	509061	2500	Avg	1.134147		2075.62	5	5	1	2.0756	2.0756	100	2.1	2.1	Yes	2.2	95	94.3	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C9-PFNA	SESI-0099	492854	13C5-PFNA	629188	1250	Avg	0.970593						1008.81	1008.8131	100				1250	81	81	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	804332	13C9-PFNA	492854	1250	Avg	0.897503		2272.96	5	5	1	2.273	2.273	100	2.3	2.3	Yes	2.4	95	94.7	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C2-8:2FTS	SESI-0106	157397	18O2-PFHxS	531026	2500	Avg	0.188821						3924.38	3924.3739	100				5000	78	78	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	628882	13C2-8:2FTS	157397	5000	Ln	2.07718	85.9208	9576.28	5	5	1	9.5763	9.5763	100	9.6	9.6	Yes	9.2	104	104.1	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C6-PFDA	SESI-0115	389910	13C2-PFDA	592297	1250	Avg	1.158659						710.2	710.1976	100				1250	57	57	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	780620	13C6-PFDA	389910	1250	Avg	0.88065		2841.72	5	5	1	2.8417	2.8417	100	2.8	2.8	Yes	2.4	118	118.4	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	D3-NMeFOSAA	SESI-0102	559003	13C4-PFOS	619134	2500	Avg	0.604638						3733.14	3733.1381	100				5000	75	75	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	217480	D3-NMeFOSAA	559003	5000	Avg	0.811858		2396.05	5	5	1	2.396	2.396	100	2.4	2.4	Yes	2.4	100	99.8	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	D5-NEtFOSAA	SESI-0110	415569	13C4-PFOS	619134	2500	Avg	0.464185						3614.99	3614.9925	100				5000	72	72	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	200851	D5-NEtFOSAA	415569	5000	Avg	1.016358		2377.69	5	5	1	2.3777	2.3777	100	2.4	2.4	Yes	2.4	99	99.1	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C8-PFOS	SESI-0098	490686	13C4-PFOS	619134	2500	Avg	1.031655						1920.54	1920.5452	100				2500	77	77	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	445072	13C8-PFOS	490686	2500	Avg	0.936233		2422.05	5	5	1	2.422	2.422	100	2.4	2.4	Yes	2.3	106	105.3	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	448292	13C8-PFOS	490686	2500	Avg	1.036752		2203.04	5	5	1	2.203	2.203	100	2.2	2.2	Yes	2.2	99	100.1	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	626091	13C8-PFOS	490686	2500	Avg	1.397808		2282.06	5	5	1	2.2821	2.2821	100	2.3	2.3	Yes	2.3	99	99.2	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C7-PFUnA	SESI-0117	401743	13C2-PFDA	592297	1250	Avg	1.110582						763.43	763.4281	100				1250	61	61	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	776027	13C7-PFUnA	401743	1250	Ln	0.890162	24.9046	2684.52	5	5	1	2.6845	2.6845	100	2.7	2.7	Yes	2.4	112	111.9	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C2-PFDoA	SESI-0118	429720	13C2-PFDA	592297	1250	Avg	1.123999						806.85	806.845	100				1250	65	65	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	604327	13C2-PFDoA	429720	1250	Avg	0.728459		2413.19	5	5	1	2.4132	2.4132	100	2.4	2.4	Yes	2.4	101	100.6	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C8-PFOSA	SESI-0107	759064	13C4-PFOS	619134	2500	Avg	1.903232						1610.43	1610.4306	100				2500	64	64	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	770279	13C8-PFOSA	759064	2500	Ln	0.972205	16.879	2592.11	5	5	1	2.5921	2.5921	100	2.6	2.6	Yes	2.4	108	108.0	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	13C2-PFTeDA	SESI-0119	386168	13C2-PFDA	592297	1250	Avg	0.979484						832.05	832.05	100				1250	67	67	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	D7-NMeFOSE	SESI-0129	2693927	13C4-PFOS	619134	2500	Avg	0.787621						13811	13810.9607	100				25000	55	55	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	D3-NMeFOSA	SESI-0109	117106	13C4-PFOS	619134	2500	Avg	0.473429						998.8	998.8026	100				2500	40	40	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	D9-NEtFOSE	SESI-0130	3034255	13C4-PFOS	619134	2500	Avg	0.875607						13993	13992.5931	100				25000	56	56	Yes			
101124A104.d	ZQ18914-002		Laboratory_Control_Sample	EIS	D5-NEtFOSA	SESI-0108	128438	13C4-PFOS	619134	2500	Avg	0.517751						1001.68	1001.6776	100				2500	40	40	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C4-PFBA	SESI-0111	3298698	13C3-PFBA	1765500	5000	Avg	1.139492						8198.49	8198.4841	37.9				10000	82	82	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorobutanoic acid (PFBA)	375-22-4	47600	13C4-PFBA	3298698	10000	Avg	0.862417		167.32	5	1.32	1	0.63379	0.6338	37.9	1.7	1.7	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C5-PFPeA	SESI-0112	1326416	13C2-PFHxA	908651	2500	Avg	0.8747						4172.19	4172.1847	37.9				5000	83	83	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluoropentanoic acid (PFPeA)	2706-90-3	429067	13C5-PFPeA	1326416	5000	Avg	0.923358		1751.64	5	1.32	1	6.635	6.635	37.9	17	18	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C2-4:2FTS	SESI-0104	168396	18O2-PFHxS	567374	2500	Avg	0.171095						4336.75	4336.7564	37.9				5000	87	87	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C5-PFHxA	SESI-0113	840512	13C2-PFHxA	908651	2500	Avg	1.027817						2249.94	2249.9404	37.9				2500	90	90	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorohexanoic acid (PFHxA)	307-24-4	1602351	13C5-PFHxA	840512	2500	Avg	0.967877		4924.18	5	1.32	1	18.652	18.6522	37.9	49	49	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C3-PFBS	SESI-0116	587559	18O2-PFHxS	567374	2500	Avg	1.337567						1935.56	1935.5595	37.9				2500	77	77	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorobutanesulfonic acid (PFBS)	375-73-5	232581	13C3-PFBS	587559	2500	Avg	1.164193		850.04	5	1.32	1	3.2198	3.2198	37.9	8.5	8.5	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C3-HFPO-DA	SESI-0121	579404	13C2-PFHxA	908651	2500	Avg	0.187386						8507.23	8507.2119	37.9				10000	85	85	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C4-PFHpA	SESI-0114	1012207	13C2-PFHxA	908651	2500	Avg	1.233488						2257.76	2257.7576	37.9				2500	90	90	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluoroheptanoic acid (PFHpA)	375-85-9	896652	13C4-PFHpA	1012207	2500	Avg	1.05664		2095.89	5	1.32	1	7.939	7.939	37.9	21	21	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C2-6:2FTS	SESI-0105	175887	18O2-PFHxS	567374	2500	Avg	0.189449						4090.83	4090.8354	37.9				5000	82	82	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1141114	13C2-6:2FTS	175887	5000	Avg	2.317932		13995	5	1.32	1	53.01	53.0104	37.9	140	140	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C8-PFOA	SESI-0097	1078345	13C4-PFOA	173717	2500	Avg	6.935343						2237.63	2237.6259	37.9				2500	90	90	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorooctanoic acid (PFOA)	335-67-1	3379207	13C8-PFOA	1078345	2500	Avg	0.942233		8314.55	5	1.32	1	31.495	31.4945	37.9	83	83	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C3-PFHxS	SESI-0096	571167	18O2-PFHxS	567374	2500	Avg	1.223059						2057.72	2057.72	37.9				2500	82	82	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluoropentansulfonic acid (PFPeS)	2706-91-4	391020	13C3-PFHxS	571167	2500	Avg	1.170077		1462.72	5	1.32	1	5.5406	5.5406	37.9	15	15	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	5619039	13C3-PFHxS	571167	2500	Avg	1.134147		21686	5	1.32	1	82.142	82.1421	37.9	220	220	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C9-PFNA	SESI-0099	499150	13C5-PFNA	648658	1250	Avg	0.970593						991.03	991.0331	37.9				1250	79	79	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorononanoic acid (PFNA)	375-95-1	393994	13C9-PFNA	499150	1250	Avg	0.897503		1099.34	5	1.32	1	4.1642	4.1642	37.9	11	11	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C2-8:2FTS	SESI-0106	254548	18O2-PFHxS	567374	2500	Avg	0.188821						5940.06	5940.0483	37.9				5000	119	119	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	314096	13C2-8:2FTS	254548	5000	Ln	2.07718	85.9208	2928.86	5	1.32	1	11.094	11.0942	37.9	29	29	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C6-PFDA	SESI-0115	512699	13C2-PFDA	571066	1250	Avg	1.158659						968.57	968.5689	37.9				1250	77	77	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorodecanoic acid (PFDA)	335-76-2	85991	13C6-PFDA	512699	1250	Avg	0.88065		238.07	5	1.32	1	0.90176	0.9018	37.9	2.4	2.4	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	D3-NMeFOSAA	SESI-0102	679824	13C4-PFOS	599447	2500	Avg	0.604638						4689.11	4689.1084	37.9				5000	94	94	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	173949	D3-NMeFOSAA	679824	5000	Avg	0.811858		1575.85	5	1.32	1	5.9691	5.9691	37.9	16	16	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	D5-NEtFOSAA	SESI-0110	458985	13C4-PFOS	599447	2500	Avg	0.464185						4123.79	4123.7906	37.9				5000	82	82	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	145820	D5-NEtFOSAA	458985	5000	Avg	1.016358		1562.94	5	1.32	1	5.9202	5.9202	37.9	16	16	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C8-PFOS	SESI-0098	498908	13C4-PFOS	599447	2500	Avg	1.031655						2016.86	2016.8574	37.9				2500	83	83	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	300257	13C8-PFOS	498908	2500	Avg	0.936233		1607.05	5	1.32	1	6.0873	6.0873	37.9	16	16	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorononanesulfonic acid (PFNS)	68259-12-1	40301	13C8-PFOS	498908	2500	Avg	1.397808		144.47	5	1.32	1	0.54725	0.5472	37.9	1.4	1.4	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C7-PFUnA	SESI-0117	566588	13C2-PFDA	571066	1250	Avg	1.110582						1116.71	1116.7101	37.9				1250	89	89	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluoroundecanoic acid (PFUnA)	2058-94-8	135763	13C7-PFUnA	566588	1250	Ln	0.890162	24.9046	308.5	5	1.32	1	1.1686	1.1686	37.9	3.1	3.1	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C2-PFDoA	SESI-0118	434165	13C2-PFDA	571066	1250	Avg	1.123999						845.5	845.498	37.9				1250	68	68	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	46155	13C2-PFDoA	434165	1250	Avg	0.728459		182.42	5	1.32	1	0.69098	0.691	37.9	1.8	1.8	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C8-PFOSA	SESI-0107	879534	13C4-PFOS	599447	2500	Avg	1.903232						1927.3	1927.3035	37.9				2500	77	77	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorooctanesulfonamide (PFOSA)	754-91-6	328665	13C8-PFOSA	879534	2500	Ln	0.972205	16.879	943.55	5	1.32	1	3.5741	3.574	37.9	9.4	9.4	Yes							
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C2-PFTeDA	SESI-0119	306172	13C2-PFDA	571066	1250	Avg	0.979484						684.21	684.2138	37.9				1250	55	55	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	D7-NMeFOSE	SESI-0129	2539414	13C4-PFOS	599447	2500	Avg	0.787621						13446	13446.3818	37.9				25000	54	54	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	D3-NMeFOSA	SESI-0109	116722	13C4-PFOS	599447	2500	Avg	0.473429						1028.22	1028.2224	37.9				2500	41	41	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	D9-NEtFOSE	SESI-0130	2535795	13C4-PFOS	599447	2500	Avg	0.875607						12078	12077.9752	37.9				25000	48	48	Yes			
101124A125.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	D5-NEtFOSA	SESI-0108	111976	13C4-PFOS	599447	2500	Avg	0.517751						901.97	901.9723	37.9				2500	36	36	Yes			
101424A075.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	EIS	13C8-PFOS	SESI-0098	85134	13C4-PFOS	98087	500	Avg	0.946037						458.73	458.7261	36.2				500	92	92	Yes			
101424A075.d	ZI12017-006	CACMW-005-110-82.25-0905	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2182265	13C8-PFOS	85134	500	Avg	1.020053		12565	5	1.38	5	227.62	227.6212	36.2	630	630	Yes							
101424A089.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	EIS	13C8-PFOS	SESI-0098	78147	13C4-PFOS	100021	500	Avg	0.946037						412.94	412.9362	37.9				500	83	83	Yes			
101424A089.d	ZI12017-005	CACMW-005-110-77-090524-	Field_Sample	Target	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	3894939	13C8-PFOS	78147	500	Avg	1.020053		24431	5	1.32	5	462.7	462.7023	37.9	1200	1200	Yes							

Data File	Lab Sample ID	Client Sample ID	QC Type	Analyte Type	Analyte	CAS	Response	Internal Standard (IS)	IS Response	IS Conc.	Fit	Avg. RF or Linear	Constant	On Col. Conc. (ng/L)	Final Volume (mL)	Initial Amount (g)	Dilution Factor	Instrument Conc. (ng/g)	Calc. Instrument Conc. (ng/g)	Percent Solids	Result (ng/g)	Calc. Result (ng/g)	Match?	Expected Result	%R	Calc. %R	Match?	RPD	Calc. RPD	Match?

Key

	from quantitation report
	from reported calibration
	from lab report/SEDD
	calculated value/comparison

%R	percent recovery
Avg	average
Calc.	calculated
CAS	Chemical Abstract Service registry number
CF	concentration factor
Conc.	concentration
EIS	extracted internal standard
g	grams
IS	internal standard
mL	milliliters
ND	not detected
ng/g	nanograms per gram
ng/L	nanograms per liter
On Col.	on column
RF	response factor
RPD	relative percent difference

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Hannah Woody	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical Services
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	ZH22011
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	October 7, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical Services – West Columbia, South Carolina. The laboratory is ADEC CS approved for the analyses performed, where required

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☐ No ☒ N/A ☐
   Comments: The CoC is missing a release signature.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: PFAS (1633)
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☒ No ☐ N/A ☐

Cooler temperature(s): 3.7, 5.8
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☒ No ☐ N/A ☐
Comments: The laboratory report case narrative documented QC anomalies addressed in the following relevant sections of this checklist or the relevant sections of the 2B checklist.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: No corrective actions were required or performed.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐

Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐
Comments:

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this workorder.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☐ No ☐ N/A ☒
Comments: PFM Resin does not have ADEC or other screening limits.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability was not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: Click or tap here to enter text.

iii. If above LoQ or RL, what samples are affected?
Comments: Click or tap here to enter text.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☐ No ☒ N/A ☐
Comments: There were no LCSD reported. MSDs were generally used to check batch precision; however, batches 18180, 18510, and 18516 had no QC duplicate.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☐ No ☐ N/A ☒
Comments: There were no LCSDs performed.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R or RPD failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected. Batch precision could not be evaluated for those batches missing QC duplicates (see above).

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Samples CACMW-004-060-53.25-081624-FM-R, CACMW-005-110-92.75-081624-FM-R, CACMW-007-160-148-081724-FM-R, and FD-2-081724-FM-R were selected by the laboratory for MS/MSD analysis.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments: MS/MSD recoveries were outside laboratory limits for PFOS in sample CACMW-004-060-53.25-081624-FM-R and PFOS, PFHxS, and PFOA in sample CACMW-005-110-92.75-081624-FM-R.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: MS/MSD recovery failures are only considered to affect parent-sample data quality if the spiking concentration is at least 3 times greater than the native concentration of the analyte in the parent sample. No samples were affected.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: There were no IDA recovery failures.

iv. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☐ No ☒ N/A ☐

Comments: The following field duplicate pairs were submitted in this work order:
CACMW-004-060-37.5-081624-FM-R / FD-1-081624-FM-R
CACMW-007-160-148-081724-FM-R / FD-2-081724-FM-R
CACMW-008-110-98-081724-FM-R / FD-3-081724-FM-R

Refer to DQA for overall evaluation of field duplicate collection frequency.

ii. Was the duplicate submitted blind to lab?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☒ No ☐ N/A ☐
Comments: N/A; see above

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☒ No ☐ N/A ☐
Comments: The following samples were submitted as field blanks and reported in SDG ZH22013:
CACMW-CO-1-081924, CACMW-CO-2-081924, CACMW-CO-3-081924, CACMW-CO-4-081924, and CACMW-CO-5-081924

ii. Are all results less than LoQ or RL?
Yes ☐ No ☒ N/A ☐
Comments: See checklist ZH22013 for details.

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank

concentration. 6:2FTS, PFNA, PFOA, PFTriA, PFUnA, PFDA, and PFHxA in all samples in this work order are considered affected.

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Hannah Woody	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical Services
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	ZH22013
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	October 4, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical Services – West Columbia, South Carolina. The laboratory is ADEC CS approved for the analyses performed, where required

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☐ No ☒ N/A ☐
   Comments: The CoC is missing release date and time.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: PFAS (1633)
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☒ No ☐ N/A ☐

Cooler temperature(s): 3.7, 5.8
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☒ No ☐ N/A ☐
Comments: The laboratory report case narrative documented QC anomalies addressed in the following relevant sections of this checklist.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: No corrective actions were required or performed.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐
Comments:

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this workorder.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☐ No ☐ N/A ☒
Comments: PFM Resin does not have ADEC or other screening limits..

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability was not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☐ No ☒
Comments: The following were detected in method blanks
Batch 18303 PFOS 0.026 ng/g
Batch 18516 PFOS 0.027 ng/g

iii. If above LoQ or RL, what samples are affected?
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated method blank concentration. No samples were affected.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☒ No ☐ N/A ☐
Comments: There were no LCSD reported. MSDs were generally used to check batch precision; however, batches 17976, 18515, 18251, and 18516 had no QC duplicate.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☐ No ☐ N/A☒
Comments: N/A; no LCSD were reported.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected. Batch precision could not be evaluated for those batches missing QC duplicates (see above).

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☒ N/A ☐
Comments: Samples CACMW-002-110-92.75-081524-FM-R, CACMW-003-110-108.5-081624-FM-R, CACMW-003-110-870.5-081624-FM-R, CACMW-003-160-153.25-081524-FM-R, CACMW-007-060-37.5-081724-FM-R were selected by the laboratory for MS/MSD analysis.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments: MS/MSD recoveries were outside laboratory limits for the following: PFHxS, PFOA, 6:2FTS, and PFHxA in sample CACMW-002-110-92.75-081524-FM-R. PFHxS, PFOS, and 6:2FTS in sample CACMW-003-160-153.25-081524-FM-R. PFHxS, PFOS, and 6:2FTS in sample CACMW-007-060-37.5-081724-FM-R. PFHxS and PFOS, in sample CACMW-003-110-108.5-081624-FM-R. PFOS in sample CACMW-003-110-870.5-081624-FM-R.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☐ No ☒ N/A ☐
Comments: MSD RPD was above laboratory limits for PFHxS in sample CACMW-007-060-37.5-081724-FM-R.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: MS/MSD recovery failures are only considered to affect parent-sample data quality if the spiking concentration is at least 3 times greater than the native concentration of the analyte in the parent sample. No samples were affected by recovery failures. CACMW-007-060-37.5-081724-FM-R is considered affected by the RPD failure.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes ☒ No ☐ N/A ☐
Comments: Results affected by RPD failure were qualified “J” as estimated with indeterminate bias.

vii. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☒ N/A ☐
Comments: 1633 IDA recoveries for d7-MeFOSE and d9-EtFOSE in the initial analysis of CACMW-003-160-153.25-081524-FM-R were below laboratory limits. Recoveries of d7-MeFOSE and d9-EtFOSE were extremely low (%R < 10%). Additionally, several IDA recoveries were below limits for the MS/MSD of CACMW-002-110-92.75-081524-FM-RM and CACMW-003-160-153.25-081524-FM-R.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Non-detect results affected by extremely low recovery are qualified ‘X’ as recommended for rejection.

iv. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☐ No ☐ N/A ☒
Comments: No field duplicates were submitted with this work order. Refer to the data quality assessment for evaluation of overall field duplicate collection frequency.

ii. Was the duplicate submitted blind to lab?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☐ No ☐ N/A ☒
Comments: N/A; see above

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☐ No ☐ N/A ☒

Comments: The following samples were submitted as field blanks and reported in SDG ZH22013:
CACMW-CO-1-081924, CACMW-CO-2-081924, CACMW-CO-3-081924, CACMW-CO-4-081924, and CACMW-CO-5-081924.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☒ N/A ☐
Comments: 6:2FTS, PFNA, PFOA, PFTriA, PFUnA, PFDA, and/or PFHxA were detected in one or more field blank.

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. 6:2FTS, PFNA, PFOA, PFTriA, PFUnA, PFDA, and PFHxA in all samples in this work order are considered affected.

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Hannah Woody	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical Services
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	ZI12013
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	October 16, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical Services – West Columbia, South Carolina. The laboratory is ADEC CS approved for the analyses performed, where required

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☐ No ☒ N/A ☐
   Comments: The digital quality of the CoC included in the report is difficult to read, but the CoC appears to be missing release date and time.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: PFAS (1633)
   Comments: Click or tap here to enter text.

3. Laboratory Sample Receipt Documentation

a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
Yes ☒ No ☐ N/A ☐
Cooler temperature(s): 2.3, 2.1
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☒ No ☐ N/A ☐
Comments: The laboratory report case narrative documented QC anomalies which are addressed in the following relevant sections of this checklist.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: No corrective actions were required or performed.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐
Comments:

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this workorder.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☐ No ☐ N/A ☒
Comments: PFM Resin does not have ADEC or other screening limits.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability was not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: There were no MB results above the LOQ. The following MB results were above the LOD but below the LOQ:

Batch 18867 PFOSA 0.055 ng/g

iii. If above LoQ or RL, what samples are affected?
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated method blank concentration. Sample CACMW-008-160-127-090624-FM-R is considered affected.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias.

v. Data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☒ No ☐ N/A ☐
Comments: There were no LCSD reported. MSDs were generally used to check batch precision; however, batches 18657 and 18867 had no QC duplicate.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R or RPD failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☒ N/A ☐
Comments: Sample CACMW-008-060-27-090624-FM-R was selected by the laboratory for MS/MSD analysis.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments: MS and MSD recoveries were outside of laboratory limits for PFOS in CACMW-008-060-27-090624-FM-R

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: MS/MSD recovery failures are only considered to affect parent-sample data quality if the spiking concentration is at least 3 times greater than the native concentration of the analyte in the parent sample. No samples were affected by recovery failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No project-sample results were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No project-sample results were affected by IDA recovery failures.

iv. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability is not affected.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☐ No ☒ N/A ☐
Comments: No field duplicates were submitted with this SDG. Refer to the data quality assessment for evaluation of overall field duplicate collection and analysis frequency.

ii. Was the duplicate submitted blind to lab?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☐ No ☐ N/A ☒
Comments: N/A; see above

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☐ No ☒ N/A ☐
Comments: The following samples were submitted as field blanks and reported in SDG ZI12013:
CACMW-CO-1-090924, CACMW-CO-2-090924, CACMW-CO-3-090924, and CACMW-CO-4-090924

ii. Are all results less than LoQ or RL?
Yes ☐ No ☒ N/A ☐
Comments: 6:2FTS, PFNA, PFOA, PFTriA, PFUnA, and/or PFHxA were detected in one or more field blank.

iii. If above LoQ or RL, specify what samples are affected.

Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. 6:2FTS, PFNA, PFOA, PFTriA, PFUnA, and PFHxA in all samples in this work order are considered affected

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Hannah Woody	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical Services
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	ZI12016
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	October 29, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical Services – West Columbia, South Carolina. The laboratory is ADEC CS approved for the analyses performed, where required

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☐ No ☒ N/A ☐
   Comments: The digital quality of the CoC included in the report is difficult to read, but the CoC appears to be missing release date and time.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: PFAS (1633)
   Comments: Click or tap here to enter text.

3. Laboratory Sample Receipt Documentation

a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
Yes ☒ No ☐ N/A ☐
Cooler temperature(s): 2.3, 2.1
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☐ No ☐ N/A ☒
Comments: There were no sample receiving discrepancies.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☒ No ☐ N/A ☐
Comments: The laboratory report case narrative documented QC anomalies which are addressed in the following relevant sections of this checklist.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: No corrective actions were required or performed.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐
Comments:

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this workorder.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☒ No ☐ N/A ☐
Comments: LOQs and LODs for non-detect results were compared to the Project Screening Levels (PSLs) as defined in Worksheet #15 of the UFP-QAPP. LOQ and LODs for all analytes were below PSLs.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability was not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: There were no MB results above the LOQ. The following MB results were above the MDL but below the LOQ:

Batch 18867 PFOSA 0.055 ng/g
Batch 18871 PFOSA 0.096 ng/g
Batch 18873 PFOSA 0.059 ng/g
Batch 18873 PFOS 0.026 ng/g
Batch 18914 PFOSA 0.058 ng/g

iii. If above LoQ or RL, what samples are affected?
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated method blank concentration. PFOSA results for the following samples are considered affected

CACMW-001-110-66.5-090424-FM-R
CACMW-001-160-117-090424-FM-R
CACMW-001-160-127.5-090424-FM-R
CACMW-002-060-16.5-090424-FM-R
CACMW-002-110-66.5-090424-FM-R
CACMW-002-160-121.75-090424-FM-R
CACMW-003-060-21.75-090424-FM-R
CACMW-003-110-71.75-090524-FM-R
CACMW-003-160-121.75-090524-FM-R
CACMW-003-160-132.25-090524-FM-R
CACMW-004-160-116.5-090524-FM-R
CACMW-004-160-121.75-090524-FM-R
CACMW-004-160-127-090524-FM-R
CACMW-004-160-132.25-090524-FM-R
CACMW-005-060-16.5-090524-FM-R
CACMW-005-060-21.75-090524-FM-R

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias.

v. Data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☒ No ☐ N/A ☐
Comments: There were no LCSD reported. MSDs were generally used to check batch precision; however, batches 18873, 18914, 19251, and 19524 had no QC duplicate.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☐ No ☒ N/A ☐
Comments: PFOSA recovery in the low-level LCS for batches 18871, 18873, and 19251 was above laboratory limits.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: PFOSA results for the following samples are considered affected

CACMW-001-160-117-090424-FM-R
CACMW-001-160-127.5-090424-FM-R
CACMW-002-060-16.5-090424-FM-R
CACMW-002-110-66.5-090424-FM-R
CACMW-002-160-121.75-090424-FM-R
CACMW-002-160-127-090424-FM-R
CACMW-003-060-21.75-090424-FM-R
CACMW-003-110-71.75-090524-FM-R
CACMW-003-160-121.75-090524-FM-R
CACMW-003-160-132.25-090524-FM-R

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Detected results were qualified “J+” as estimated with high bias.

vii. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☒ N/A ☐
Comments: Samples CACMW-001-110-82.25-090424-FM-R, CACMW-003-060-27-090424-FM-R, and CACMW-004-110-77-090524-FM-R were selected by the laboratory for MS/MSD analysis.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments: MS/MSD recoveries were outside of laboratory limits for PFHxS and PFOS in CACMW-001-110-82.25-090424-FM-R
PFOS in CACMW-003-060-27-090424-FM-R
PFOS in CACMW-004-110-77-090524-FM-R

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: MS/MSD recovery failures are only considered to affect parent-sample data quality if the spiking concentration is at least 3 times greater than the native concentration of the analyte in the parent sample. No sample results were affected by recovery failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No project-sample results were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No project-sample results were affected by IDA recovery failures.

iv. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability is not affected.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?

Yes ☐ No ☒ N/A ☐
Comments: No field duplicates were submitted with this SDG. Refer to the data quality assessment for evaluation of overall field duplicate collection and analysis frequency.

ii. Was the duplicate submitted blind to lab?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☐ No ☐ N/A ☒
Comments: N/A; see above

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☐ No ☒ N/A ☐
Comments: The following samples were submitted as field blanks and reported in SDG ZI12013:
CACMW-CO-1-090924, CACMW-CO-2-090924, CACMW-CO-3-090924, and CACMW-CO-4-090924

ii. Are all results less than LoQ or RL?
Yes ☐ No ☒ N/A ☐
Comments: 6:2FTS, PFNA, PFOA, PFTriA, PFUnA, and/or PFHxA were detected in one or more field blank.

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. 6:2FTS, PFNA, PFOA, PFTriA, PFUnA, and PFHxA in all samples in this work order are considered affected

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Hannah Woody	**CS Site Name:**	Eielson AFB Basewide PFAS	**Lab Name:**	Pace Analytical Services
Title:	Environmental Scientist	**ADEC File No.:**	107.38.150	**Lab Report No.:**	ZI12017
Consulting Firm:	Arctic Data Services	**Hazard ID No.:**	26773	**Lab Report Date:**	October 17, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: All samples were received and analyzed by Pace Analytical Services – West Columbia, South Carolina. The laboratory is ADEC CS approved for the analyses performed, where required

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: No samples were transferred to or analyzed by another laboratory.

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: The digital quality of the CoC included in the report is difficult to read.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: PFAS (1633)
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☒ No ☐ N/A ☐

Cooler temperature(s): 2.3, 2.1
Comments: Samples were received within acceptable temperature range.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☒ No ☐ N/A ☐
Comments: The laboratory noted that 6 samples were received that were not listed on the CoC. These samples had dates but no times. Samples were analyzed for PFAS.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability are not affected.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☒ No ☐ N/A ☐
Comments: The laboratory report case narrative documented QC anomalies which are addressed in the following relevant sections of this checklist.

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: No corrective actions were required or performed.

d. What is the effect on data quality/usability according to the case narrative?
Comments: The case narrative made no comments on data quality or usability.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐
Comments:

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples were submitted in this workorder.

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☐ No ☐ N/A ☒
Comments: PFM Resin does not have ADEC or other screening limits

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability was not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: There were no MB results above the LOQ. The following MB results were above the MDL but below the LOQ:

Batch 18914 PFOSA 0.058 ng/g
Batch 18915 PFOSA 0.047 ng/g
Batch 18916 PFOSA 0.034 ng/g

iii. If above LoQ or RL, what samples are affected?
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated method blank concentration. The following samples are considered affected:

CACMW-005-110-66.5-090524-FM-R
CACMW-005-160-116.5-090524-FM-R
CACMW-005-160-121.75-090524-FM-R
CACMW-005-160-127-090524-FM-R
CACMW-005-160-132.25-090524-FM-R
CACMW-006-060-21.75-090524-FM-R
CACMW-006-060-27-090524-FM-R
CACMW-006-110-66.5-090524-FM-R
CACMW-006-160-116.5-090524-FM-R
CACMW-006-160-127-090524-FM-R
CACMW-006-160-132.25-090524-FM-R
CACMW-007-160-132.25-090624-FM-R
CACMW-008-160-116.5-090624-FM-R
FD-5-090424-FM-R
FD-8-090524-FM-R
FD-09-090624-FM-R

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias.

v. Data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☒ No ☐ N/A ☐
Comments: There were no LCSD reported. MSDs were generally used to check batch precision; however, batch 18914 had no QC duplicate.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK

Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☐ No ☐ N/A ☒
Comments: No LCSD was performed.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A; there were no %R failures.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No samples were affected.

vii. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☒ N/A ☐
Comments: Samples CACMW-005-110-82.25-090524-FM-R and CACMW-008-110-77-090624-FM-R were selected by the laboratory for MS/MSD analysis.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: No inorganic methods were performed in this work order.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☒ N/A ☐
Comments:
MS and MSD recoveries for PFOS, PFOA, and PFHxS were below recovery limits in CACMW-008-110-77-090624-FM-R.

MS and MSD recoveries for PFOS, PFOA, and PFHxS were above recovery limits in CACMW-005-110-82.25-090524-FM-R.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☐ No ☒ N/A ☐
Comments: The MSD RPD for PFOA in CACMW-005-110-82.25-090524-FM-R was 31%, exceeding the 30% control criteria.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: MS/MSD recovery failures are only considered to affect parent-sample data quality if the spiking concentration is at least 3 times greater than the native concentration of the analyte in the parent sample. No samples were affected by recovery failures. CACMW-005-110-82.25-090524-FM-R is considered affected by the RPD failure.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☒ No ☐ N/A ☐
Comments: Results affected by RPD failure were qualified “J” as estimated with indeterminate bias.

vii. Is the data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Data quality is affected as described above. Refer to the data quality assessment for discussion of potential impacts to data usability.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?

Yes ☐ No ☐ N/A ☒
Comments: N/A; there were no IDA recovery failures.

iv. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability is not affected.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☐ No ☐ N/A ☒
Comments: No volatile analyses were performed in this work order.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

iii. If above LoQ or RL, what samples are affected?
Comments: N/A; see above.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: N/A; see above.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☒ No ☐ N/A ☐
Comments: The following field duplicate pairs were submitted in this work order:

FD-4-090424-FM-R / CACMW-002-110-77-090424-FM-R
FD-5-090424-FM-R / CACMW-003-160-127-090424-FM-R
FD-6-090524-FM-R / CACMW-004-060-27-090524-FM-R
FD-7-090524-FM-R / CACMW-004-110-77-090524-FM-R
FD-8-090524-FM-R / CACMW-006-060-27-090524-FM-R
FD-9-090624-FM-R / CACMW-006-110-66.5-090624-FM-R
FD-10-090624-FM-R / CACMW-007-110-66.5-090624-FM-R

Refer to DQA for overall evaluation of field duplicate collection frequency.

ii. Was the duplicate submitted blind to lab?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☒ No ☐ N/A ☐
Comments: N/A; there were no field-duplicate RPD failures.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Data quality and usability were not affected.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☐ No ☐ N/A ☒
Comments: The following samples were submitted as field blanks and reported in SDG ZI12013:
CACMW-CO-1-090924, CACMW-CO-2-090924, CACMW-CO-3-090924, and CACMW-CO-4-090924.

ii. Are all results less than LoQ or RL?
Yes ☐ No ☒ N/A ☐
Comments: See checklist ZI12013 for details.

iii. If above LoQ or RL, specify what samples are affected.
Comments: Project-sample results are considered affected if the analyte in question is detected within five times (5X) the associated blank concentration. 6:2FTS, PFNA, PFOA, PFTriA, PFUnA, and PFHxA in all samples in this work order are considered affected.

iv. Are data quality or usability affected?
Yes ☒ No ☐ N/A ☐
Comments: Affected results below the LOD were qualified with a "UB" as false-positives and are considered non-detect up to the LOD and results above the LOD were qualified with a “J+” as estimated with high bias. Refer to the data quality assessment for discussion of potential impacts to data usability.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?

Yes ☒ No ☐ N/A ☐

Comments: Click or tap here to enter text.

SDG:	ZH22011
Lab Name:	Pace
Completed By:	Leslie Brooks
Date:	11/27/2024
Methods (types) reviewed	1633 (LC-MS/MS)

	Yes	No	N/A
Additional Stage 2A 1633 PFAS Checks – All Field Samples			
Ion ratios within 50-150% of ion ratio of applicable calibration standard?		X	
Extracted Internal Standard (EIS) recovery within 20-150% or laboratory limits?	X		
EIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Non-Extracted Internal Standards (NIS) peak area greater than 30% of the average area of the calibration standards or within laboratory limits?		X	
NIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Laboratory Control (LCS) and Low-Level Laboratory Control Sample (LLLCS) are prepared in every preparation batch of 20 environmental samples and recovery within control limits?	X		
Bile Salt Interference Check reported and PFOS and TDCA separated by at least 1 minute	X		
Qualitative Identification Standard containing a mix of branched and linear isomers analyzed once daily prior to sample analysis?	X		

Comments:

Several analytes were detected below the LOQ with ion ratios outside the 50-150% range. These results were not additionally qualified as they are already 'J' flagged due to being below the LOQ. NMeFOSAA in sample CACMW-008-110-103.25-081724-FM-R and PFPeA in sample CACMW-004-060-37.5-081624-FM-R were detected above the LOQ and had ion ratios outside 50-150% of the ion ratio of the midpoint calibration standard. Affected results are qualified 'J' as estimated.

NIS peak area for the dilution runs of samples CACMW-008-060-42.75-081724-FM-R, CACMW-008-060-53.25-081724-FM-R, FD-1-081624-FM-R, CACMW-005-110-87.5-081624-FM-R, CACMW-005-110-92.75-081624-FM-R, CACMW-001-160-148.5-081524-FM-R, CACMW-005-110-98-081624-FM-R, CACMW-006-060-48-081724-FM-R, CACMW-006-060-53.25-081724-FM-R, CACMW-007-060-48-081724-FM-R, CACMW-007-110-87.5-081724-FM-R were below 30% of the average area of the calibration standards. However, it was noted that NIS standards were not refortified in the dilution. Only PFOS and/or 8:2 FTS were reported from dilution runs and qualification is not required.

General			
Preparation and analysis run logs reported and complete?	X		
Bench logs and data sheets reported and complete? *(where relevant)*	X		

Comments:

	Yes	No	N/A
Tuning and Instrument Performance – 10% Selected Field Samples for Stage 4			
Mass Calibration and Mass Calibration Verification performed prior to initial calibration	X		
Verify the peak apex for each mass did not shift more than 0.2 Da (or amu) from the expected masses for each target analyte.	X		
Comments:			
Initial Calibration – 10% Selected Field Samples for Stage 4			
Initial calibration performed at the required frequency? *(generally prior to sample analysis or after ICV/CCV failure)*	X		
Does the calibration include the minimum number of levels? *(6 for Avg. RF or linear with 5 within quantification range and 1 additional if second order)*	X		
Does the calibration meet method criteria? *(RSD or RSE < 20%)*	X		
Comments:			
Initial (Secondary Source), Continuing Calibration Verification, and Instrument Sensitivity Check – 10% Selected Field Samples for Stage 4			
Initial calibration verification (ICV) performed after initial calibration with second source standard?	X		
ICV within method criteria? *(%D <30%)*		X	
Instrument Sensitivity Check (ISC) performed at least once daily prior to sample analysis?	X		
ISC within method criteria? *(%D <30%)*	X		
Continuing calibration verification (CCV) performed at the required frequency? *(bracketing all field samples and after every 10 field samples)*	X		
CCVs within method criteria? *(%D <30%)*		X	

Comments:

8:2 FTS in the ICV for calibration 092224C-1633+ICAL.b was recovered above laboratory limits. 8:2FTS results for the following samples are qualified 'J+' as estimated with high bias due to high ICV recovery. CACMW-004-160-137.5-081624-FM-R, CACMW-004-160-142.75-081624-FM-R, CACMW-004-160-148-081624-FM-R, CACMW-004-160-153.25-081624-FM-R, CACMW-004-160-158.5-081624-FM-R, CACMW-008-160-137.5-081724-FM-R, CACMW-008-160-142.75-081724-FM-R, CACMW-008-160-148-081724-FM-R, CACMW-008-160-153.25-081724-FM-R, FD-2-081724-FM-R

EIS D5-NEtFOSAA in CCV L5H_SCLV-4091 for calibration 092224C-1633+ICAL.b was recovered above laboratory limits. Associated target analytes were recovered within limits and data quality was not affected.

PFDoS, EIS 13C2-PFTeDA, and EIS D9-NEtFOSE in CCV L5D_SVLC-4091 for calibration 092324B-1633+ICAL.b were recovered above laboratory limits. PFDoS was not detected in any associated project samples, so data quality was not affected. Target analytes associated with failed EIS CCV recovery were recovered within limits in the CCV, so data quality was not affected by the EIS failures.

	Yes	No	N/A
EIS 13C8-PFOA in CCV L5F_SVLC-4091 for calibration 092324B-1633+ICAL.b was recovered above laboratory limits. Associated target analytes were recovered within limits and data quality was not affected.			
Instrument Blanks – 10% Selected Field Samples for Stage 4			
Instrument Blanks performed at the required frequency? (*immediately following the highest standard analyzed, daily prior to analyzing standards, after each CV, and immediately following samples with PFAS concentrations exceeding the quantification range*)	X		
IB target analyte concentrations below ½ LOQ?	X		
Comments:			
Other QC			
No other instrument-level QC failures or anomalies?		X	
Comments: The laboratory qualified PFOS result in sample CACMW-004-110-92.75-081624-FM-R as having exceeded the calibration range. Affected results are qualified 'J' as estimated for exceeding the calibration range.			

SDG:	ZH22013
Lab Name:	Pace
Completed By:	Leslie Brooks
Date:	11/27/2024
Methods (types) reviewed	1633 (LC-MS/MS)

	Yes	No	N/A
Additional Stage 2A 1633 PFAS Checks – All Field Samples			
Ion ratios within 50-150% of ion ratio of applicable calibration standard?		X	
Extracted Internal Standard (EIS) recovery within 20-150% or laboratory limits?		X	
EIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Non-Extracted Internal Standards (NIS) peak area greater than 30% of the average area of the calibration standards or within laboratory limits?		X	
NIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Laboratory Control (LCS) and Low-Level Laboratory Control Sample (LLLCS) are prepared in every preparation batch of 20 environmental samples and recovery within control limits?	X		
Bile Salt Interference Check reported and PFOS and TDCA separated by at least 1 minute	X		
Qualitative Identification Standard containing a mix of branched and linear isomers analyzed once daily prior to sample analysis?	X		

Comments:

Several analytes were detected below the LOQ with ion ratios outside the 50-150% range. These results were not additionally qualified as they are already 'J' flagged due to being below the LOQ.

EIS recovery in sample CACMW-003-160-153.25-081524-FM-R were outside limits see ADEC checklist for details.

NIS peak area for the dilution runs of samples CACMW-002-060-58.5-081524-FM-R, CACMW-002-110-92.75-081524-FM-R, CACMW-002-160-137.5-081524-FM-R, CACMW-002-160-142.75-081524-FM-R, CACMW-002-160-148-081524-FM-R, CACMW-002-160-153.25-081524-FM-R, CACMW-002-160-158.5-081524-FM-R, CACMW-003-060-37.5-081624-FM-R, CACMW-003-060-42.75-081624-FM-R, CACMW-003-060-48-081624-FM-R, CACMW-003-060-53.25-081624-FM-R, CACMW-003-060-58.5-081624-FM-R, CACMW-003-110-103.25-081624-FM-R, CACMW-003-110-108.5-081624-FM-R, CACMW-003-110-870.5-081624-FM-R, CACMW-003-110-92.75-081624-FM-R, CACMW-003-110-98-081624-FM-R, CACMW-003-160-137.5-081524-FM-R, CACMW-003-160-142.75-081524-FM-R, CACMW-003-160-148-081524-FM-R, CACMW-003-160-153.25-081524-FM-R, CACMW-006-060-37.5-081724-FM-R, CACMW-006-060-42.75-081724-FM-R, CACMW-008-060-48-081724-FM-R were below 30% of the average area of the calibration standards. However, it was noted that IS standards were not refortified in the dilution and qualification is not required.

General			
Preparation and analysis run logs reported and complete?	X		
Bench logs and data sheets reported and complete? *(where relevant)*	X		

	Yes	No	N/A
Comments:			
Tuning and Instrument Performance – 10% Selected Field Samples for Stage 4			
Mass Calibration and Mass Calibration Verification performed prior to initial calibration	X		
Verify the peak apex for each mass did not shift more than 0.2 Da (or amu) from the expected masses for each target analyte.	X		
Comments:			
Initial Calibration – 10% Selected Field Samples for Stage 4			
Initial calibration performed at the required frequency? *(generally prior to sample analysis or after ICV/CCV failure)*	X		
Does the calibration include the minimum number of levels? *(6 for Avg. RF or linear with 5 within quantification range and 1 additional if second order)*	X		
Does the calibration meet method criteria? *(RSD or RSE < 20%)*	X		
Comments:			
Initial (Secondary Source), Continuing Calibration Verification, and Instrument Sensitivity Check – 10% Selected Field Samples for Stage 4			
Initial calibration verification (ICV) performed after initial calibration with second source standard?	X		
ICV within method criteria? *(%D <30%)*	X		
Instrument Sensitivity Check (ISC) performed at least once daily prior to sample analysis?	X		
ISC within method criteria? *(%D <30%)*	X		
Continuing calibration verification (CCV) performed at the required frequency? *(bracketing all field samples and after every 10 field samples)*	X		
CCVs within method criteria? *(%D <30%)*	X		
Comments:			
Instrument Blanks – 10% Selected Field Samples for Stage 4			
Instrument Blanks performed at the required frequency? (*immediately following the highest standard analyzed, daily prior to analyzing standards, after each CV, and immediately following samples with PFAS concentrations exceeding the quantification range*)	X		
IB target analyte concentrations below ½ LOQ?	X		
Comments:			
Other QC			
No other instrument-level QC failures or anomalies?		X	
Comments:			

SDG:	ZI12013
Lab Name:	Pace
Completed By:	Leslie Brooks
Date:	11/27/2024
Methods (types) reviewed	1633 (LC-MS/MS)

	Yes	No	N/A
Additional Stage 2A 1633 PFAS Checks – All Field Samples			
Ion ratios within 50-150% of ion ratio of applicable calibration standard?		X	
Extracted Internal Standard (EIS) recovery within 20-150% or laboratory limits?	X		
EIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Non-Extracted Internal Standards (NIS) peak area greater than 30% of the average area of the calibration standards or within laboratory limits?	X		
NIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Laboratory Control (LCS) and Low-Level Laboratory Control Sample (LLLCS) are prepared in every preparation batch of 20 environmental samples and recovery within control limits?	X		
Bile Salt Interference Check reported and PFOS and TDCA separated by at least 1 minute	X		
Qualitative Identification Standard containing a mix of branched and linear isomers analyzed once daily prior to sample analysis?	X		
Comments: Several analytes were detected below the LOQ with ion ratios outside the 50-150% range. These results were not additionally qualified as they are already 'J' flagged due to being below the LOQ. PFPeA in sample CACMW-007-060-27-090624-FM-R was detected above the LOQ and had ion ratios outside 50-150% of the ion ratio of the midpoint calibration standard. Affected results are qualified 'J' as estimated.			
General			
Preparation and analysis run logs reported and complete?	X		
Bench logs and data sheets reported and complete? *(where relevant)*	X		
Comments:			
Tuning and Instrument Performance – 10% Selected Field Samples for Stage 4			
Mass Calibration and Mass Calibration Verification performed prior to initial calibration	X		
Verify the peak apex for each mass did not shift more than 0.2 Da (or amu) from the expected masses for each target analyte.	X		
Comments:			
Initial Calibration – 10% Selected Field Samples for Stage 4			
Initial calibration performed at the required frequency? *(generally prior to sample analysis or after ICV/CCV failure)*	X		

	Yes	No	N/A
Does the calibration include the minimum number of levels? *(6 for Avg. RF or linear with 5 within quantification range and 1 additional if second order)*	X		
Does the calibration meet method criteria? *(RSD or RSE < 20%)*	X		
Comments:			
Initial (Secondary Source), Continuing Calibration Verification, and Instrument Sensitivity Check – 10% Selected Field Samples for Stage 4			
Initial calibration verification (ICV) performed after initial calibration with second source standard?	X		
ICV within method criteria? *(%D <30%)*	X		
Instrument Sensitivity Check (ISC) performed at least once daily prior to sample analysis?	X		
ISC within method criteria? *(%D <30%)*	X		
Continuing calibration verification (CCV) performed at the required frequency? *(bracketing all field samples and after every 10 field samples)*	X		
CCVs within method criteria? *(%D <30%)*	X		
Comments:			
Instrument Blanks – 10% Selected Field Samples for Stage 4			
Instrument Blanks performed at the required frequency? (*immediately following the highest standard analyzed, daily prior to analyzing standards, after each CV, and immediately following samples with PFAS concentrations exceeding the quantification range*)	X		
IB target analyte concentrations below ½ LOQ?	X		
Comments:			
Other QC			
No other instrument-level QC failures or anomalies?		X	
Comments:			

SDG:	ZI12016
Lab Name:	Pace
Completed By:	Leslie Brooks
Date:	11/27/2024
Methods (types) reviewed	1633 (LC-MS/MS)

	Yes	No	N/A
Additional Stage 2A 1633 PFAS Checks – All Field Samples			
Ion ratios within 50-150% of ion ratio of applicable calibration standard?		X	
Extracted Internal Standard (EIS) recovery within 20-150% or laboratory limits?	X		
EIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Non-Extracted Internal Standards (NIS) peak area greater than 30% of the average area of the calibration standards or within laboratory limits?		X	
NIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Laboratory Control (LCS) and Low-Level Laboratory Control Sample (LLLCS) are prepared in every preparation batch of 20 environmental samples and recovery within control limits?	X		
Bile Salt Interference Check reported and PFOS and TDCA separated by at least 1 minute	X		
Qualitative Identification Standard containing a mix of branched and linear isomers analyzed once daily prior to sample analysis?	X		
Comments:			
Several analytes were detected below the LOQ with ion ratios outside the 50-150% range. These results were not additionally qualified as they are already 'J' flagged due to being below the LOQ. PFNA in samples CACMW-001-160-122.25-090424-FM-R and CACMW-002-110-66.5-090424-FM-R was detected above the LOQ and had ion ratios outside 50-150% of the ion ratio of the midpoint calibration standard. Affected results are qualified 'J' as estimated. NIS peak area for the dilution runs of samples CACMW-001-110-82.25-090424-FM-R and CACMW-004-060-32.25-090524-FM-R were below 30% of the average area of the calibration standards. However, it was noted that NIS standards were not refortified in the dilution and qualification is not required.			
General			
Preparation and analysis run logs reported and complete?	X		
Bench logs and data sheets reported and complete? *(where relevant)*	X		
Comments:			
Tuning and Instrument Performance – 10% Selected Field Samples for Stage 4			
Mass Calibration and Mass Calibration Verification performed prior to initial calibration	X		
Verify the peak apex for each mass did not shift more than 0.2 Da (or amu) from the expected masses for each target analyte.	X		

	Yes	No	N/A
Comments:			
Initial Calibration – 10% Selected Field Samples for Stage 4			
Initial calibration performed at the required frequency? *(generally prior to sample analysis or after ICV/CCV failure)*	X		
Does the calibration include the minimum number of levels? *(6 for Avg. RF or linear with 5 within quantification range and 1 additional if second order)*	X		
Does the calibration meet method criteria? *(RSD or RSE < 20%)*	X		
Comments:			
Initial (Secondary Source), Continuing Calibration Verification, and Instrument Sensitivity Check – 10% Selected Field Samples for Stage 4			
Initial calibration verification (ICV) performed after initial calibration with second source standard?	X		
ICV within method criteria? *(%D <30%)*	X		
Instrument Sensitivity Check (ISC) performed at least once daily prior to sample analysis?	X		
ISC within method criteria? *(%D <30%)*	X		
Continuing calibration verification (CCV) performed at the required frequency? *(bracketing all field samples and after every 10 field samples)*	X		
CCVs within method criteria? *(%D <30%)*		X	
Comments: EIS D3-NMeFOSAA PFUnA in CCV L5C_SVLC-4137 for calibration 101024-1633.b were recovered above laboratory limits. PFUnA was not reported from any associated project samples and data quality was not affected. Target analytes associated with failed EIS CCV recovery were recovered within limits and data quality was not affected. PFOA in CCV L5G_SVLC-4165 for calibration 102324-1633.b were recovered above laboratory limits. PFOA was not reported from any associated project samples and data quality was not affected.			
Instrument Blanks – 10% Selected Field Samples for Stage 4			
Instrument Blanks performed at the required frequency? (*immediately following the highest standard analyzed, daily prior to analyzing standards, after each CV, and immediately following samples with PFAS concentrations exceeding the quantification range*)	X		
IB target analyte concentrations below ½ LOQ?	X		
Comments:			
Other QC			
No other instrument-level QC failures or anomalies?		X	
Comments:			

SDG:	ZI12017
Lab Name:	Pace
Completed By:	Leslie Brooks
Date:	11/27/2024
Methods (types) reviewed	1633 (LC-MS/MS)

	Yes	No	N/A
Additional Stage 2A 1633 PFAS Checks – All Field Samples			
Ion ratios within 50-150% of ion ratio of applicable calibration standard?		X	
Extracted Internal Standard (EIS) recovery within 20-150% or laboratory limits?	X		
EIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Non-Extracted Internal Standards (NIS) peak area greater than 30% of the average area of the calibration standards or within laboratory limits?		X	
NIS retention time within 0.40 minutes of retention time of applicable standard?	X		
Laboratory Control (LCS) and Low-Level Laboratory Control Sample (LLLCS) are prepared in every preparation batch of 20 environmental samples and recovery within control limits?	X		
Bile Salt Interference Check reported and PFOS and TDCA separated by at least 1 minute	X		
Qualitative Identification Standard containing a mix of branched and linear isomers analyzed once daily prior to sample analysis?	X		
Comments:			
Several analytes were detected below the LOQ with ion ratios outside the 50-150% range. These results were not additionally qualified as they are already 'J' flagged due to being below the LOQ. PFOA in sample CACMW-008-060-16.5-090624-FM-R and PFTrDA in samples CACMW-006-160-132.25-090524-FM-R and CACMW-007-110-82.25-090624-FM-R were detected above the LOQ and had ion ratios outside 50-150% of the ion ratio of the midpoint calibration standard. Affected results are qualified 'J' as estimated. NIS peak area for the dilution runs of samples CACMW-005-110-77-090524-FM-R and CACMW-005-110-82.25-090524-FM-R were below 30% of the average area of the calibration standards. However, it was noted that NIS standards were not refortified in the dilution and qualification is not required.			
General			
Preparation and analysis run logs reported and complete?	X		
Bench logs and data sheets reported and complete? *(where relevant)*	X		
Comments:			
Tuning and Instrument Performance – 10% Selected Field Samples for Stage 4			
Mass Calibration and Mass Calibration Verification performed prior to initial calibration	X		
Verify the peak apex for each mass did not shift more than 0.2 Da (or amu) from the expected masses for each target analyte.	X		

	Yes	No	N/A
Comments:			
Initial Calibration – 10% Selected Field Samples for Stage 4			
Initial calibration performed at the required frequency? *(generally prior to sample analysis or after ICV/CCV failure)*	X		
Does the calibration include the minimum number of levels? *(6 for Avg. RF or linear with 5 within quantification range and 1 additional if second order)*	X		
Does the calibration meet method criteria? *(RSD or RSE < 20%)*	X		
Comments:			
Initial (Secondary Source), Continuing Calibration Verification, and Instrument Sensitivity Check – 10% Selected Field Samples for Stage 4			
Initial calibration verification (ICV) performed after initial calibration with second source standard?	X		
ICV within method criteria? *(%D <30%)*	X		
Instrument Sensitivity Check (ISC) performed at least once daily prior to sample analysis?	X		
ISC within method criteria? *(%D <30%)*	X		
Continuing calibration verification (CCV) performed at the required frequency? *(bracketing all field samples and after every 10 field samples)*	X		
CCVs within method criteria? *(%D <30%)*	X		
Comments:			
Instrument Blanks – 10% Selected Field Samples for Stage 4			
Instrument Blanks performed at the required frequency? (*immediately following the highest standard analyzed, daily prior to analyzing standards, after each CV, and immediately following samples with PFAS concentrations exceeding the quantification range*)	X		
IB target analyte concentrations below ½ LOQ?	X		
Comments:			
Other QC			
No other instrument-level QC failures or anomalies?	X		
Comments:			

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Appendix H

EnviroFlux Report

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MASS FLUX MEASUREMENT AT EIELSON AFB DGI

Prepared for

Arcadis

Prepared by

EnviroFlux, LLC

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Suite 20
Gainesville, FL 32601

Phone: 352-554-5296

2024

Passive Flux Meters (PFMs) were used to measure the ambient groundwater flux and PFAS mass flux at Eielson AFB DGI site in Alaska. For a description of PFM fundamentals see Hatfield et al., 2004 and for field implementation see Annable et al., 2005. Flux refers to the mass of water and contaminants flowing per unit area at a measured point in a well screened over a given period. Based upon this general definition, the units associated with mass flux are determined as:

$$flux = \frac{mass}{area \cdot time} = \left[\frac{M}{L^2 T}\right]$$

where the terms M, L, and T represent the base units of mass, length, and time respectively. For consistency with common practice, the ambient groundwater flux will be discussed in terms of the specific discharge or Darcy velocity, which is the volumetric water flux (or flowrate) through a specified cross-sectional area. The resulting units are L/T and for this report the Darcy velocity will be represented with the units of cm/day. For this report the PFAS flux will be discussed in terms of mass flux (M/L^2T)) and represented with the units of $ug/m^{2/}day$.

Based on previous site assessments, the expected contaminants at the site included Per- and Polyfluoroalkyl Substances (PFAS). These were evaluated in 24 wells: MW-001-60/110/160, MW-002-60/110/160, MW-003-60/110/160, MW-004-60/110/160, MW-005-60/110/160, MW-006-60/110/160, MW-007-60/110/160, and MW-008-60/110/160.

A total of 216 PFMs were constructed and shipped to the site for deployment across two rounds. In the first round, 120 PFMs were deployed, followed by 96 PFMs in the second round. Each PFM was constructed to a length of 5 feet and designed with alternating layers of activated carbon and resin to quantify both Darcy flux and PFAS fluxes during the same deployment. The PFMs featured four alternating layers, with each sampling interval being 15 inches thick.

In the first round, PFMs were deployed from 07/31/2024 to 08/02/2024 and retrieved between 08/14/2024 and 08/17/2024, resulting in deployment durations ranging from approximately 14 to 16 days. In the second round, PFMs were deployed from 08/21/2024 to 08/23/2024 and retrieved between 09/04/2024 and 09/06/2024, with deployment durations of approximately 14 days.

All wells have a 2-inch diameter. The results are presented in Figures 1 through 58 and Tables 1 through 5. Figures 1 through 8 illustrate flux profiles for both Darcy flux and PFAS flux, as directly measured by the PFMs. Detailed data are summarized in Table 1 (Appendix A), with well average values provided in Table 4 (Appendix A).

Figure 9 shows the average Darcy velocity for each well, while Figures 10 through 33 present the average mass fluxes for each well. The flux average concentrations can be indirectly calculated based on the measured PFAS and Darcy fluxes. The resulting data are presented in Table 2 (Appendix A), with the well average values summarized in Table 5 (Appendix A).

PFAS mass flux values, measured at the local scale (approximately 2.5-foot vertical intervals), were integrated over the vertical profile and represented as mass discharge per unit width of aquifer (µg/m/day) in Table 3 (Appendix A). Figures 34 through 58 (Appendix A) illustrate the flux of each PFAS constituent for each well.

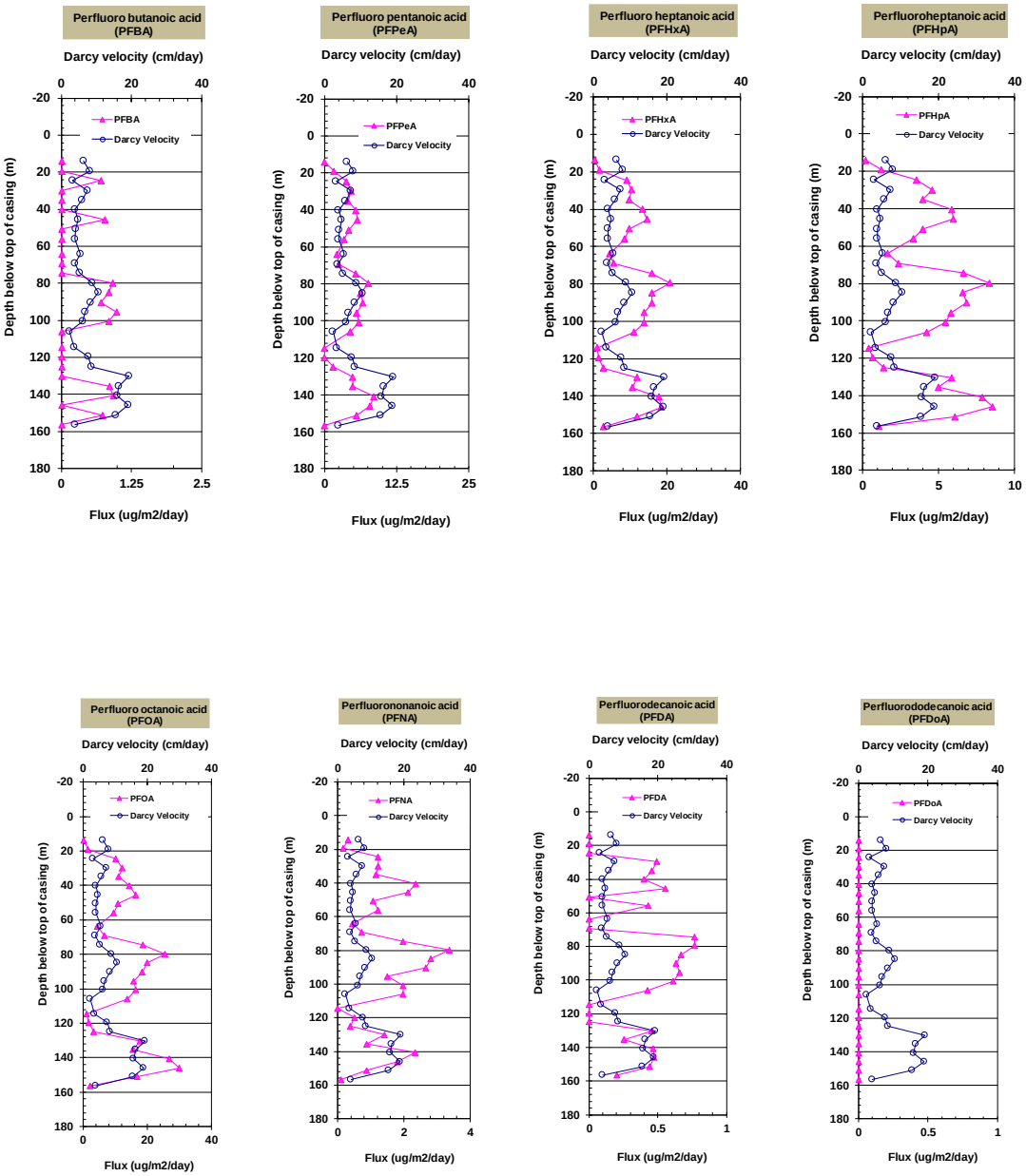

Figure 1. Contaminant and Darcy flux profiles for well MW-001-060 & 110 & 160

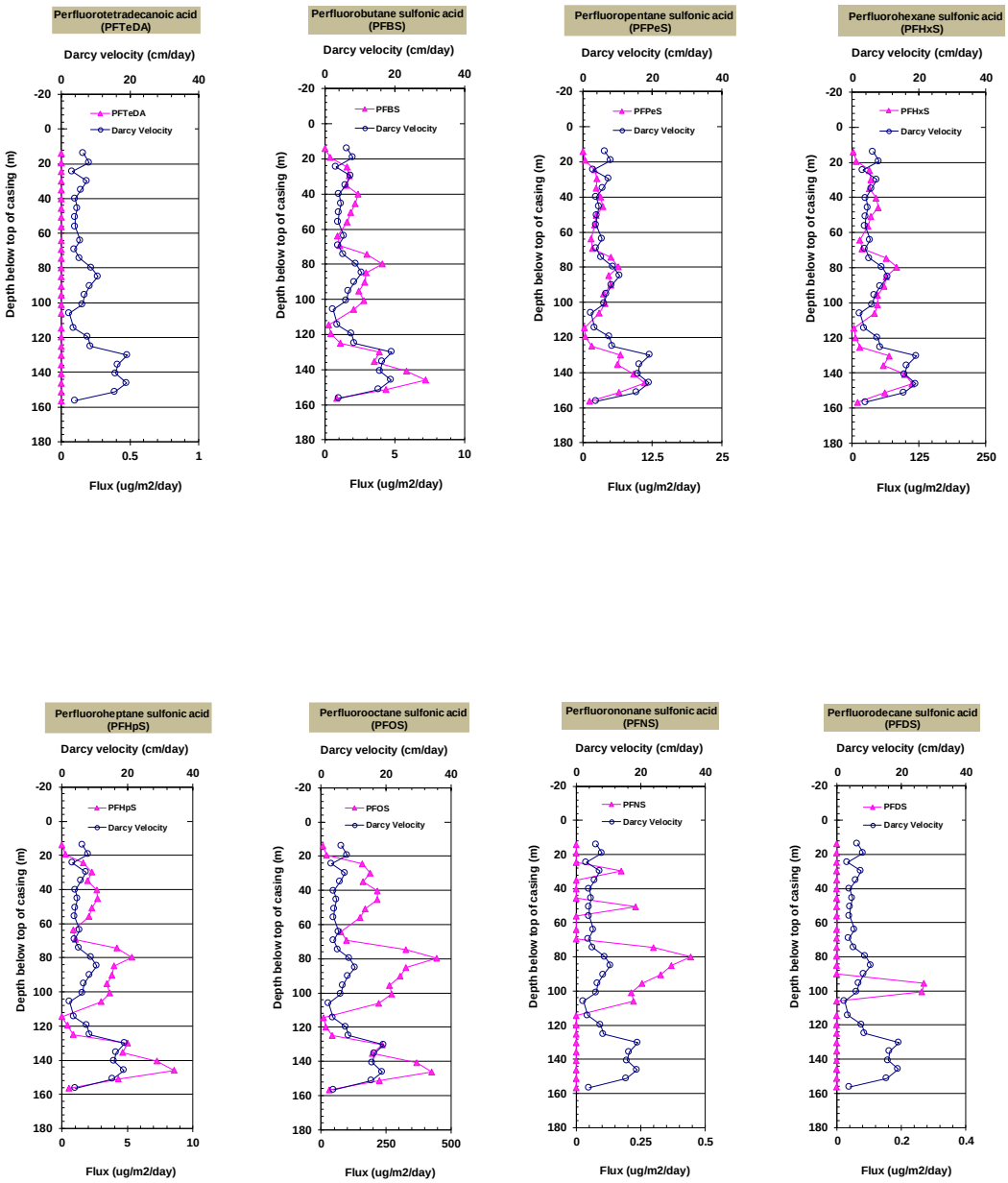

Figure 1. Contaminant and Darcy flux profiles for well MW-001-060 & 110 & 160 (continued)

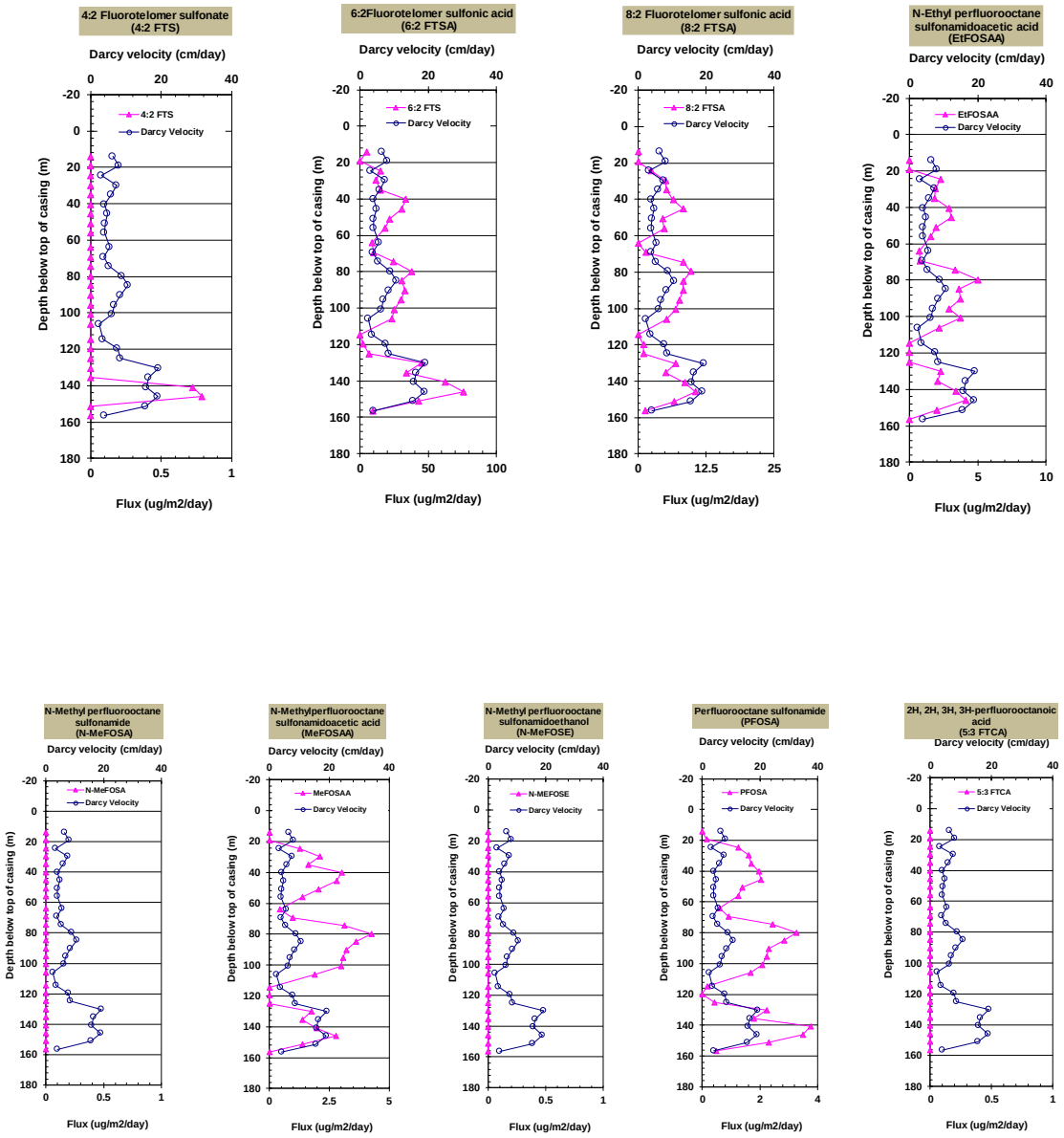

Figure 1. Contaminant and Darcy flux profiles for well MW-001-060 & 110 & 160 (continued)

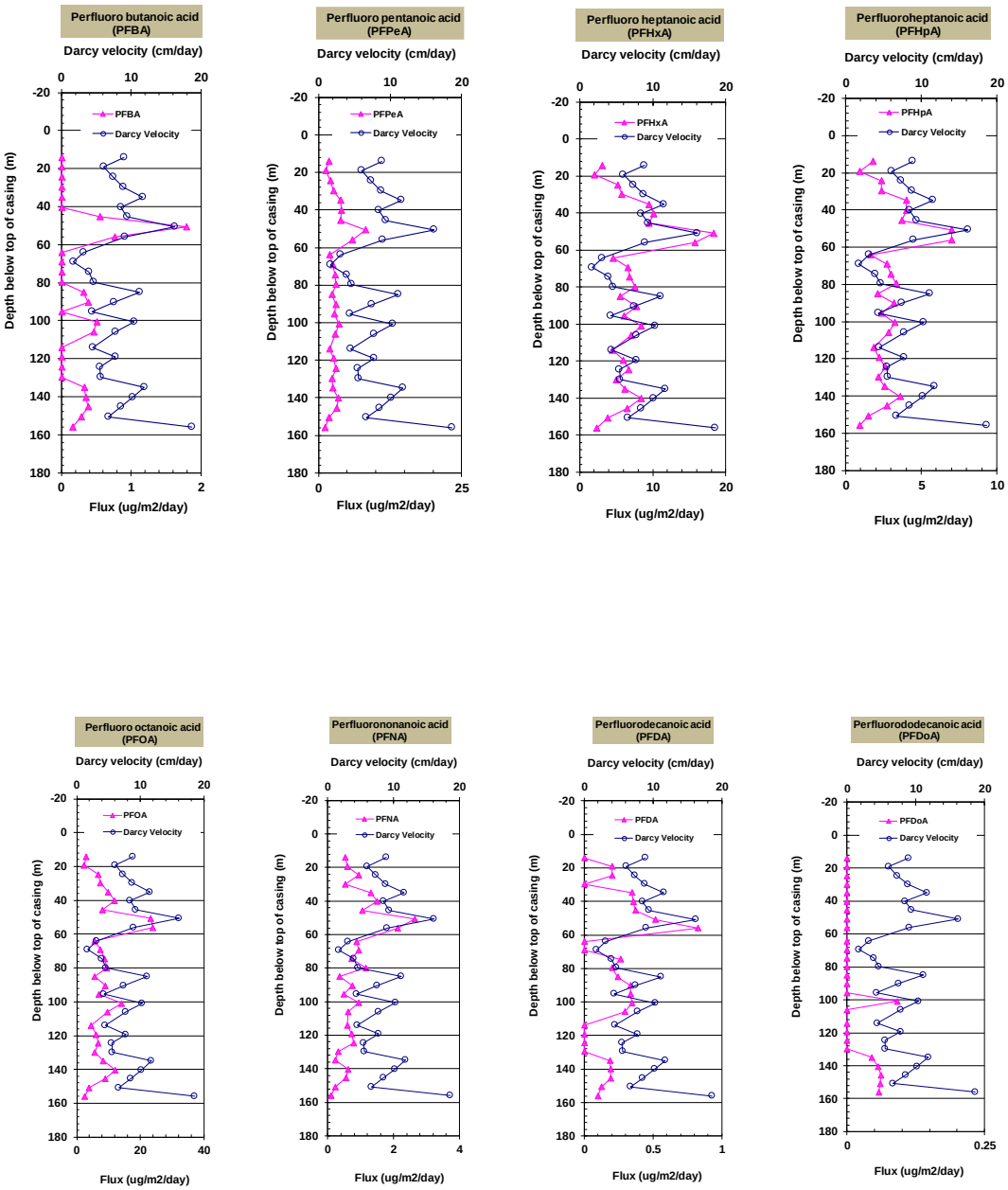

Figure 2. Contaminant and Darcy flux profiles for well MW-002-060 & 110 & 160

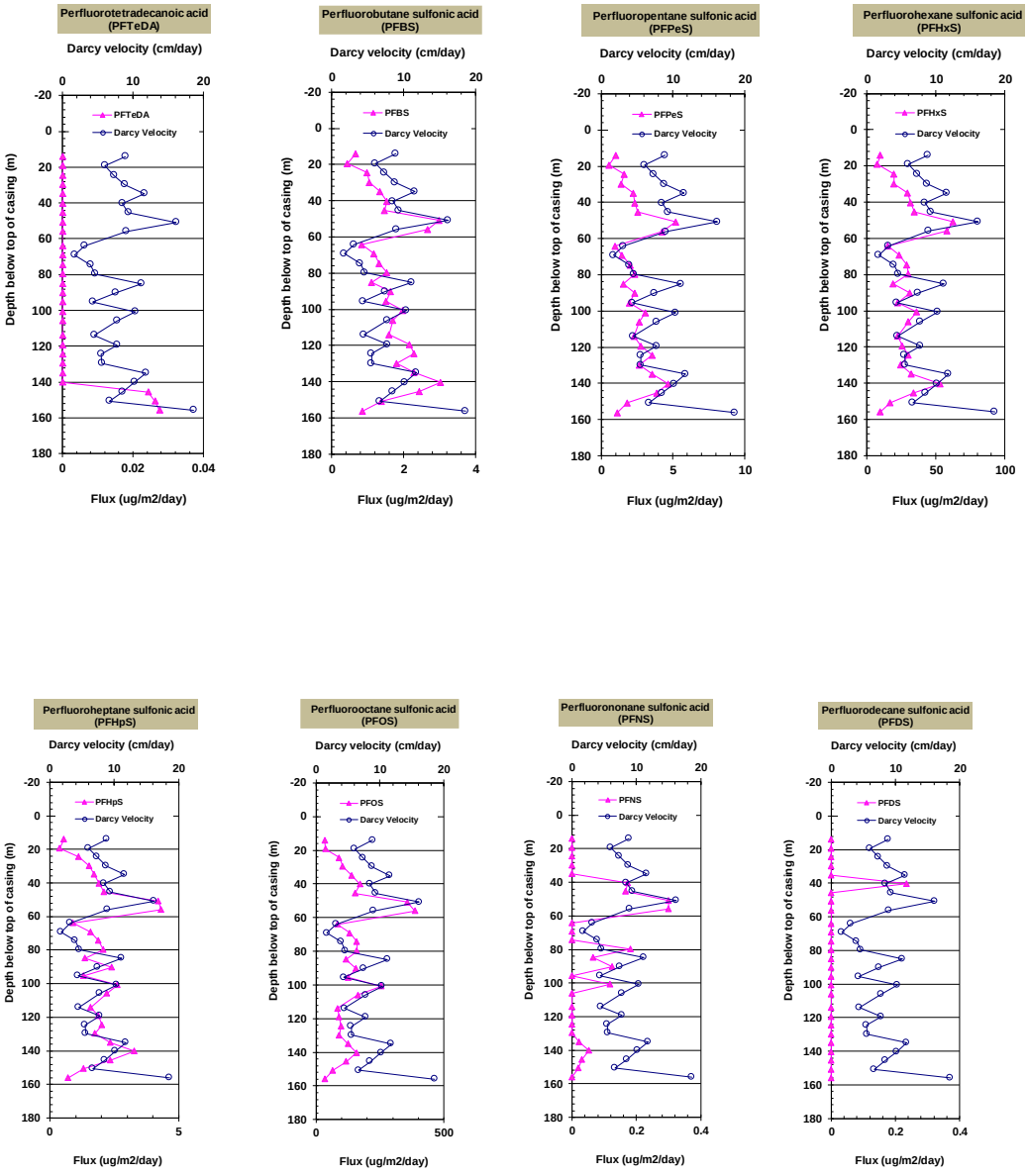

Figure 2. Contaminant and Darcy flux profiles for well MW-002-060 & 110 & 160 (continued)

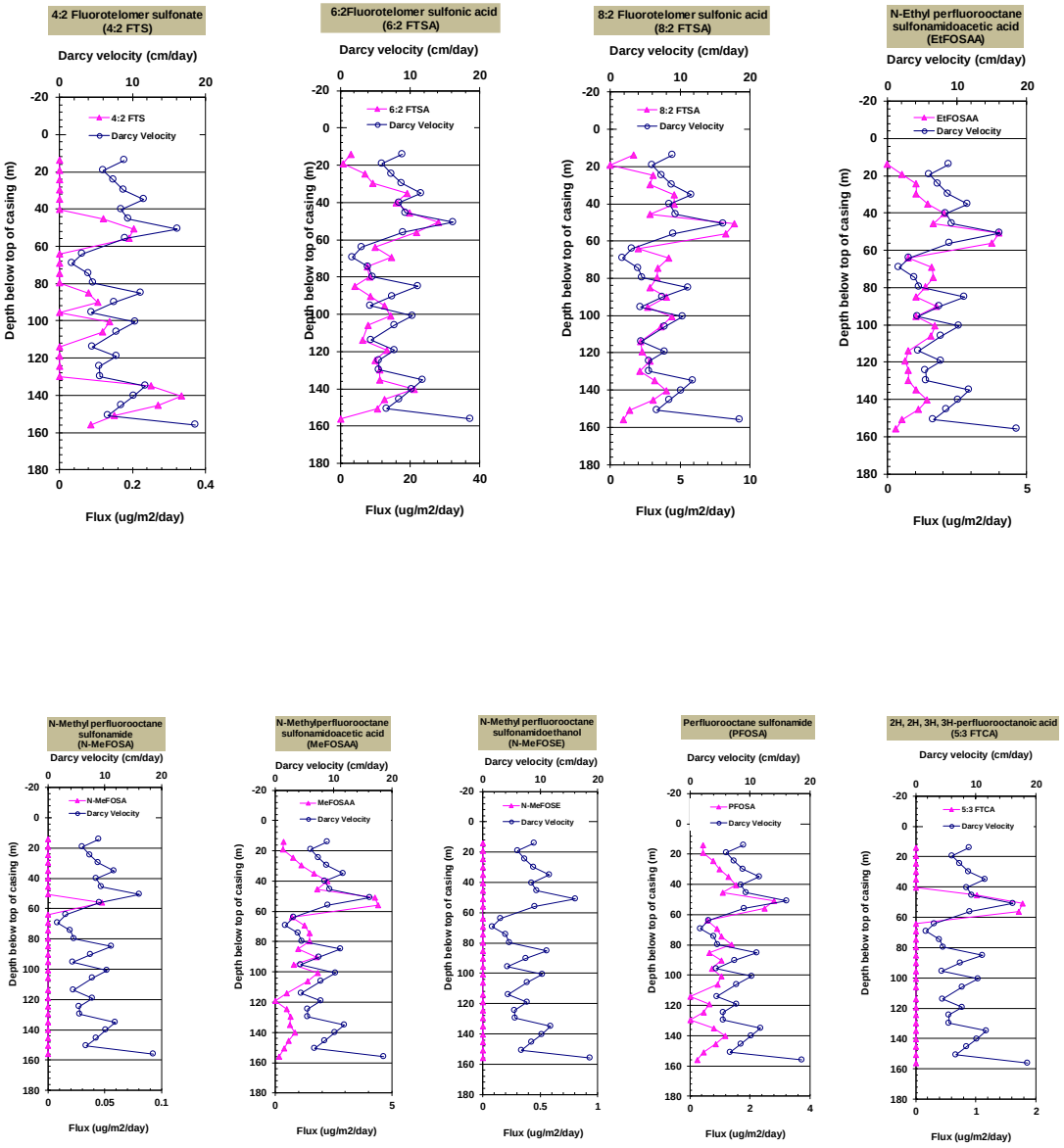

Figure 2. Contaminant and Darcy flux profiles for well MW-002-060 & 110 & 160 (continued)

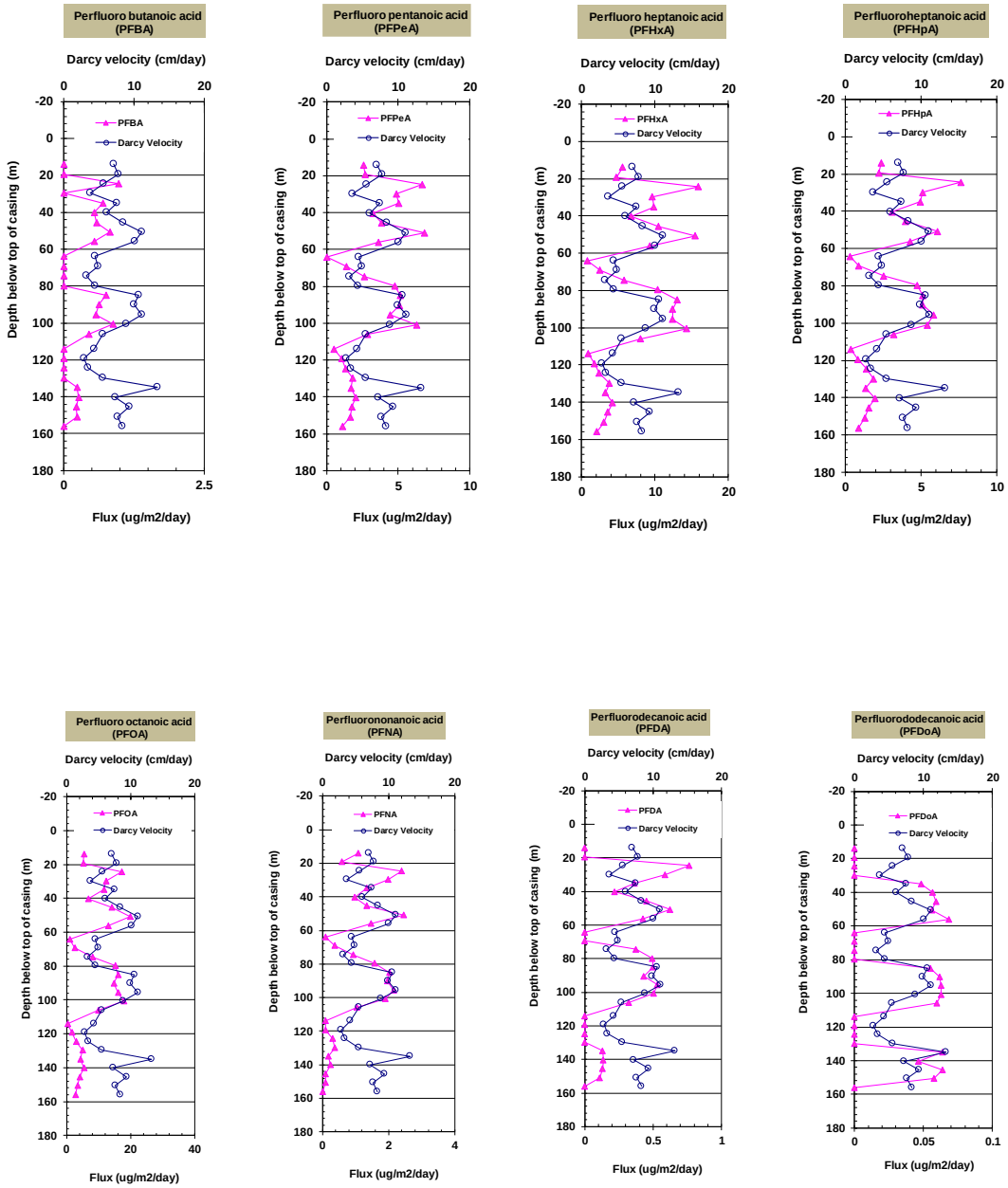

Figure 3. Contaminant and Darcy flux profiles for well MW-003-060 & 110 & 160

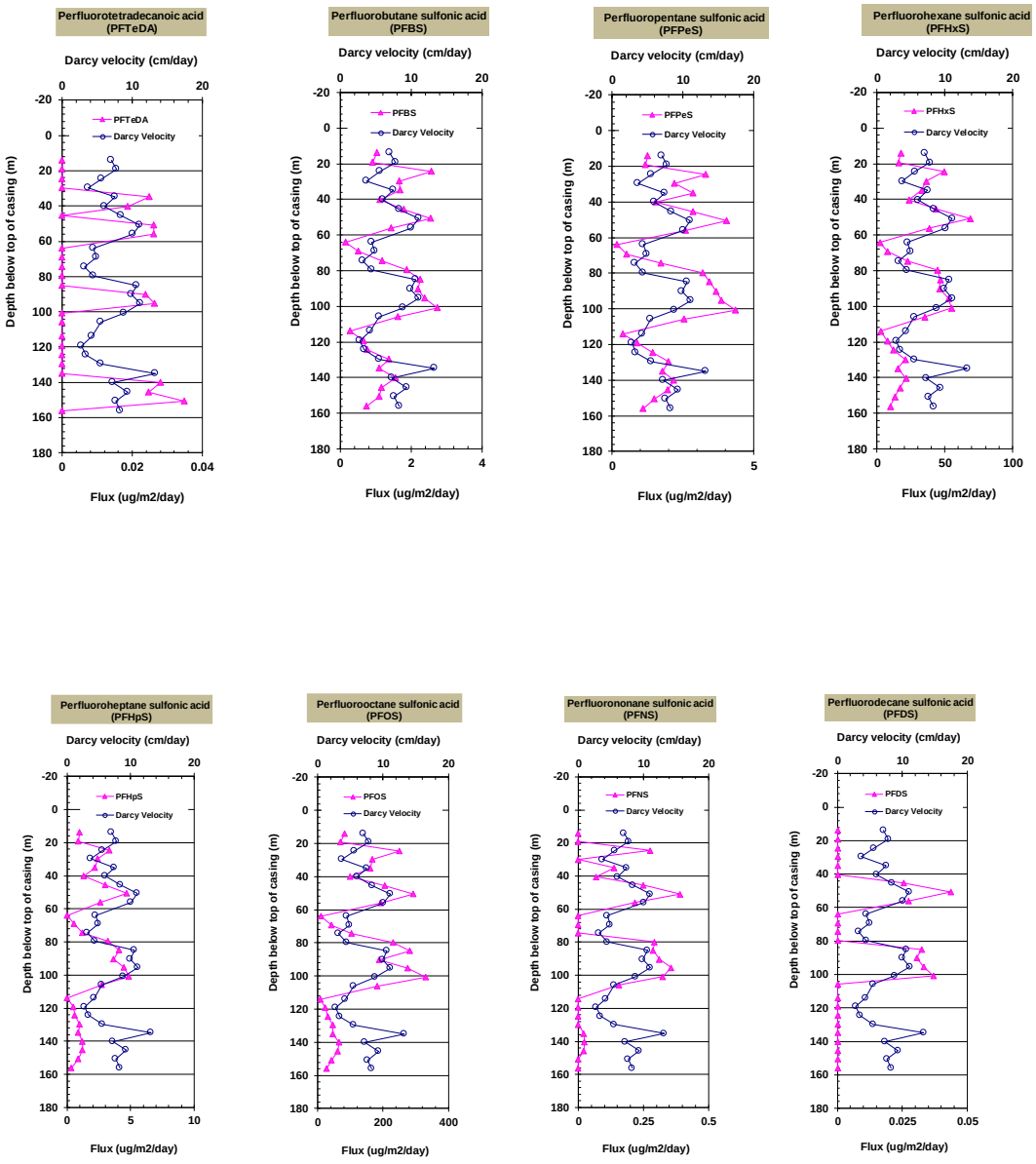

Figure 3. Contaminant and Darcy flux profiles for well MW-003-060 & 110 & 160 (continued)

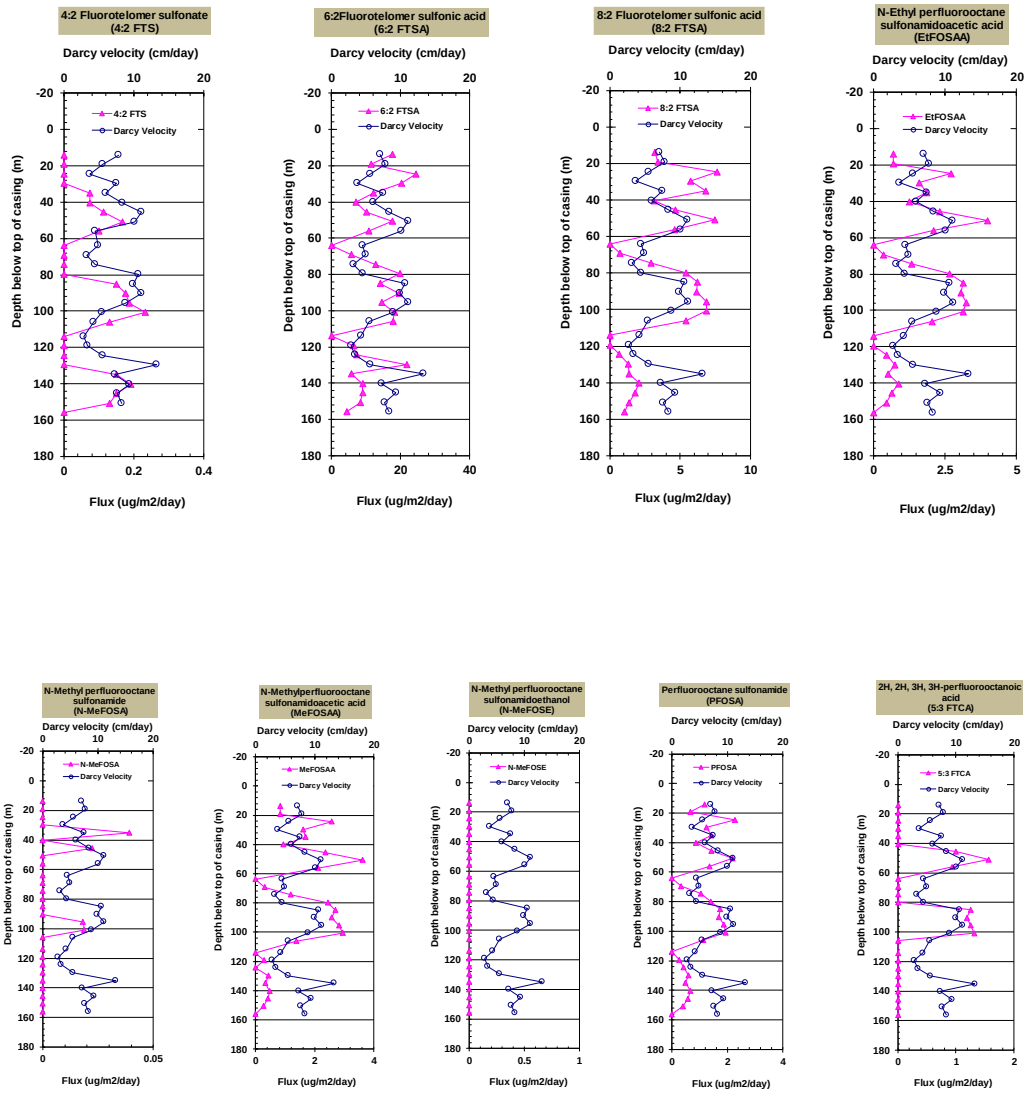

Figure 3. Contaminant and Darcy flux profiles for well MW-003-060 & 110 & 160 (continued)

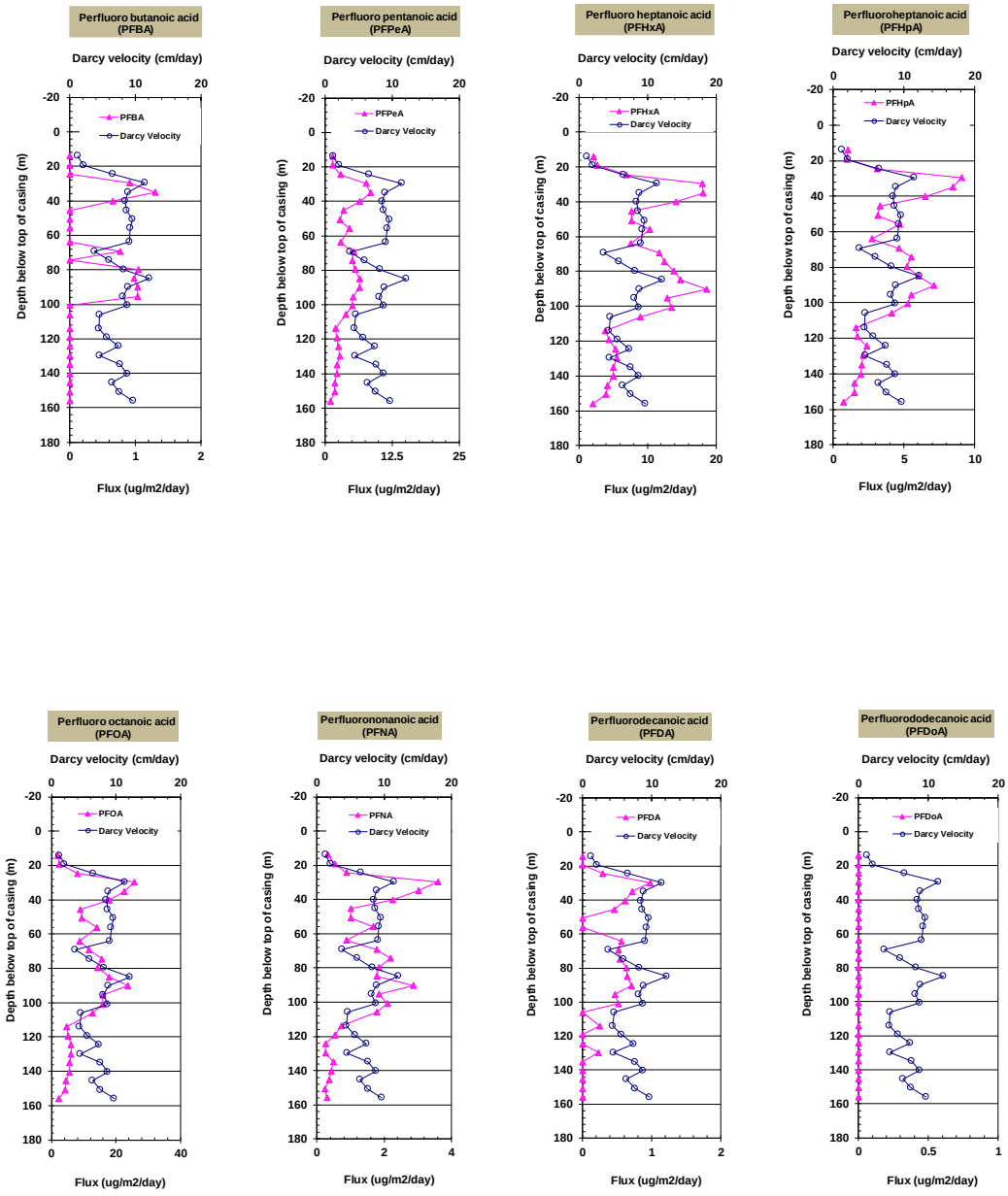

Figure 4. Contaminant and Darcy flux profiles for well MW-004-060 & 110 & 160

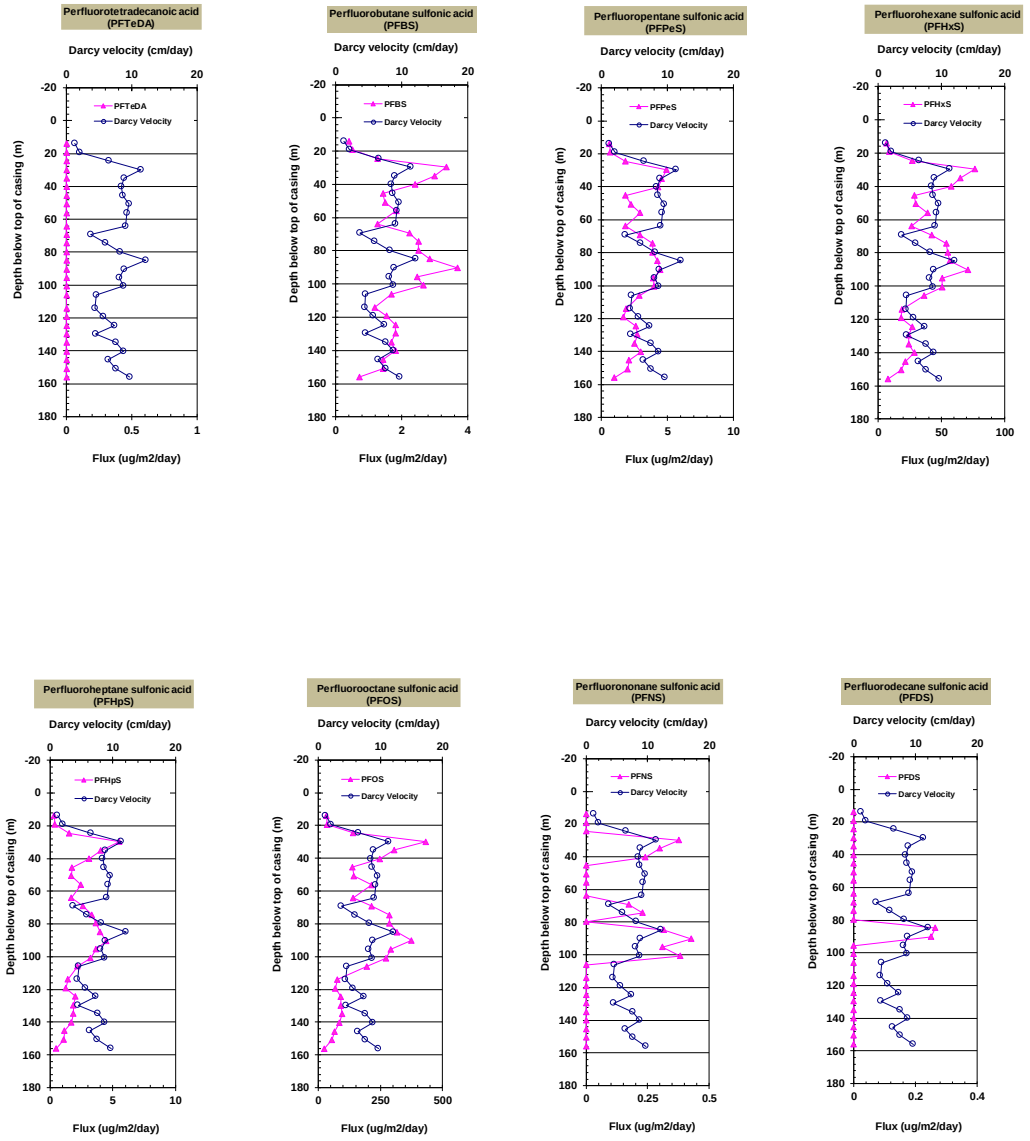

Figure 4. Contaminant and Darcy flux profiles for well MW-004-060 & 110 & 160 (continued)

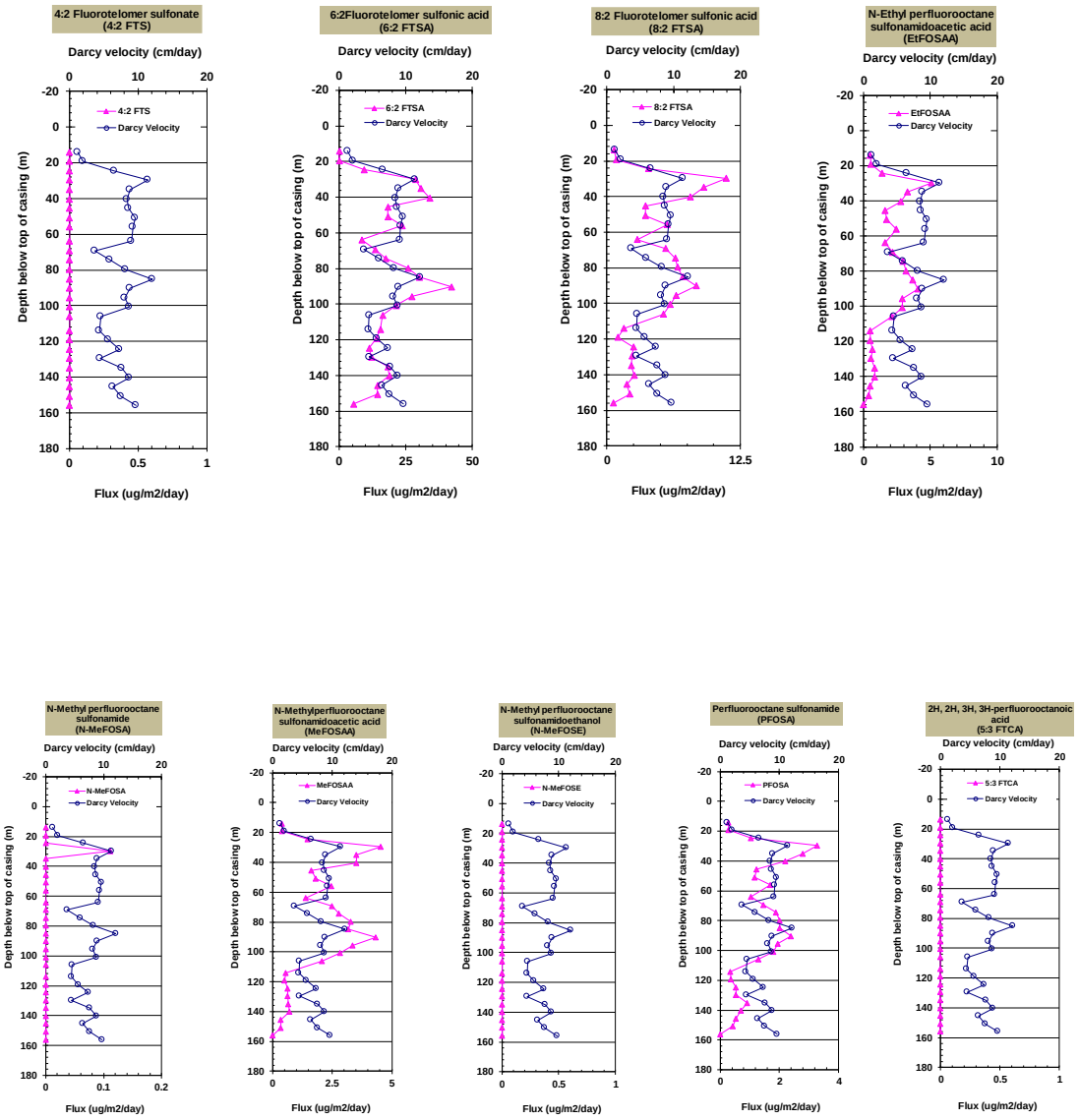

Figure 4. Contaminant and Darcy flux profiles for well MW-004-060 & 110 & 160 (continued)

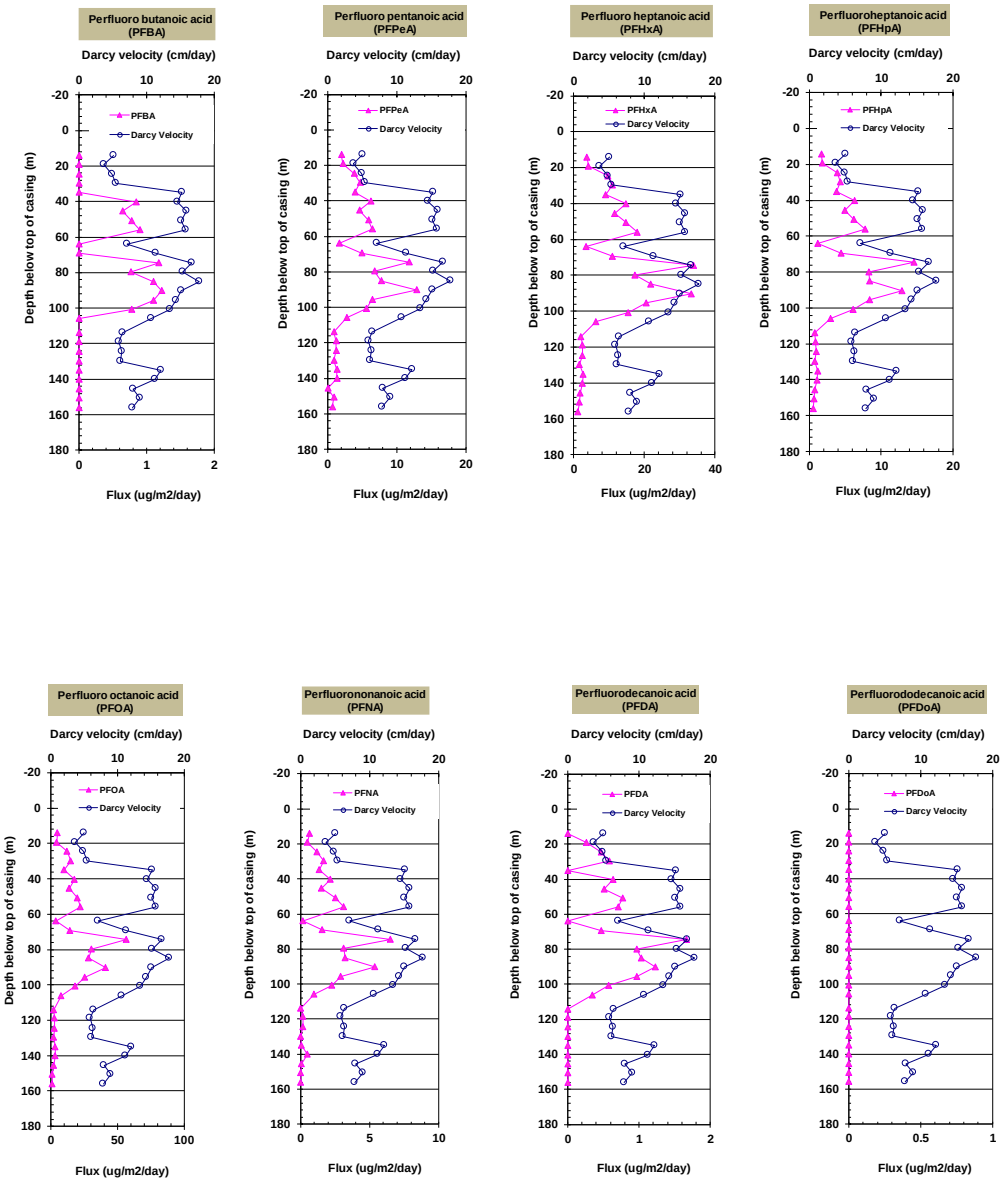

Figure 5. Contaminant and Darcy flux profiles for well MW-005-060 & 110 & 160

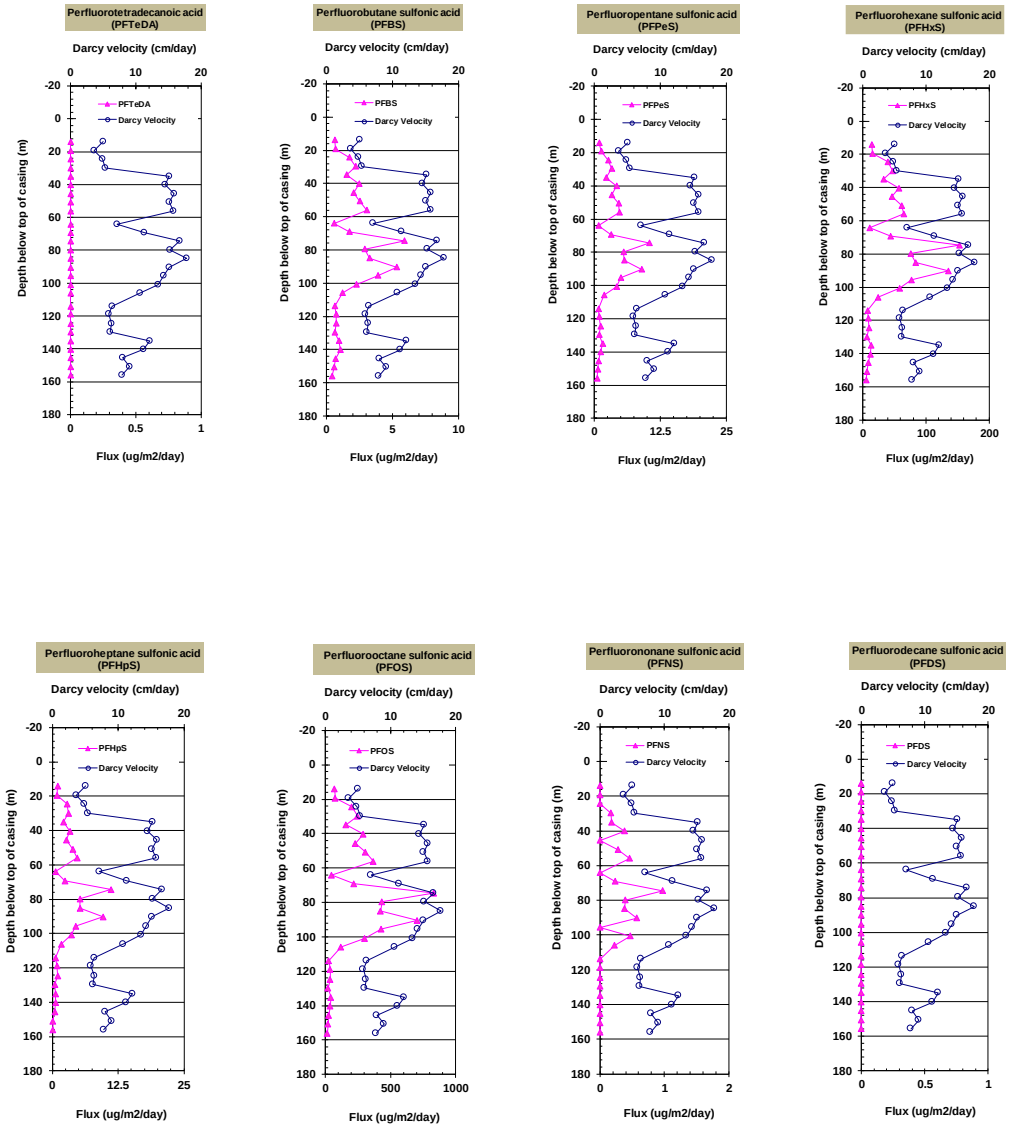

Figure 5. Contaminant and Darcy flux profiles for well MW-005-060 & 110 & 160 (continued)

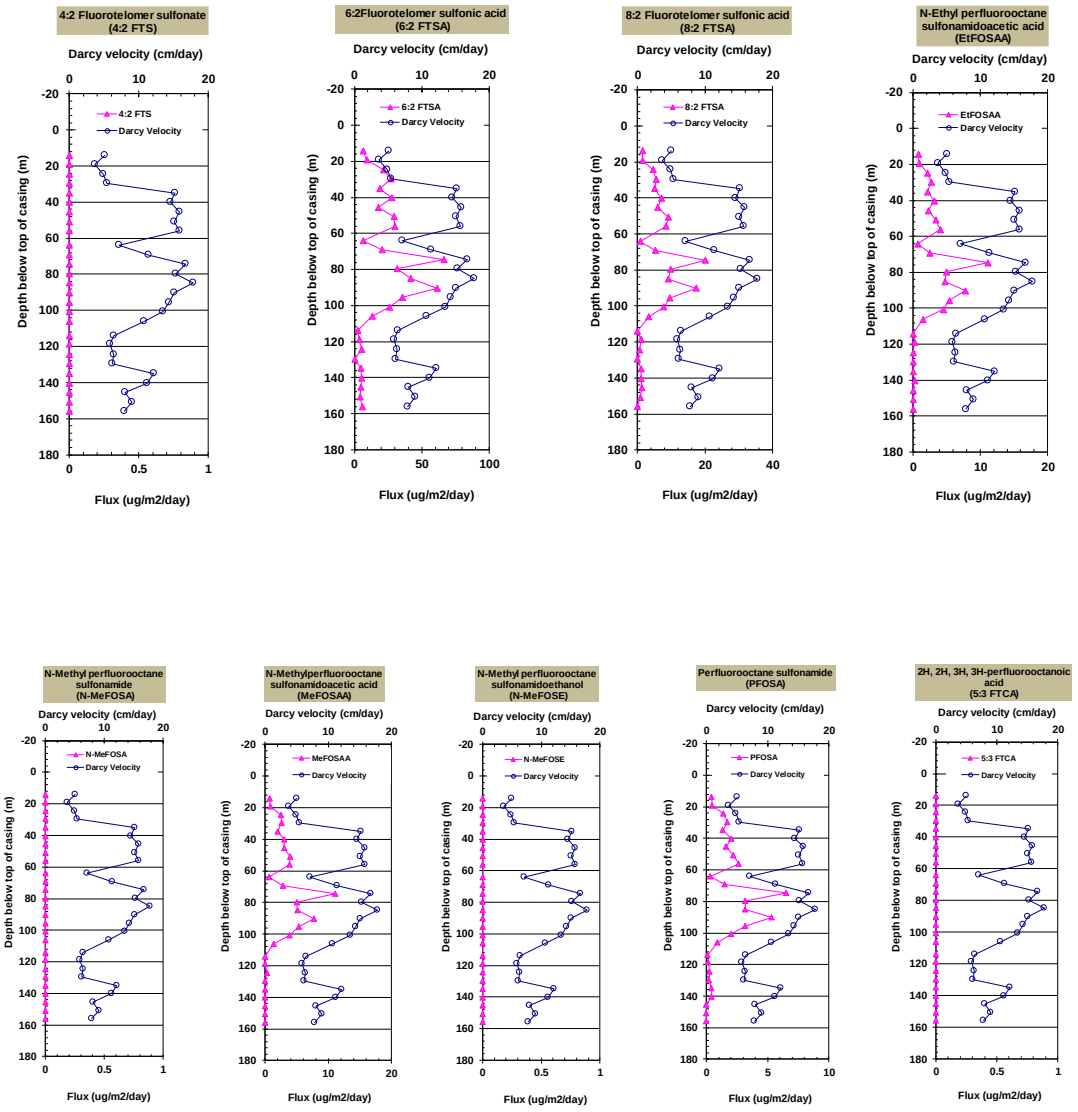

Figure 5. Contaminant and Darcy flux profiles for well MW-005-060 & 110 & 160 (continued)

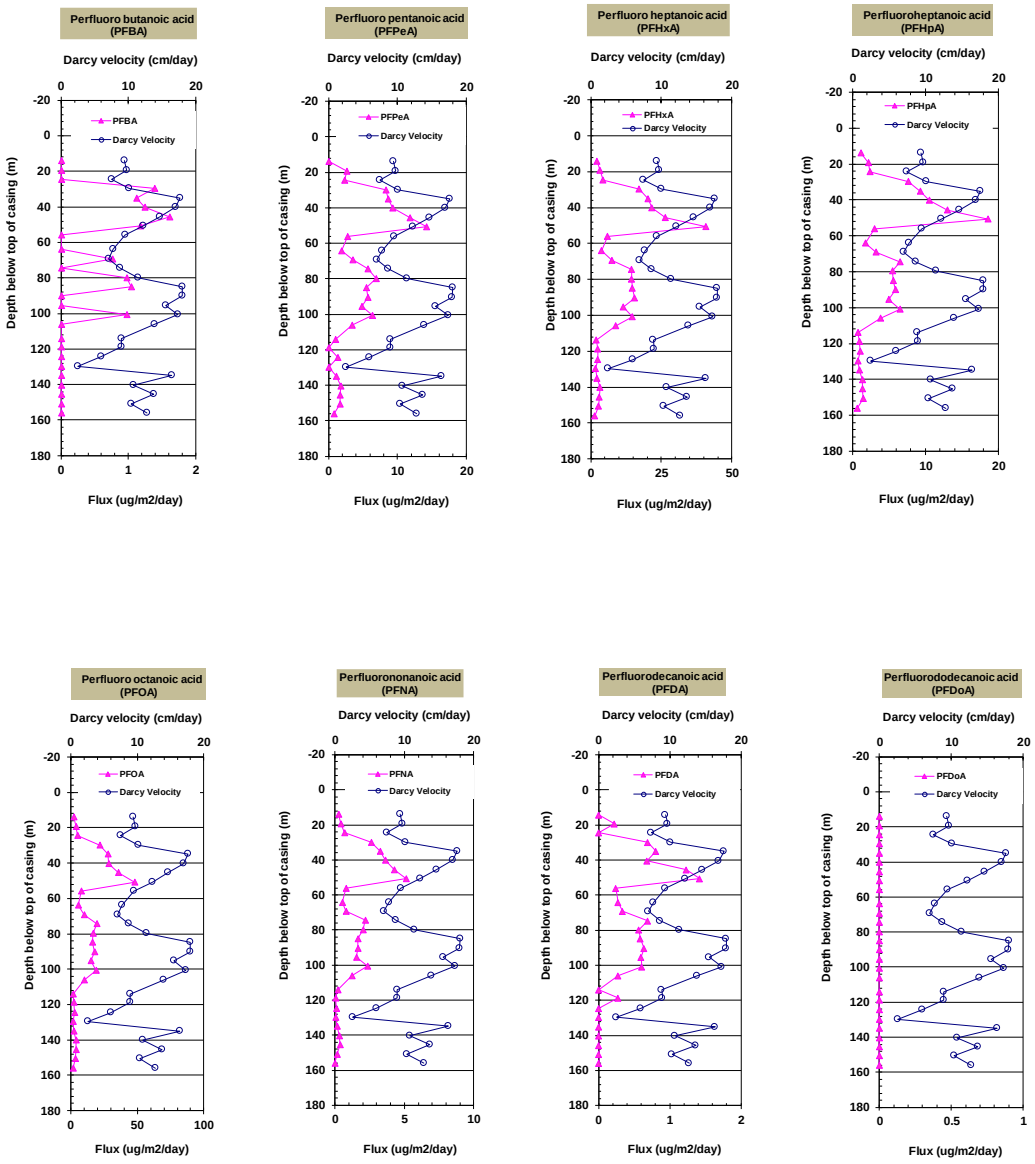

Figure 6. Contaminant and Darcy flux profiles for well MW-006-060 & 110 & 160

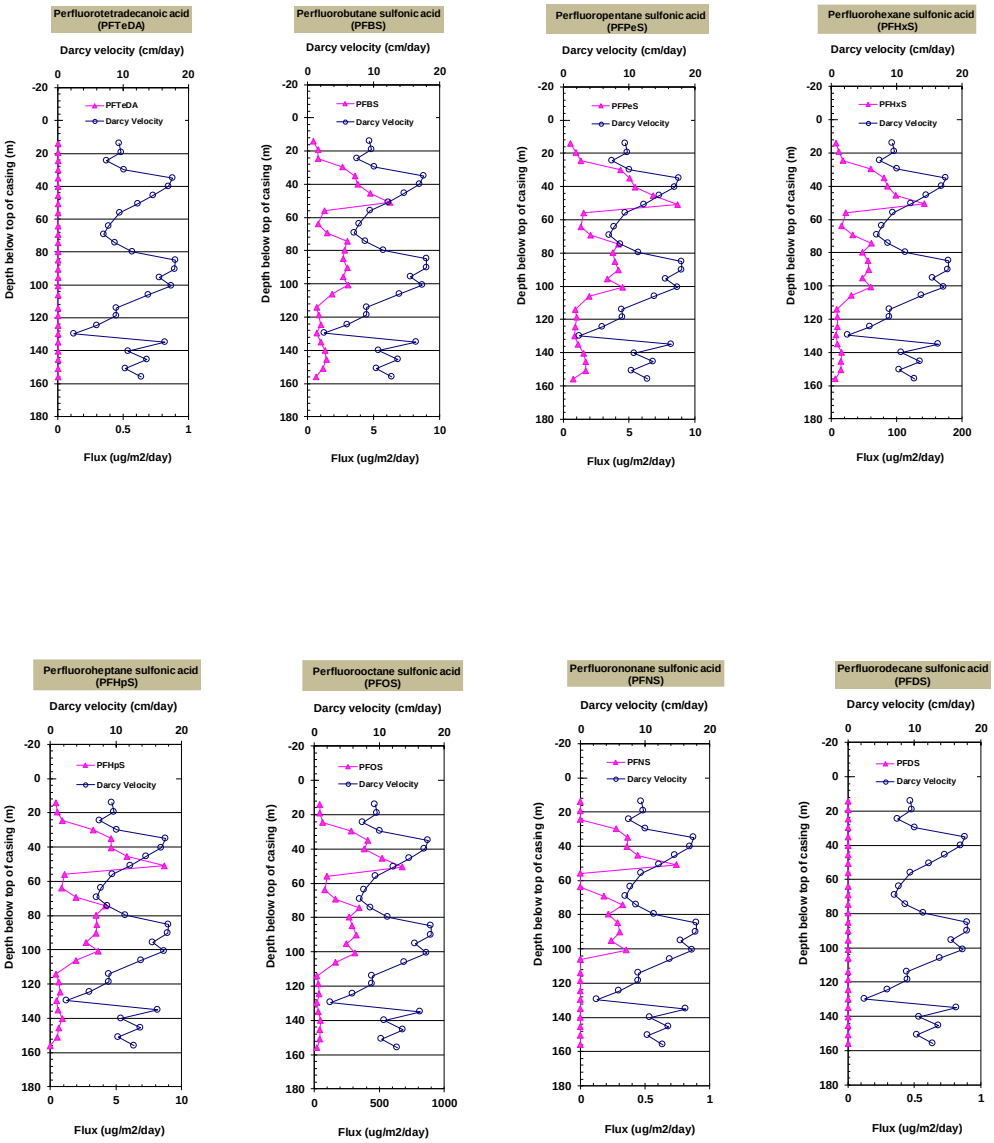

Figure 6. Contaminant and Darcy flux profiles for well MW-006-060 & 110 & 160 (continued)

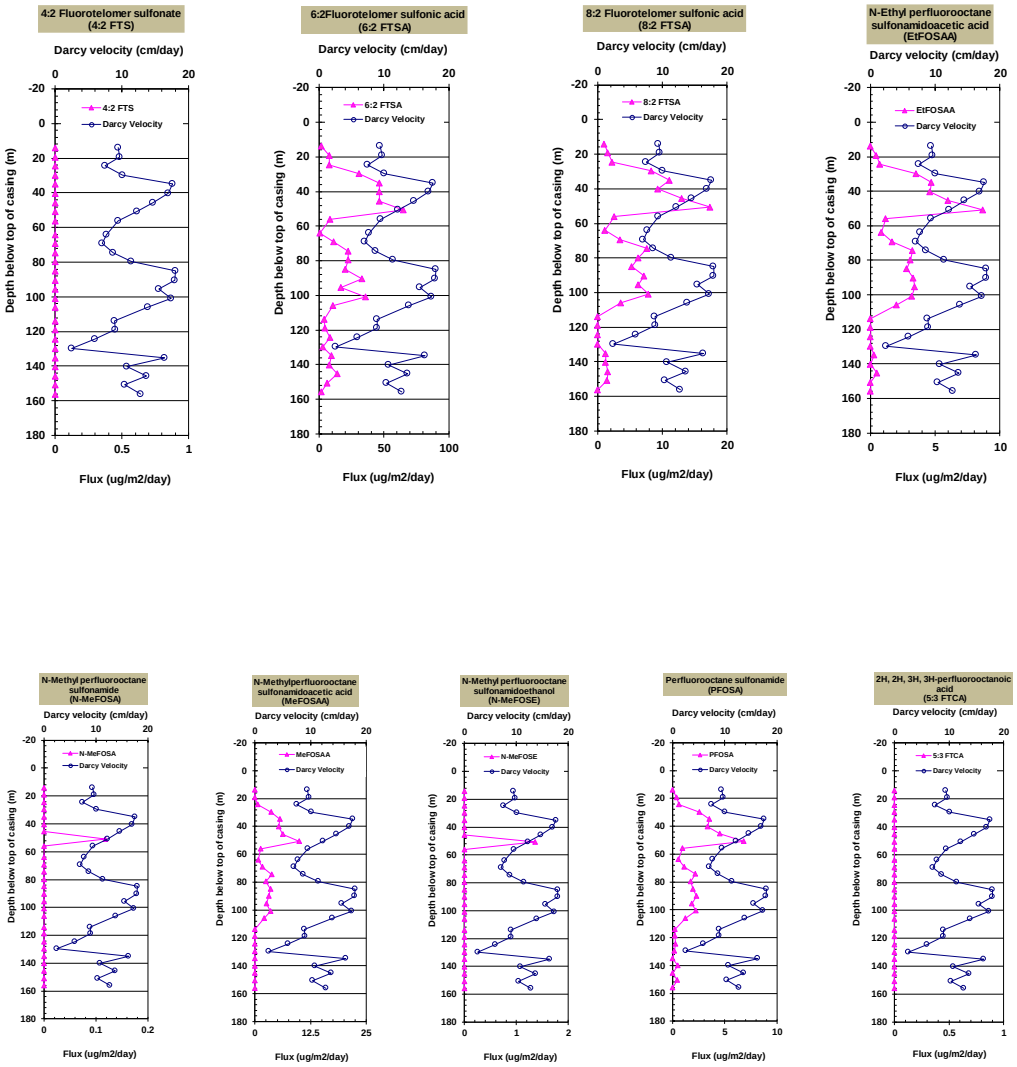

Figure 6. Contaminant and Darcy flux profiles for well MW-006-060 & 110 & 160 (continued)

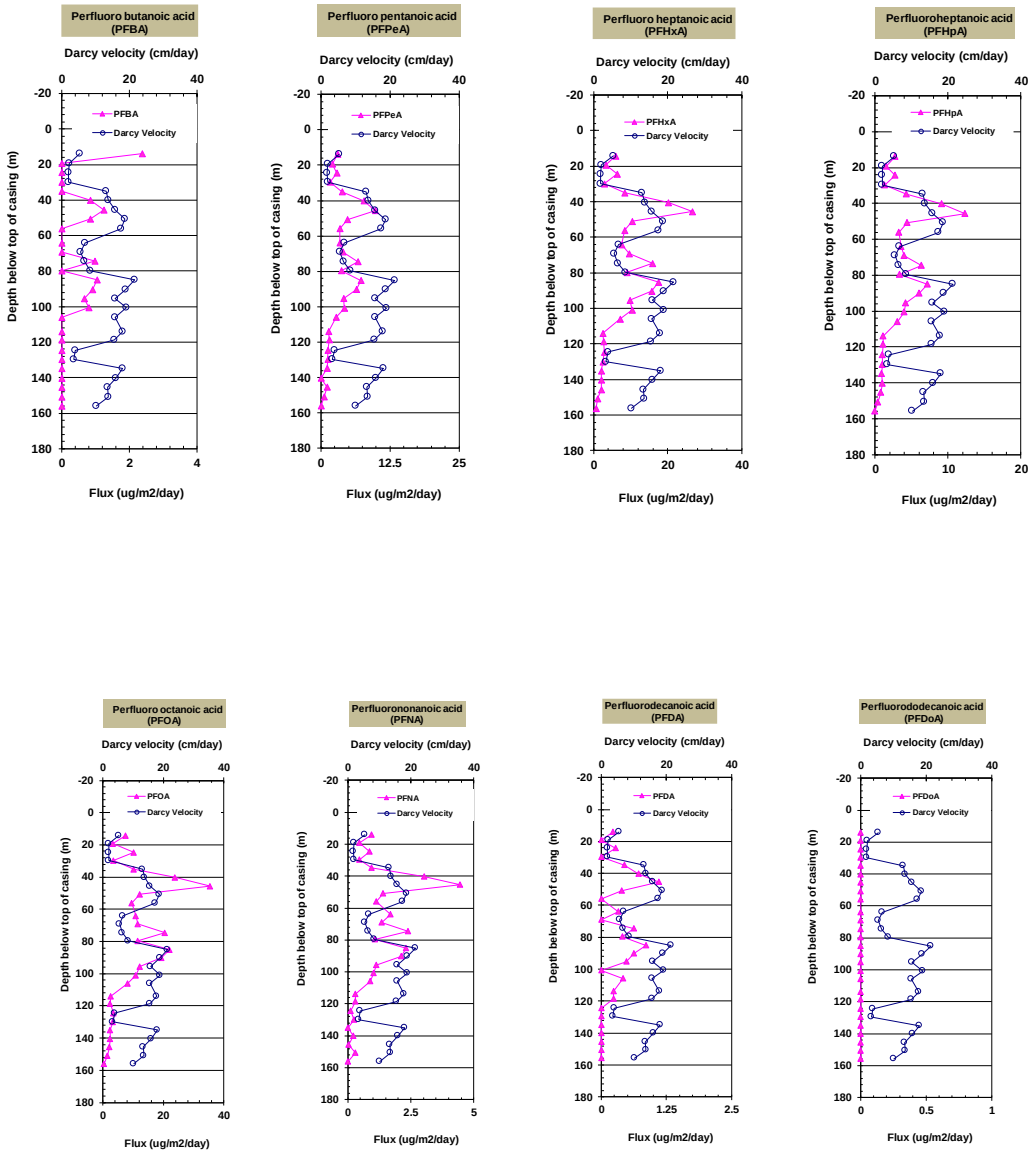

Figure 7. Contaminant and Darcy flux profiles for well MW-007-060 & 110 & 160

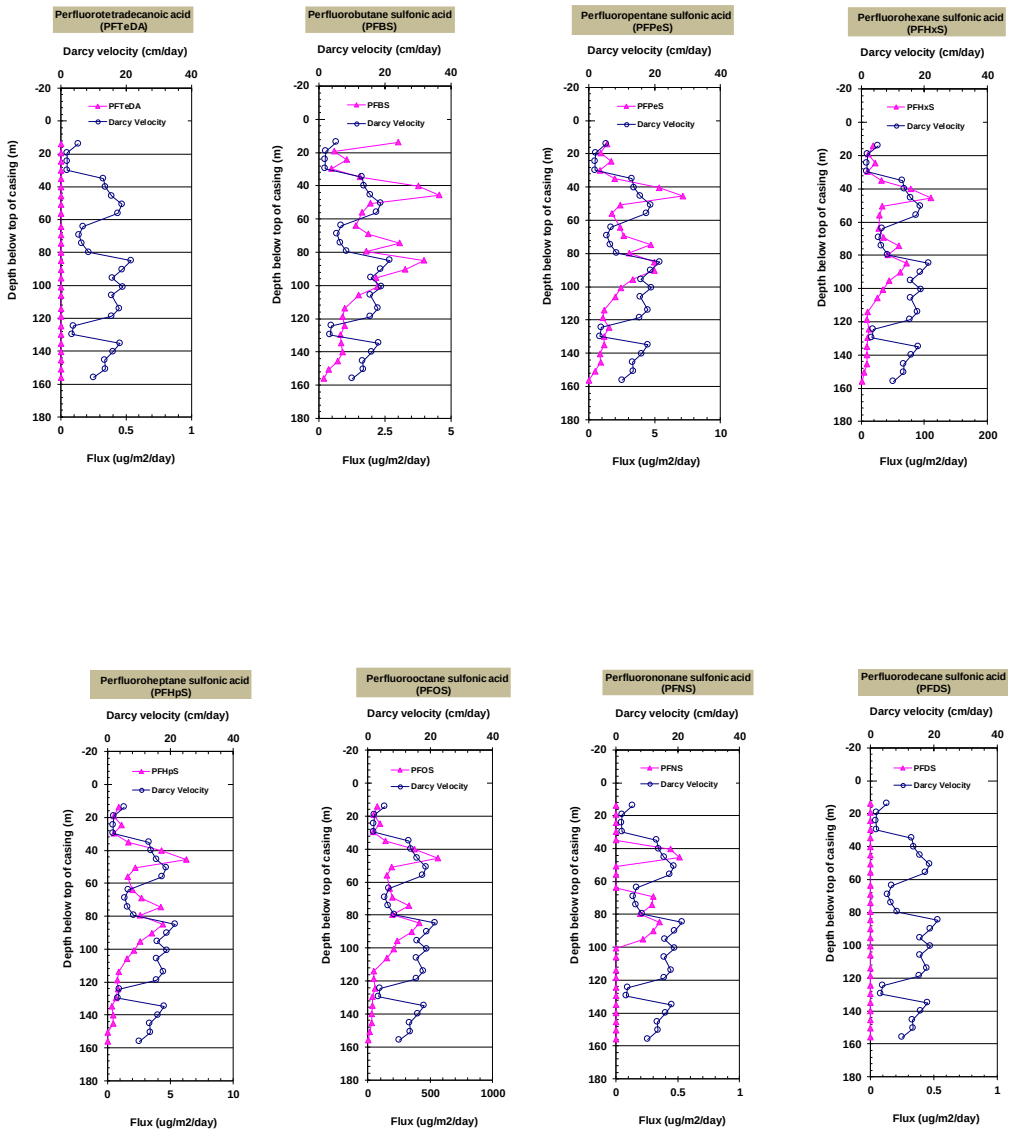

Figure 7. Contaminant and Darcy flux profiles for well MW-007-060 & 110 & 160 (continued)

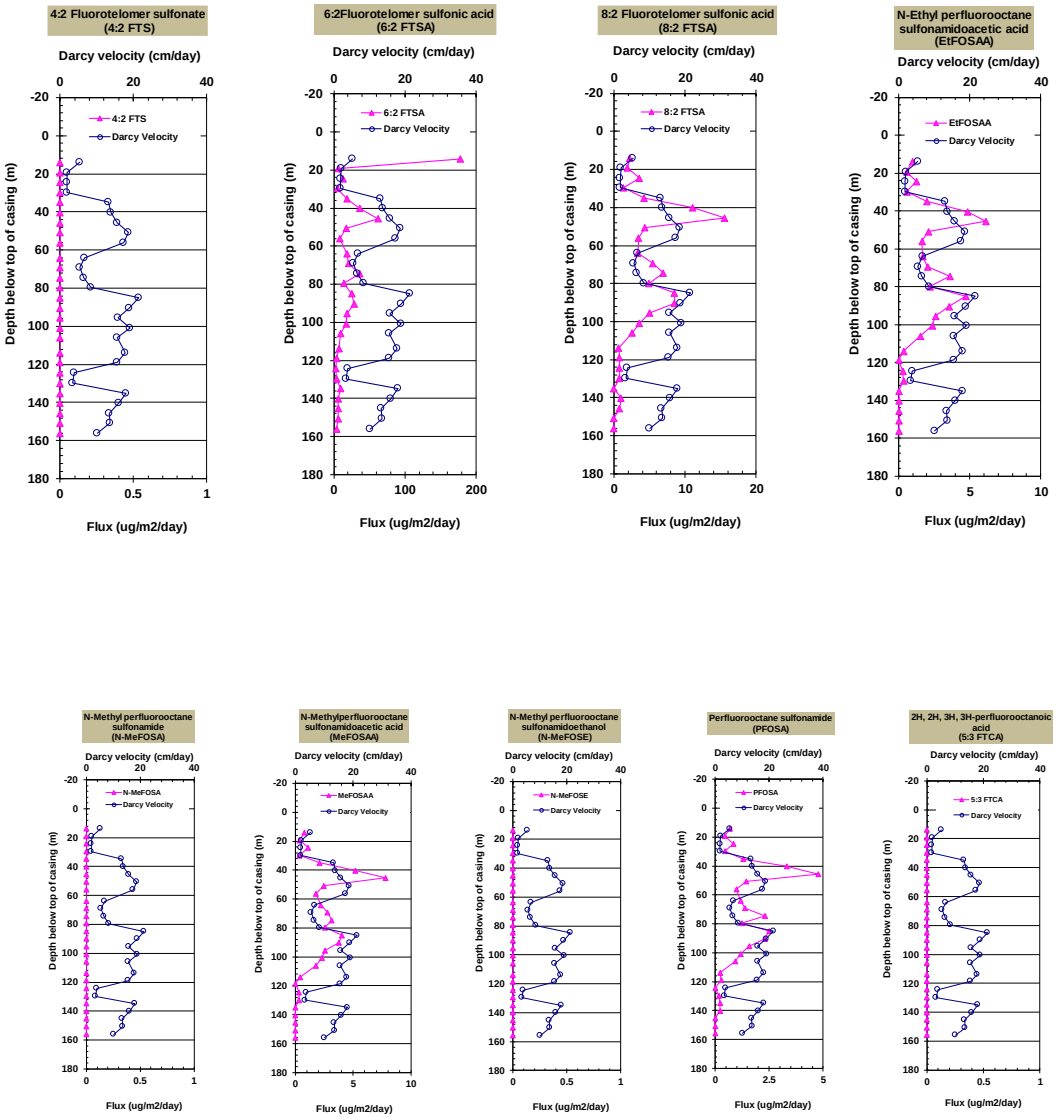

Figure 7. Contaminant and Darcy flux profiles for well MW-007-060 & 110 & 160 (continued)

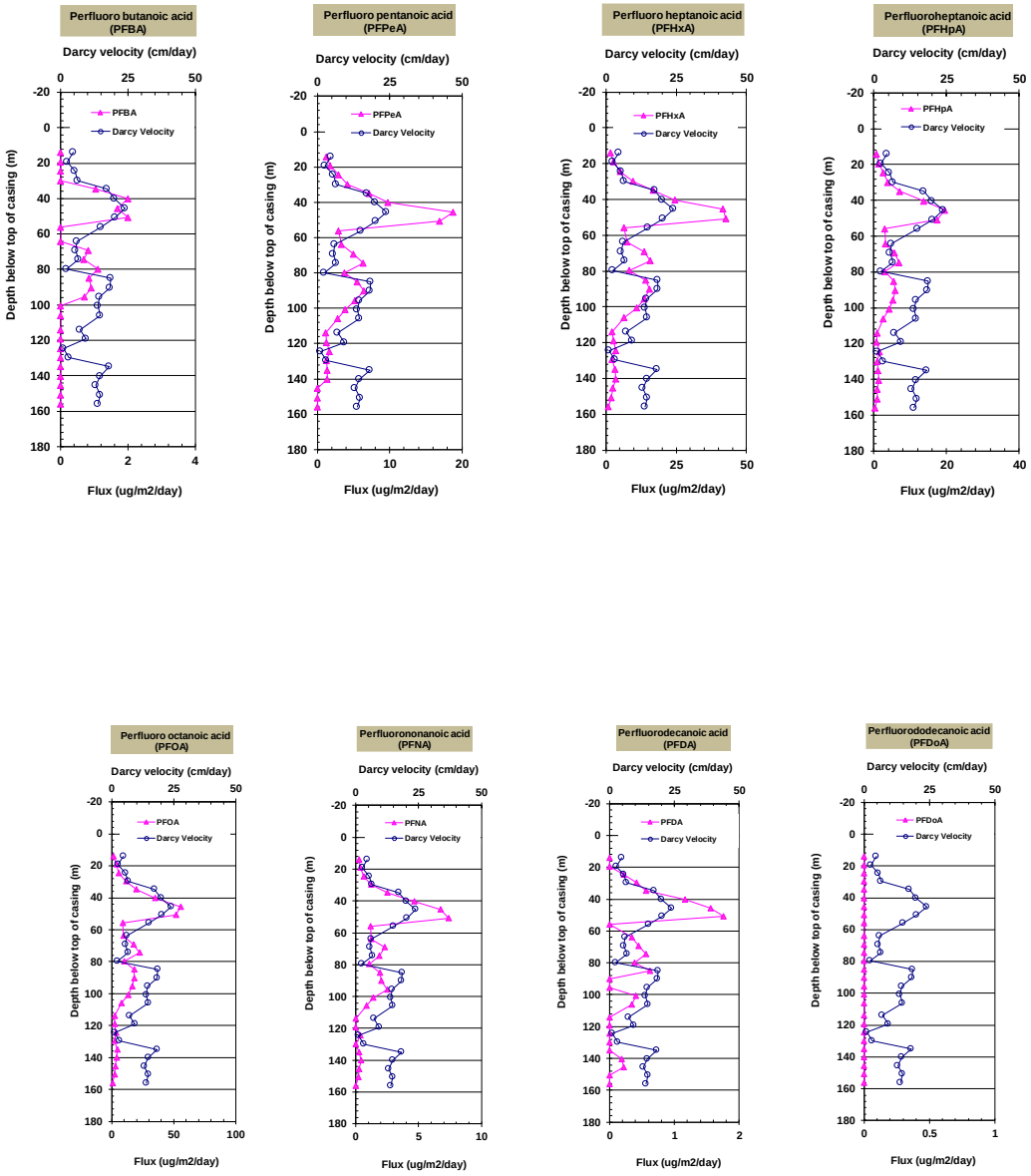

Figure 8. Contaminant and Darcy flux profiles for well MW-008-060 & 110 & 160

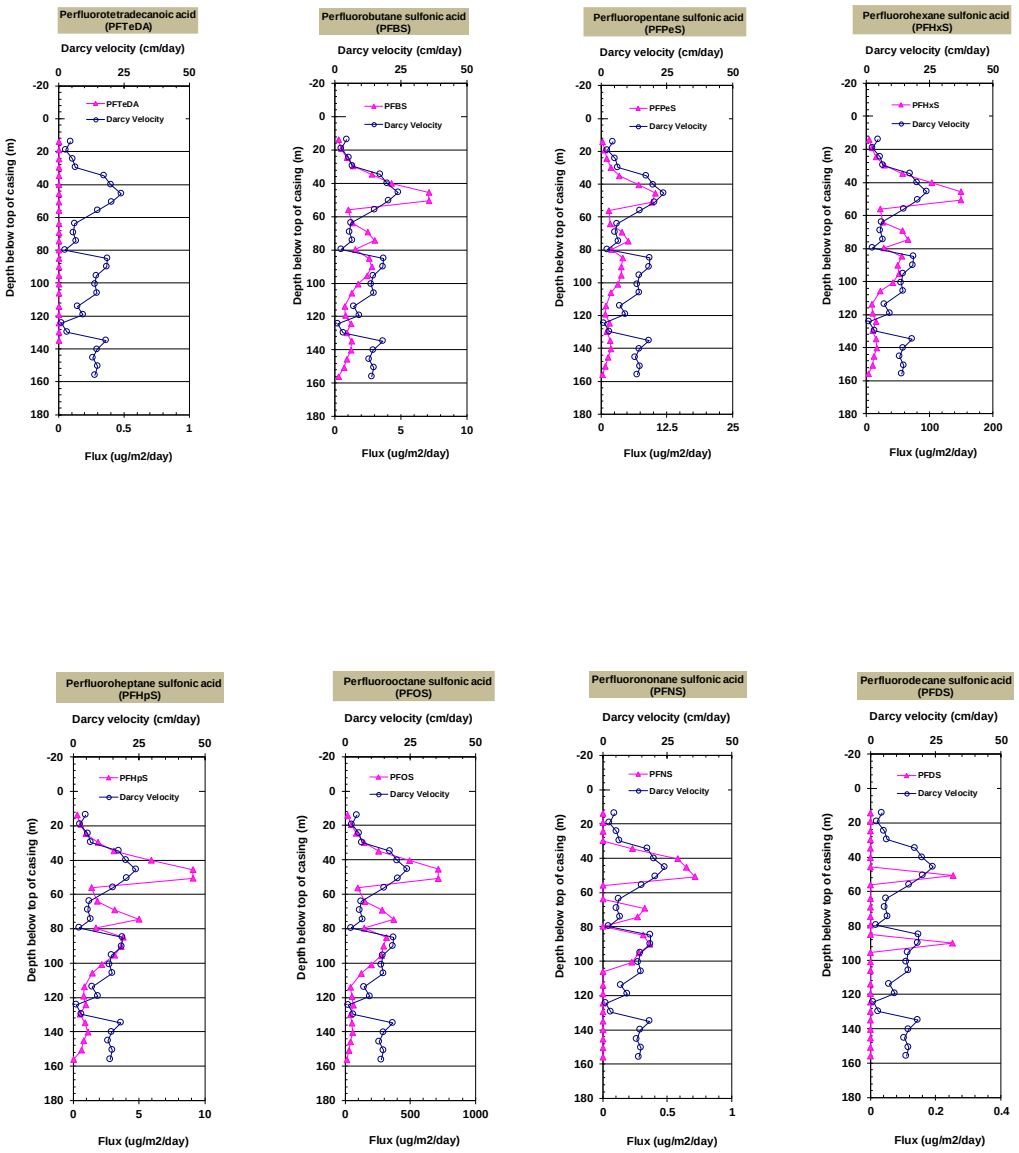

Figure 8. Contaminant and Darcy flux profiles for well MW-008-060 & 110 & 160 (continued)

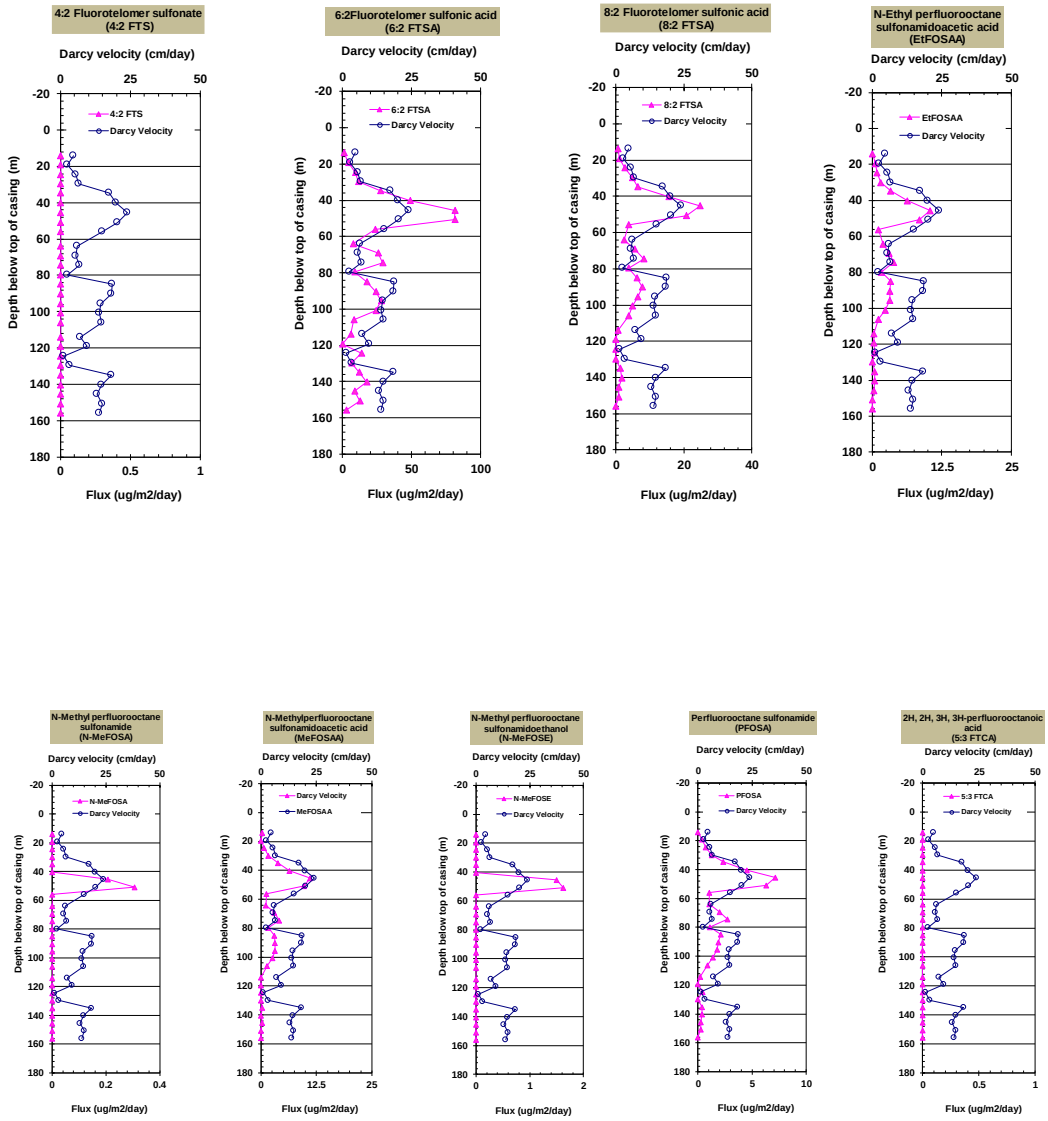

Figure 8. Contaminant and Darcy flux profiles for well MW-008-060 & 110 & 160 (continued)

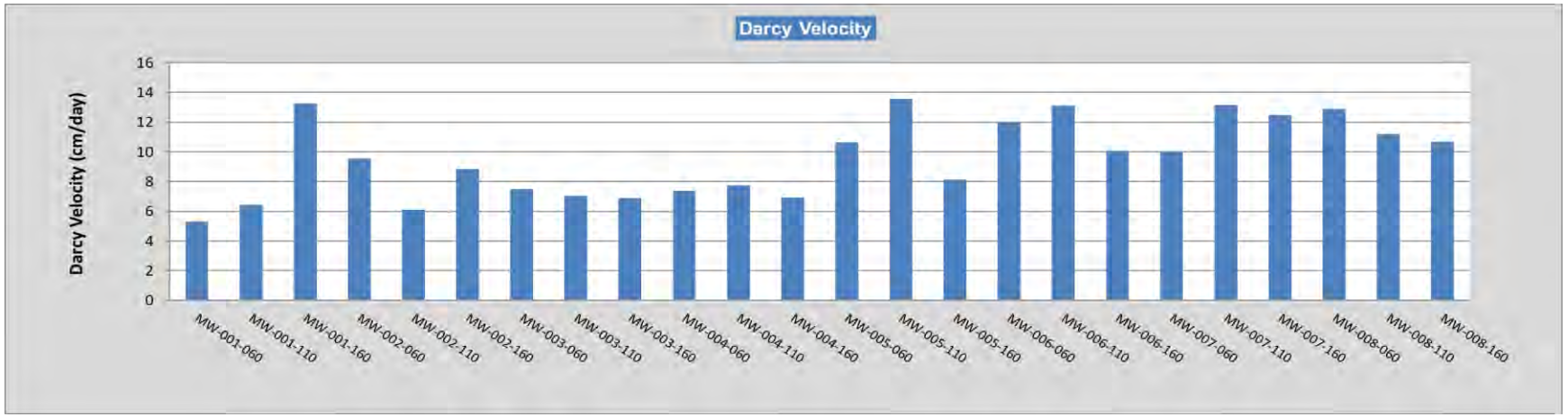

Figure 9. Average Darcy Velocity at each well

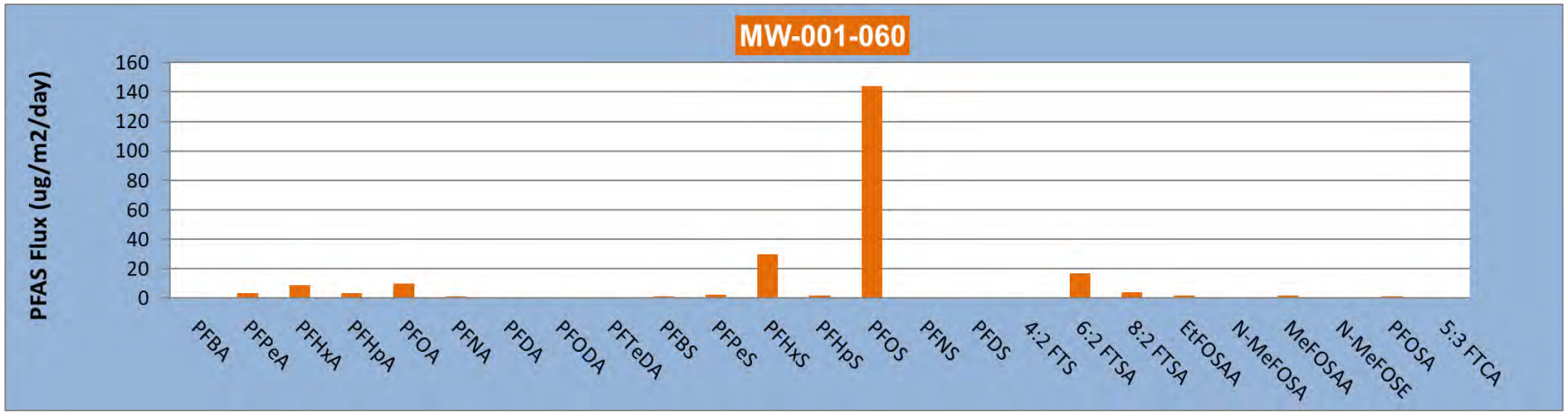

Figure 10. Average PFAS Flux for well MW-001-060

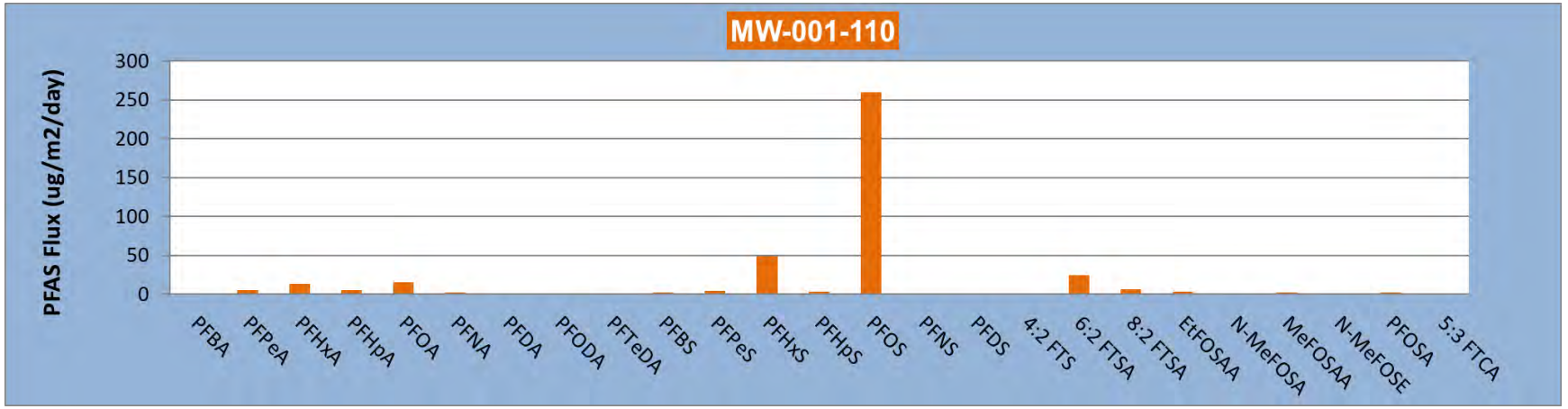

Figure 11. Average PFAS Flux for well MW-001-110

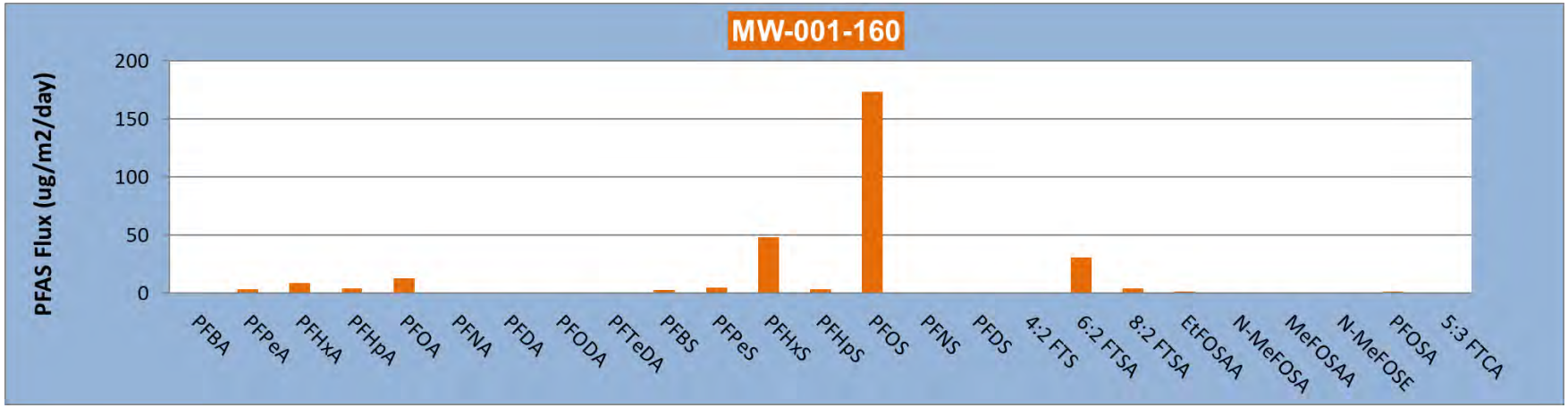

Figure 12. Average PFAS Flux for well MW-001-160

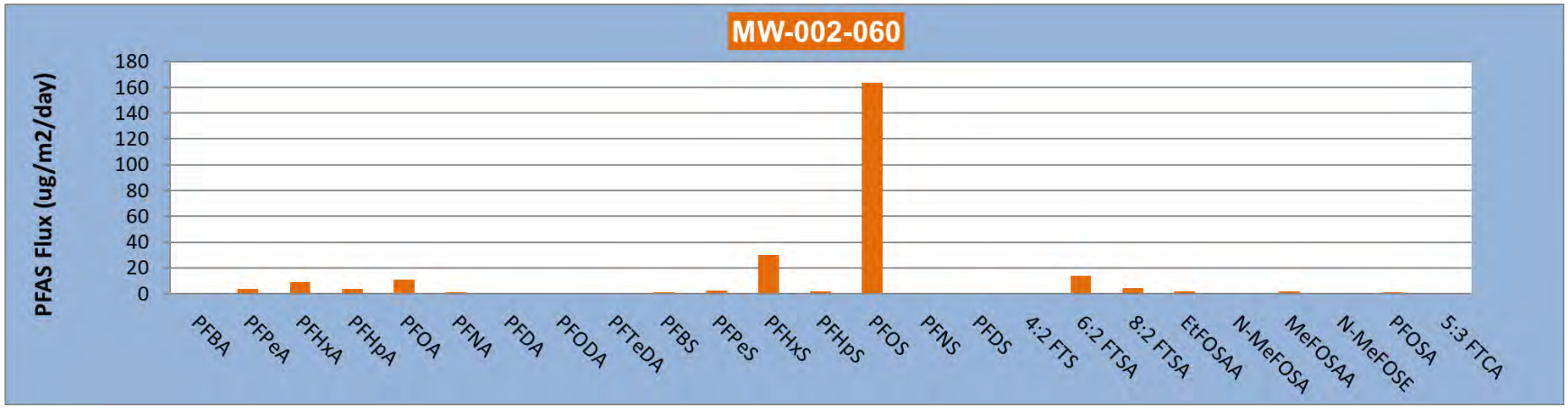

Figure 13. Average PFAS Flux for well MW-002-060

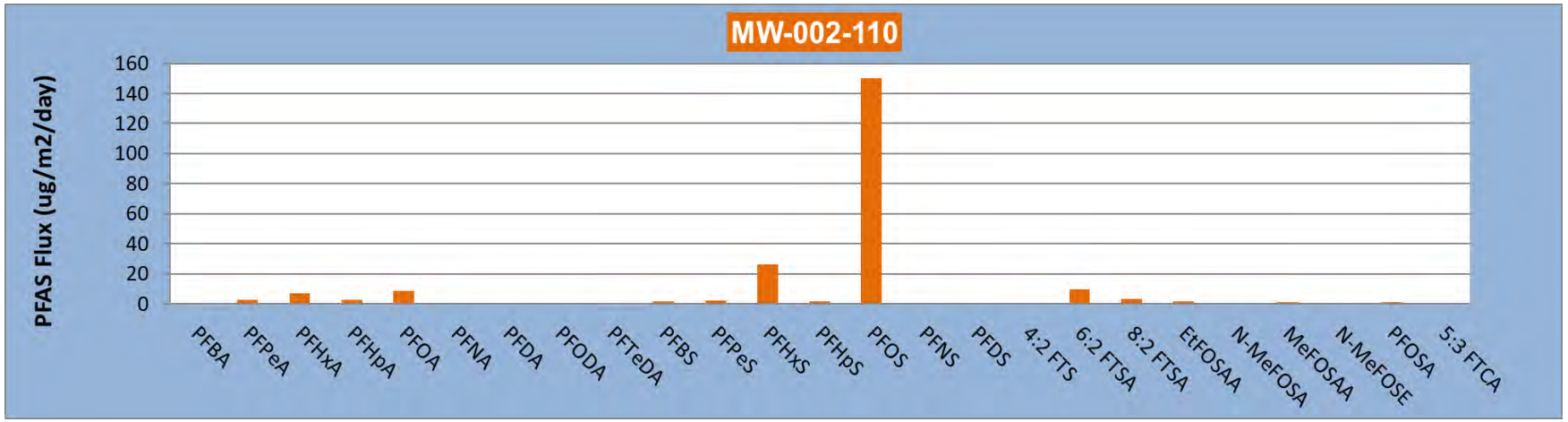

Figure 14. Average PFAS Flux for well MW-002-110

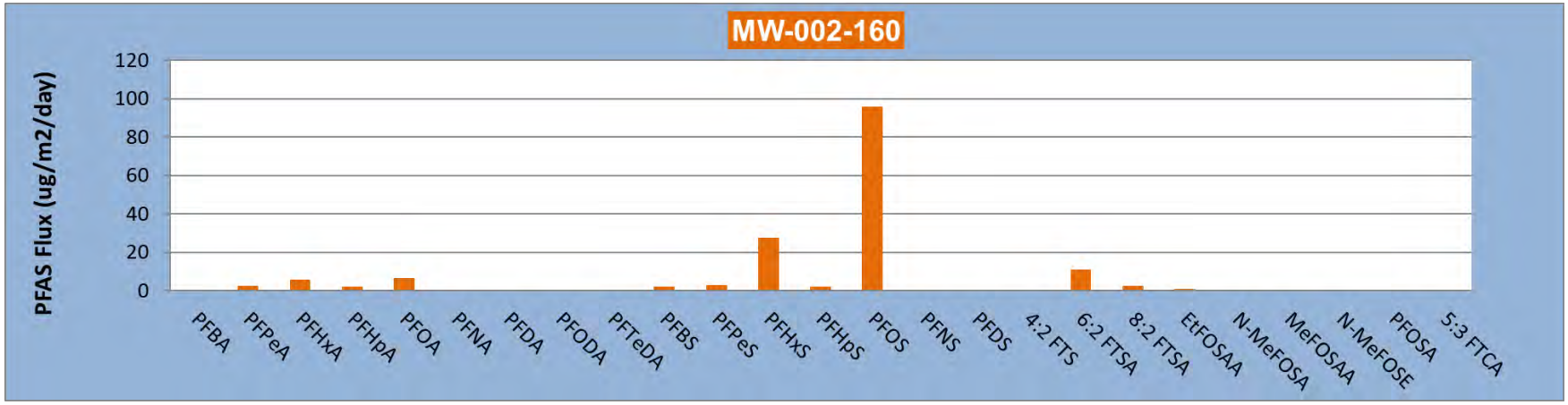

Figure 15. Average PFAS Flux for well MW-002-160

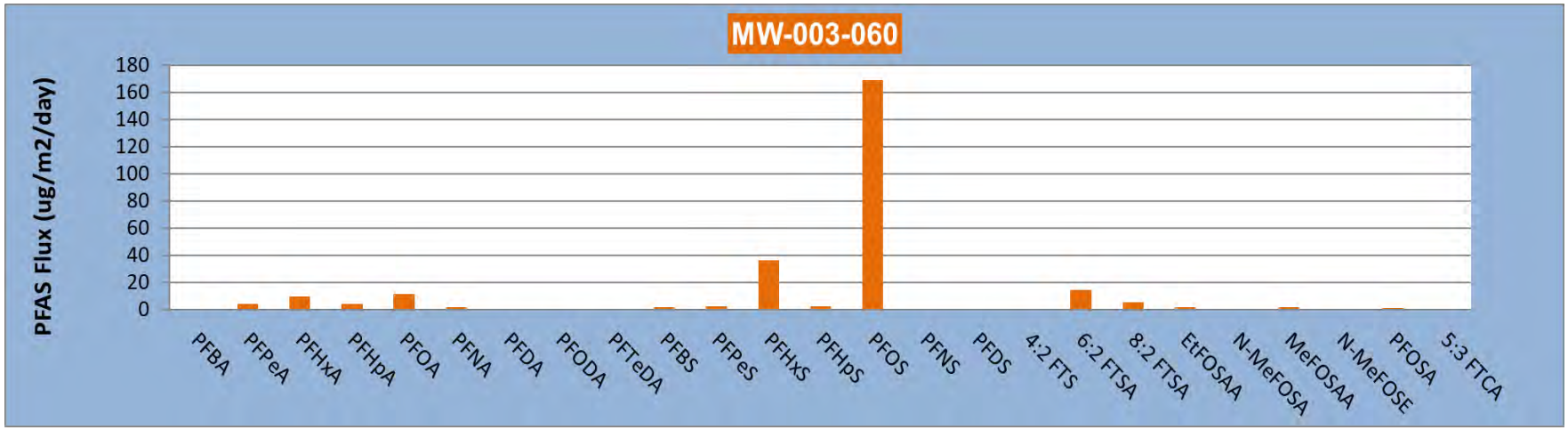

Figure 16. Average PFAS Flux for well MW-003-060

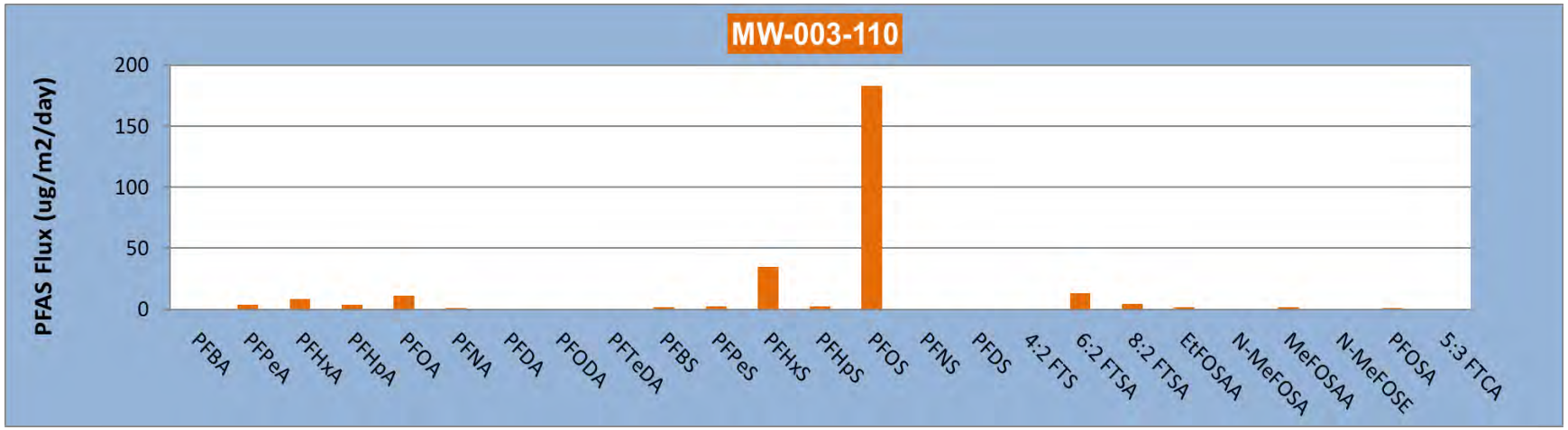

Figure 17. Average PFAS Flux for well MW-003-110

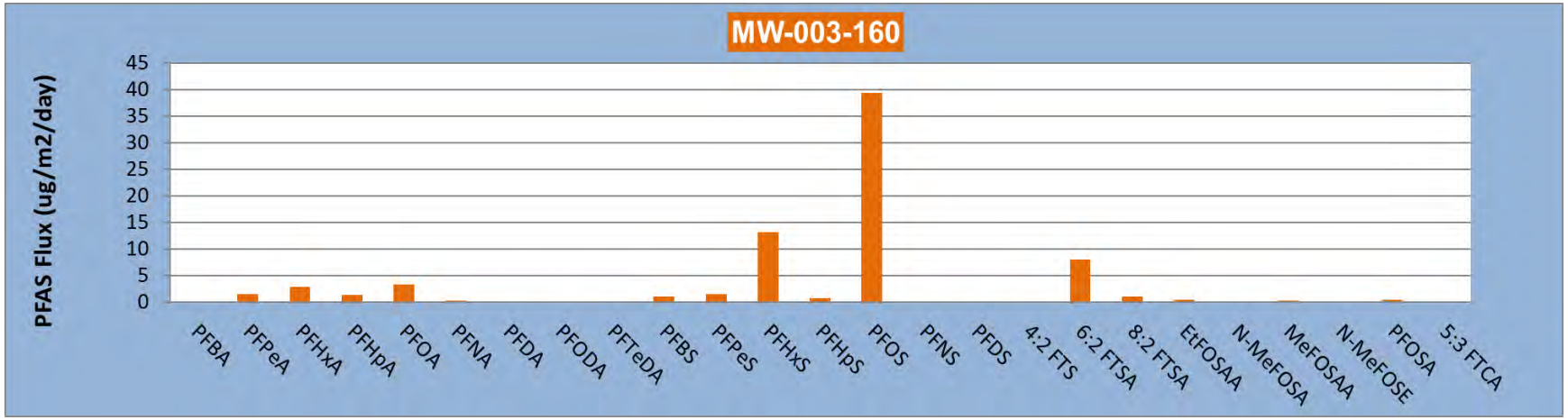

Figure 18. Average PFAS Flux for well MW-003-160

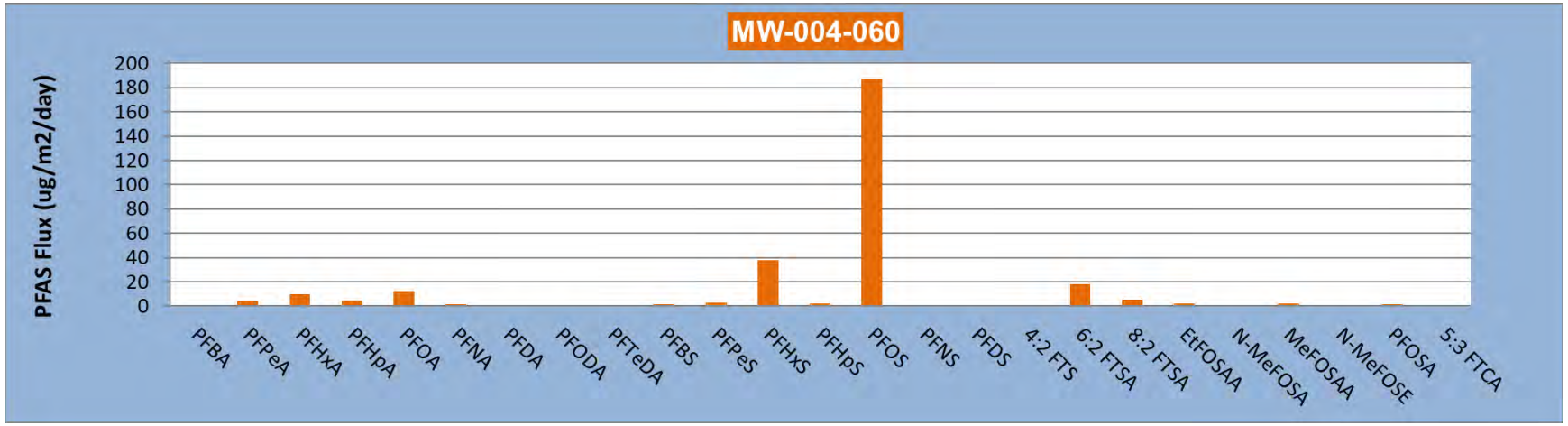

Figure 19. Average PFAS Flux for well MW-004-060

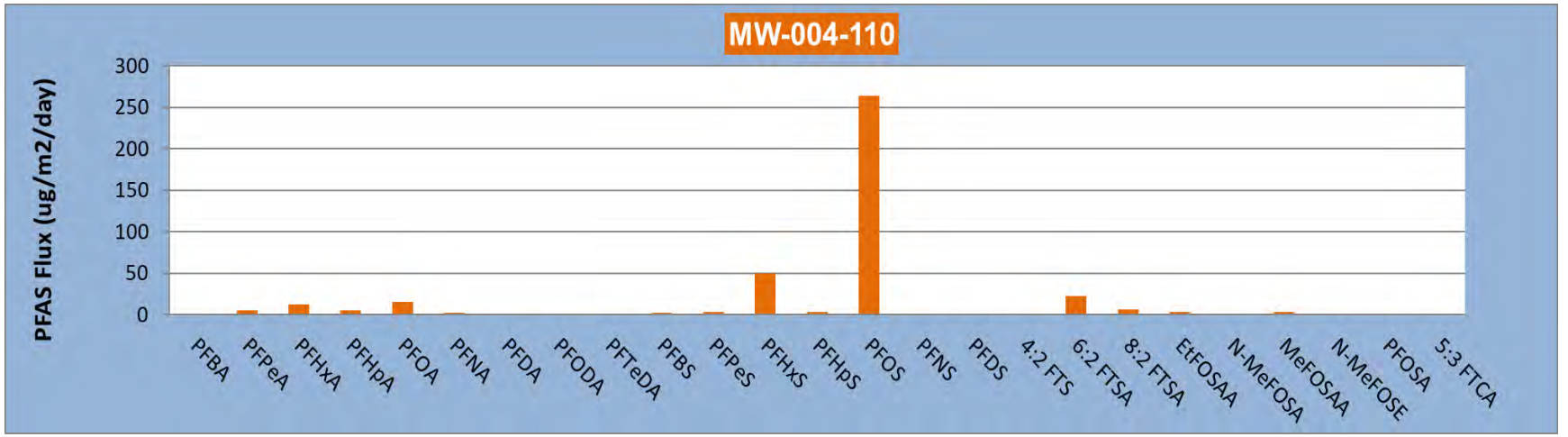

Figure 20. Average PFAS Flux for well MW-004-110

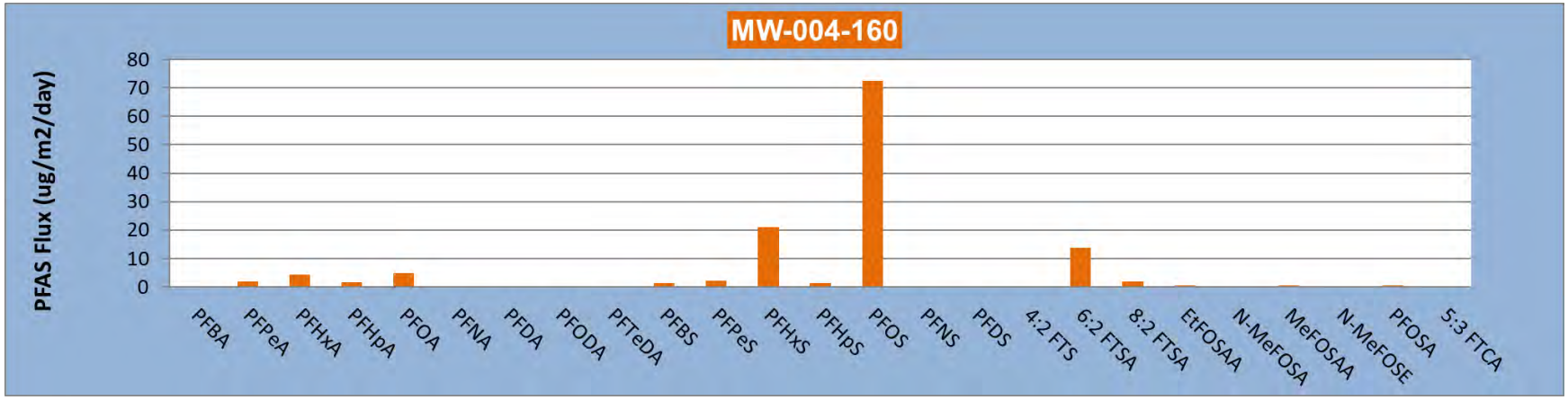

Figure 21. Average PFAS Flux for well MW-004-160

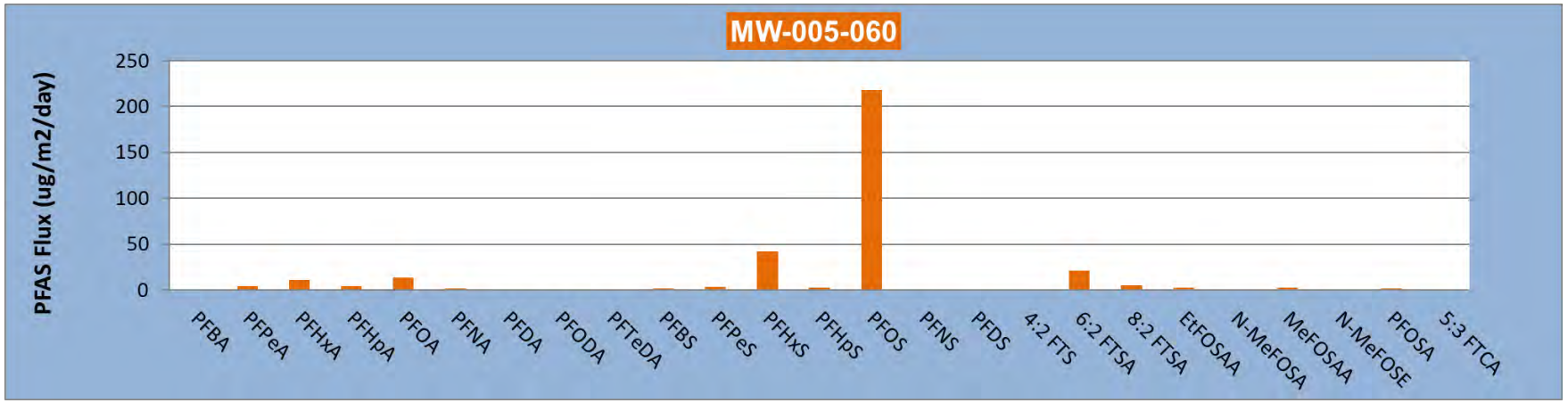

Figure 22. Average PFAS Flux for well MW-005-060

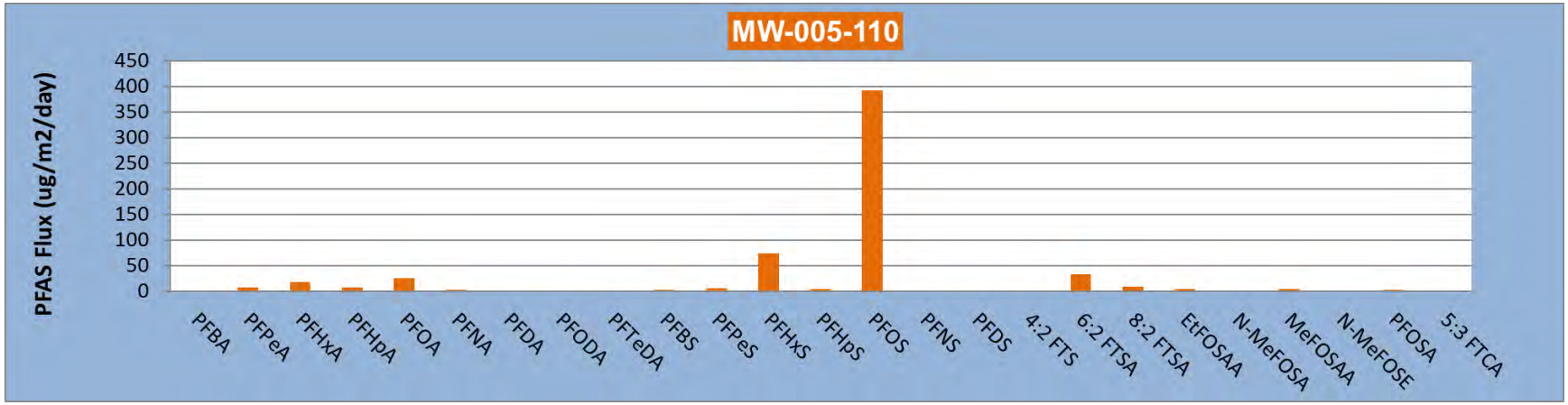

Figure 23. Average PFAS Flux for well MW-005-110

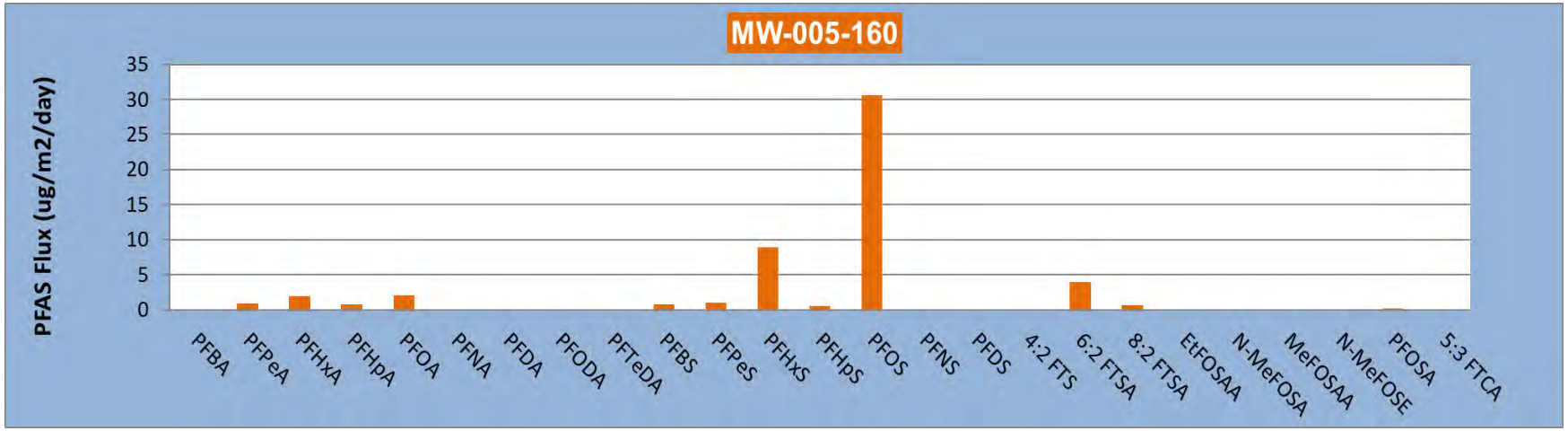

Figure 24. Average PFAS Flux for well MW-005-160

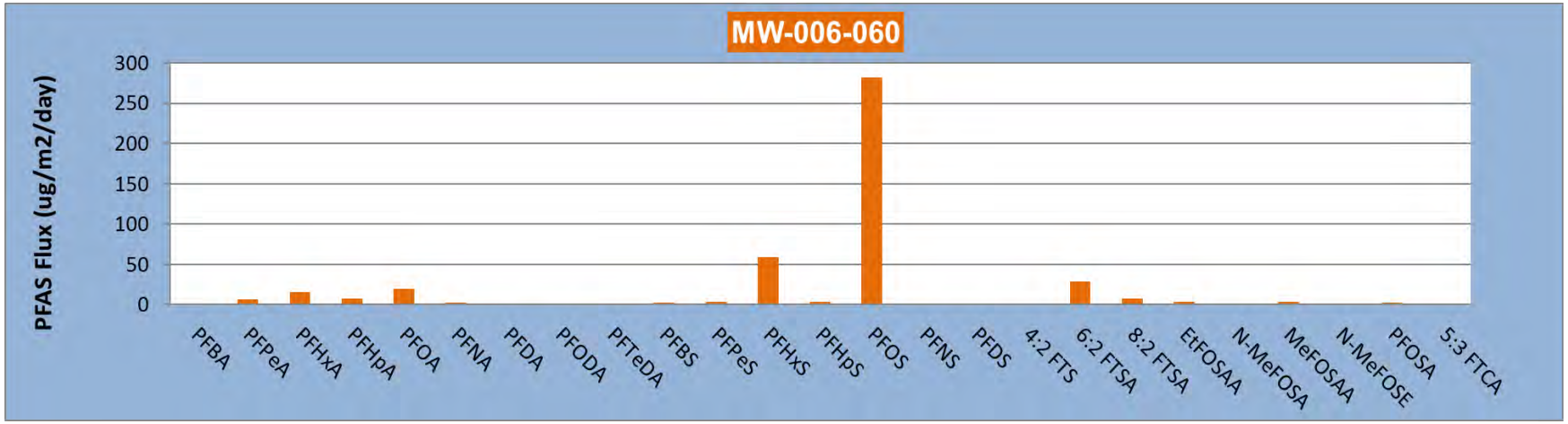

Figure 25. Average PFAS Flux for well MW-006-060

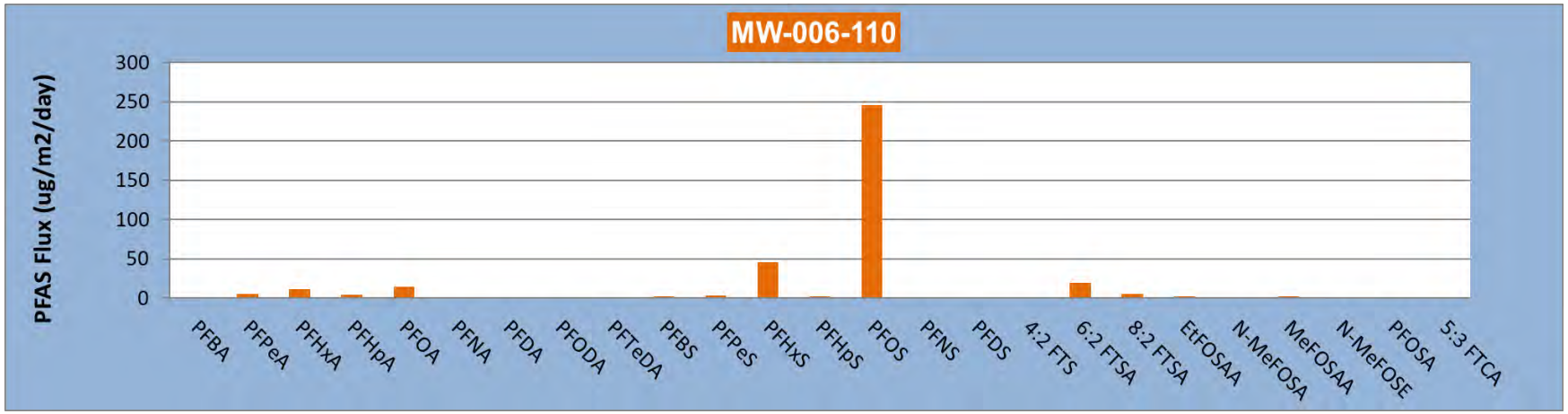

Figure 26. Average PFAS Flux for well MW-006-110

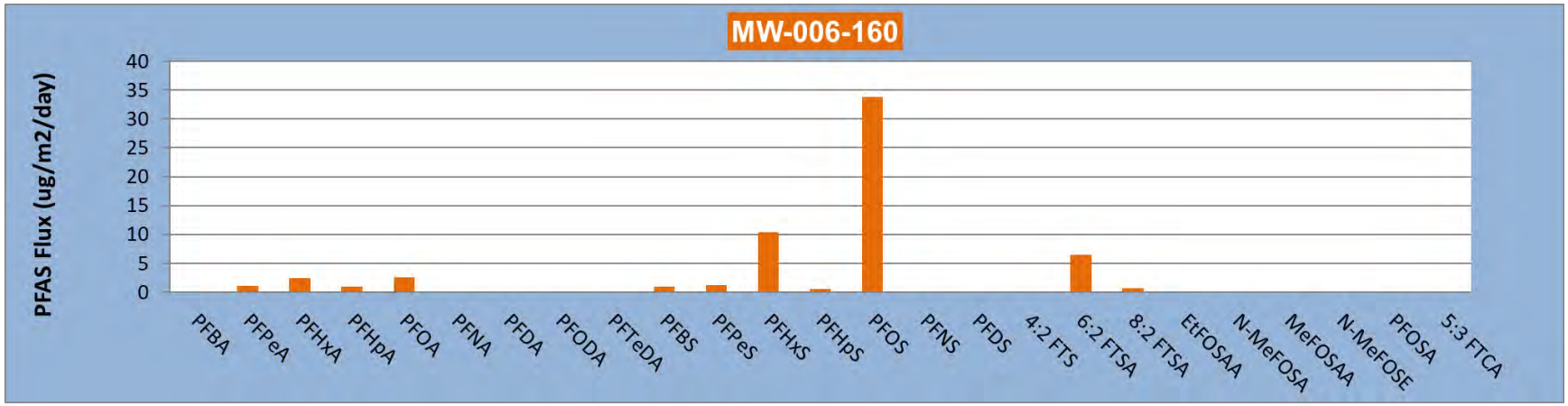

Figure 27. Average PFAS Flux for well MW-006-160

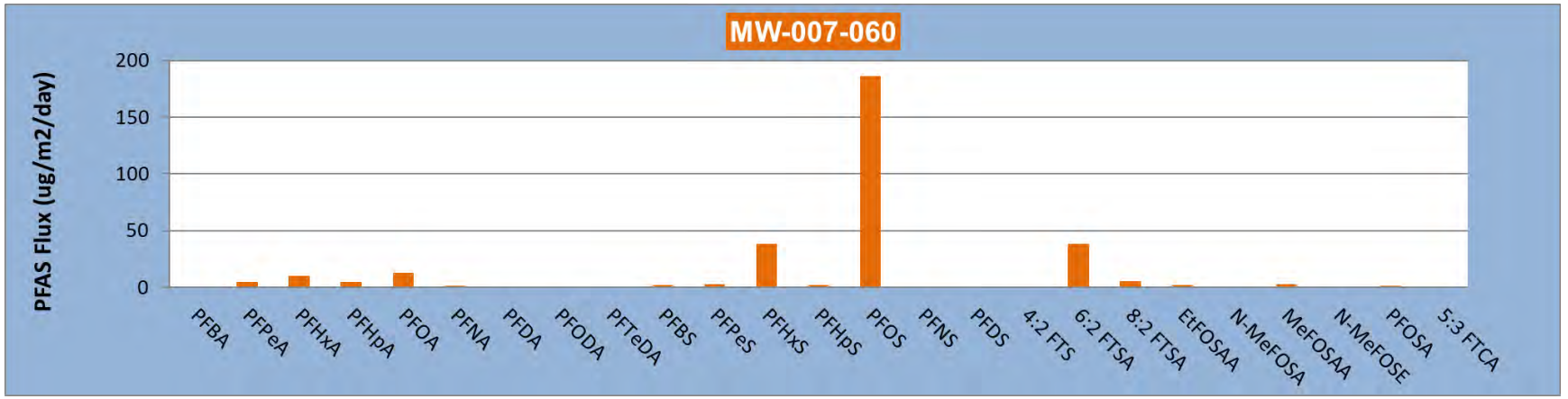

Figure 28. Average PFAS Flux for well MW-007-060

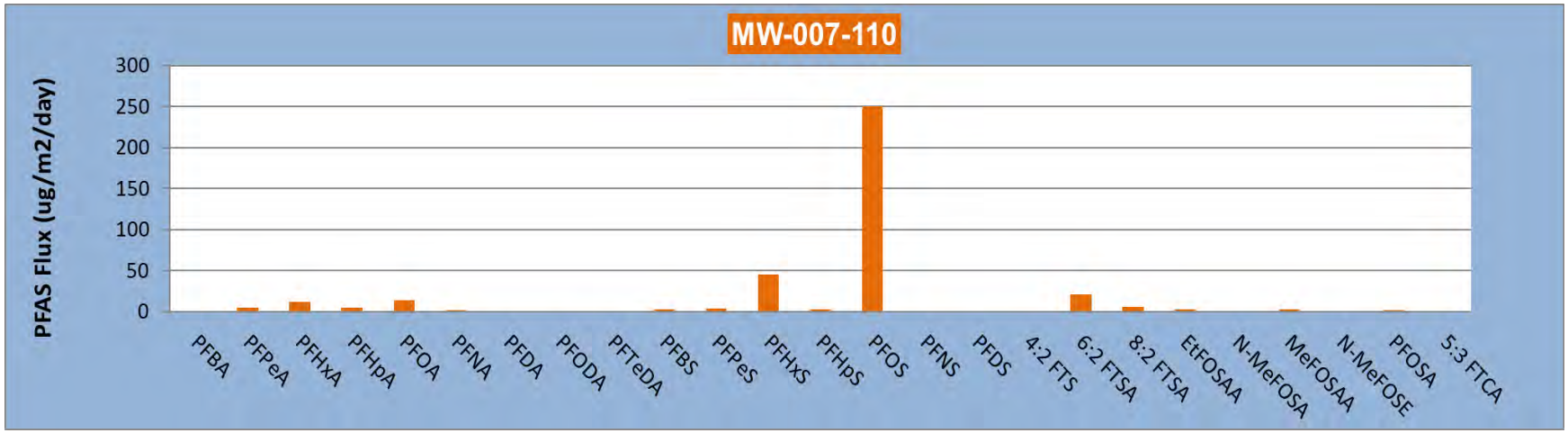

Figure 29. Average PFAS Flux for well MW-007-110

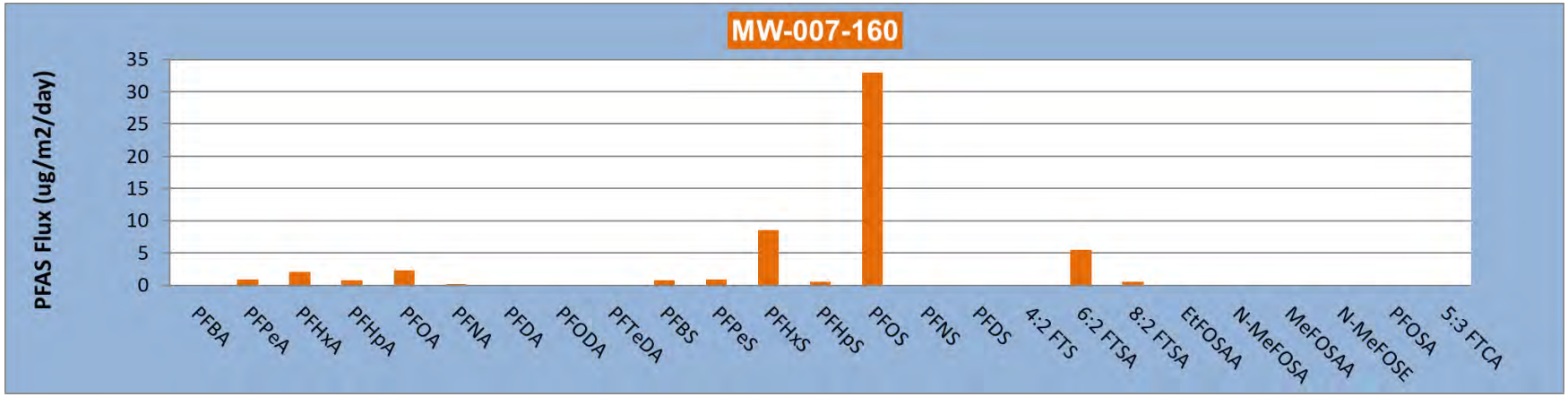

Figure 30. Average PFAS Flux for well MW-007-160

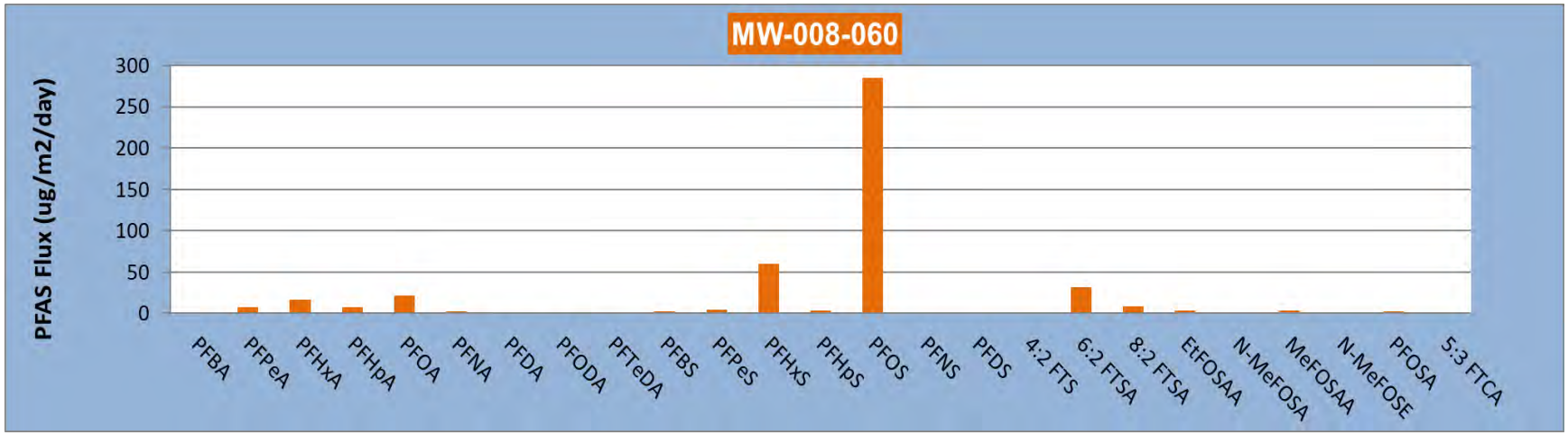

Figure 31. Average PFAS Flux for well MW-008-060

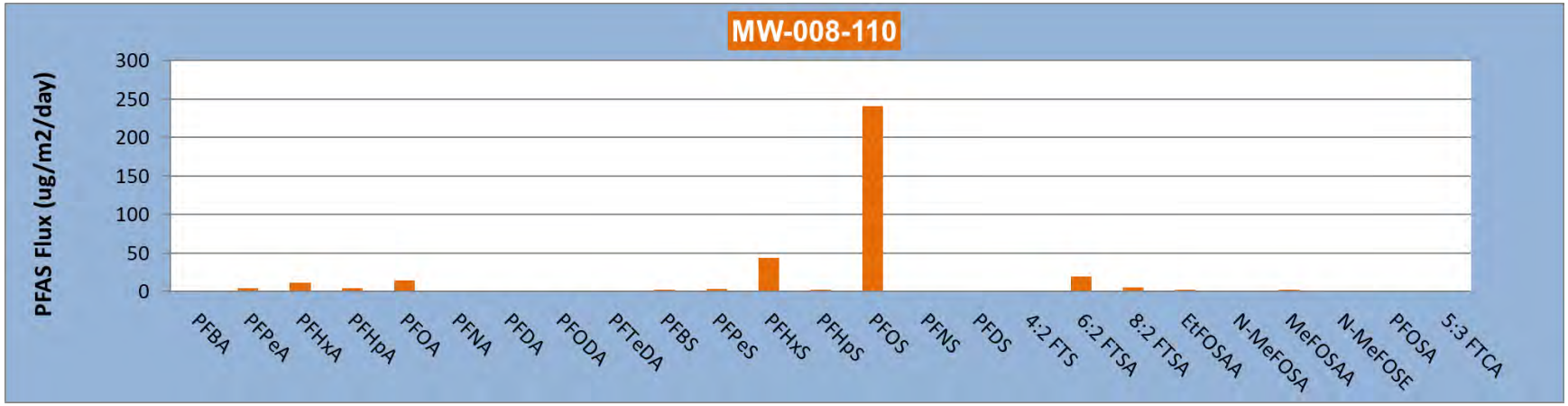

Figure 32. Average PFAS Flux for well MW-008-110

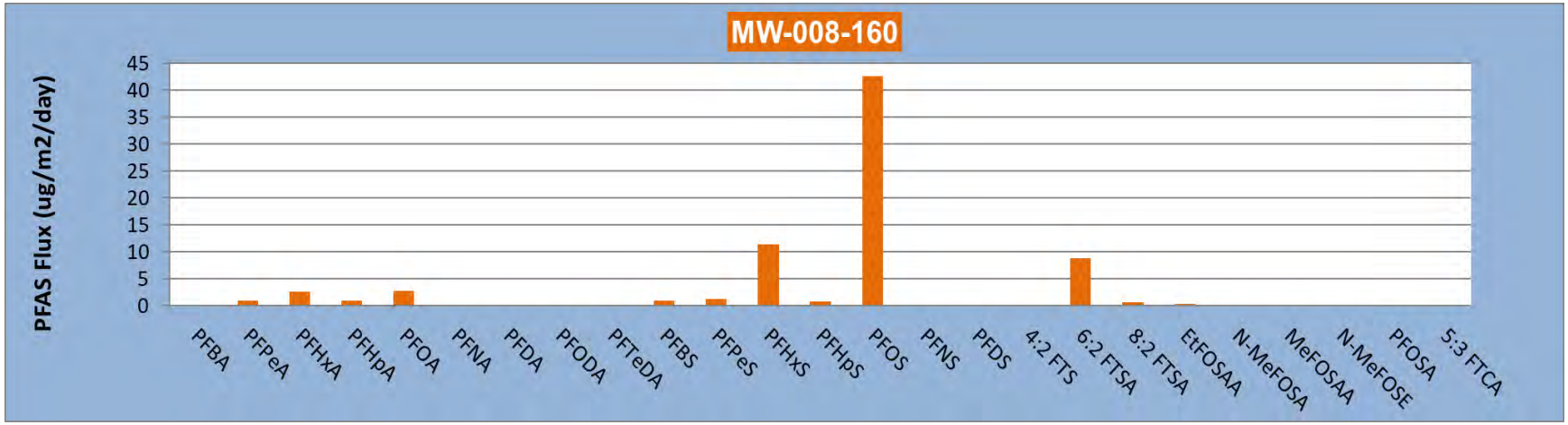

Figure 33. Average PFAS Flux for well MW-008-160

References

Annable, M.D., K. Hatfield, J. Cho, H. Klammler, B.L. Parker, J.A. Cherry, P.S.C. Rao, "Field-Scale Evaluation of the Passive Flux Meter for Simultaneous Measurement of Groundwater and Contaminant Fluxes". Environmental Science & Technology. Vol. 39, 2005, pp. 7194-7201.

Hatfield, K., M.D. Annable, J. Cho, P.S.C. Rao, H. Klammler. " A Direct Passive Method for Measuring Water and Contaminant Fluxes in Porous Media". Journal of Contaminant Hydrology Vol. 75, No. 3-4, 2004, pp. 155-181.

Appendix A: Data from Flux Wells

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well.

Well ID	SAMPLE_ID for Darcy	Depth intervals for Darcy (ft)	Center point of PFM location (ft)	Darcy Velocity (cm/day)
MW-001-060	CACMW-001-060-16.5-090424-FM-G	11.5-16.5	14.0	6.3
	CACMW-001-060-21.75-090424-FM-G	16.75-21.75	19.3	8.1
	CACMW-001-060-27-090424-FM-G	22-27	24.5	3.1
	CACMW-001-060-32.25-090424-FM-G	27.25-32.25	29.8	7.4
	CACMW-001-060-37.5-081424-FM-G	32.5-37.5	35.0	5.9
	CACMW-001-060-42.75-081424-FM-G	37.75-42.75	40.3	4.0
	CACMW-001-060-48-081424-FM-G	43-48	45.5	4.8
	CACMW-001-060-53.25-081524-FM-G	48.25-53.25	50.8	4.0
	CACMW-001-060-58.5-081524-FM-G	53.5-58.5	56.0	4.0
MW-001-110	CACMW-001-110-66.5-090424-FM-G	61.5-66.5	64.0	5.5
	CACMW-001-110-71.75-090424-FM-G	66.75-71.75	69.3	3.8
	CACMW-001-110-77-090424-FM-G	72-77	74.5	5.3
	CACMW-001-110-82.25-090424-FM-G	77.25-82.25	79.8	8.8
	CACMW-001-110-87.5-081424-FM-G	82.5-87.5	85.0	10.6
	CACMW-001-110-92.75-081424-FM-G	87.75-92.75	90.3	8.4
	CACMW-001-110-98-081424-FM-G	93-98	95.5	6.8
	CACMW-001-110-103.25-081424-FM-G	98.25-103.25	100.8	6.2
	CACMW-001-110-108.5-081424-FM-G	103.5-108.5	106.0	2.3
MW-001-160	CACMW-001-160-117-090424-FM-G	112-117	114.5	3.6
	CACMW-001-160-122.25-090424-FM-G	117.25-122.25	119.8	7.6
	CACMW-001-160-127.5-090424-FM-G	122.5-127.5	125.0	8.5
	CACMW-001-160-132.75-090424-FM-G	127.75-132.75	130.3	19.2
	CACMW-001-160-138-081524-FM-G	133-138	135.5	16.4
	CACMW-001-160-143.25-081524-FM-G	138.25-143.25	140.8	15.8
	CACMW-001-160-148.5-081524-FM-G	143.5-148.5	146.0	19.0
	CACMW-001-160-153.75-081524-FM-G	148.75-153.75	151.3	15.5
	CACMW-001-160-159-081524-FM-G	154-159	156.5	4.0
MW-002-060	CACMW-002-060-16.5-090424-FM-G	11.5-16.5	14.0	8.9
	CACMW-002-060-21.75-090424-FM-G	16.75-21.75	19.3	6.0
	CACMW-002-060-27-090424-FM-G	22-27	24.5	7.3
	CACMW-002-060-32.25-090424-FM-G	27.25-32.25	29.8	8.8
	CACMW-002-060-37.5-081524-FM-G	32.5-37.5	35.0	11.6
	CACMW-002-060-42.75-081524-FM-G	37.75-42.75	40.3	8.5
	CACMW-002-060-48-081524-FM-G	43-48	45.5	9.4
	CACMW-002-060-53.25-081524-FM-G	48.25-53.25	50.8	16.2
	CACMW-002-060-58.5-081524-FM-G	53.5-58.5	56.0	9.0
MW-002-110	CACMW-002-110-66.5-090424-FM-G	61.5-66.5	64.1	3.1
	CACMW-002-110-71.75-090424-FM-G	66.75-71.75	69.3	1.7
	CACMW-002-110-77-090424-FM-G	72-77	74.5	3.9
	CACMW-002-110-82.25-090424-FM-G	77.25-82.25	79.8	4.6
	CACMW-002-110-87.5-081524-FM-G	82.5-87.5	85.0	11.1
	CACMW-002-110-92.75-081524-FM-G	87.75-92.75	90.3	7.5
	CACMW-002-110-98-081524-FM-G	93-98	95.5	4.3
	CACMW-002-110-103.25-081524-FM-G	98.25-103.25	100.8	10.4
	CACMW-002-110-108.5-081524-FM-G	103.5-108.5	106.0	7.8
MW-002-160	CACMW-002-160-116.5-090424-FM-G	111.5-116.5	114.0	4.5
	CACMW-002-160-121.75-090424-FM-G	116.75-121.75	119.3	7.8
	CACMW-002-160-127-090424-FM-G	122-127	124.5	5.5
	CACMW-002-160-132.25-090424-FM-G	127.25-132.25	129.8	5.6
	CACMW-002-160-137.5-081524-FM-G	132.5-137.5	135.0	11.8
	CACMW-002-160-142.75-081524-FM-G	137.75-142.75	140.3	10.2
	CACMW-002-160-148-081524-FM-G	143-148	145.5	8.5
	CACMW-002-160-153.25-081524-FM-G	148.25-153.25	150.8	6.7
	CACMW-002-160-158.5-081524-FM-G	153.5-158.5	156.0	18.6

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

Well ID	SAMPLE_ID for Darcy	Depth intervals for Darcy (ft)	Center point of PFM location (ft)	Darcy Velocity (cm/day)
MW-003-060	CACMW-003-060-16.5-090424-FM-G	11.5-16.5	14.0	7.0
	CACMW-003-060-21.75-090424-FM-G	16.75-21.75	19.3	7.8
	CACMW-003-060-27-090424-FM-G	22-27	24.5	5.6
	CACMW-003-060-32.25-090424-FM-G	27.25-32.25	29.8	3.7
	CACMW-003-060-37.5-081624-FM-G	32.5-37.5	35.0	7.5
	CACMW-003-060-42.75-081624-FM-G	37.75-42.75	40.3	6.0
	CACMW-003-060-48-081624-FM-G	43-48	45.5	8.4
	CACMW-003-060-53.25-081624-FM-G	48.25-53.25	50.8	11.1
	CACMW-003-060-58.5-081624-FM-G	53.5-58.5	56.0	10.1
MW-003-110	CACMW-003-110-66.5-090524-FM-G	61.5-66.5	64.0	4.5
	CACMW-003-110-71.75-090524-FM-G	66.75-71.75	69.3	4.9
	CACMW-003-110-77-090524-FM-G	72-77	74.5	3.2
	CACMW-003-110-82.25-090524-FM-G	77.25-82.25	79.8	4.4
	CACMW-003-110-87.5-081624-FM-G	82.5-87.5	85.0	10.6
	CACMW-003-110-92.75-081624-FM-G	87.75-92.75	90.3	9.9
	CACMW-003-110-98-081624-FM-G	93-98	95.5	11.1
	CACMW-003-110-103.25-081624-FM-G	98.25-103.25	100.8	8.8
	CACMW-003-110-108.5-081624-FM-G	103.5-108.5	106.0	5.5
MW-003-160	CACMW-003-160-116.5-090424-FM-G	111.5-116.5	114.0	4.3
	CACMW-003-160-121.75-090424-FM-G	116.75-121.75	119.3	2.8
	CACMW-003-160-127-090424-FM-G	122-127	124.5	3.4
	CACMW-003-160-132.25-090424-FM-G	127.25-132.25	129.8	5.5
	CACMW-003-160-137.5-081524-FM-G	132.5-137.5	135.0	13.3
	CACMW-003-160-142.75-081524-FM-G	137.75-142.75	140.3	7.2
	CACMW-003-160-148-081524-FM-G	143-148	145.5	9.3
	CACMW-003-160-153.25-081524-FM-G	148.25-153.25	150.8	7.6
	CACMW-003-160-158.5-081524-FM-G	153.5-158.5	156.0	8.3
MW-004-060	CACMW-004-060-16.5-090524-FM-G	11.5-16.5	14.0	1.2
	CACMW-004-060-21.75-090524-FM-G	16.75-21.75	19.3	2.0
	CACMW-004-060-27-090524-FM-G	22-27	24.5	6.5
	CACMW-004-060-32.25-090524-FM-G	27.25-32.25	29.8	11.4
	CACMW-004-060-37.5-081624-FM-G	32.5-37.5	35.0	8.9
	CACMW-004-060-42.75-081624-FM-G	37.75-42.75	40.3	8.5
	CACMW-004-060-48-081624-FM-G	43-48	45.5	8.7
	CACMW-004-060-53.25-081624-FM-G	48.25-53.25	50.8	9.6
	CACMW-004-060-58.5-081624-FM-G	53.5-58.5	56.0	9.2
MW-004-110	CACMW-004-110-66.5-090524-FM-G	61.5-66.5	64.0	9.1
	CACMW-004-110-71.75-090524-FM-G	66.75-71.75	69.3	3.7
	CACMW-004-110-77-090524-FM-G	72-77	74.5	5.9
	CACMW-004-110-82.25-090524-FM-G	77.25-82.25	79.8	8.2
	CACMW-004-110-87.5-081624-FM-G	82.5-87.5	85.0	12.1
	CACMW-004-110-92.75-081624-FM-G	87.75-92.75	90.3	8.8
	CACMW-004-110-98-081624-FM-G	93-98	95.5	8.1
	CACMW-004-110-103.25-081624-FM-G	98.25-103.25	100.8	8.7
	CACMW-004-110-108.5-081624-FM-G	103.5-108.5	106.0	4.6
MW-004-160	CACMW-004-160-116.5-090524-FM-G	111.5-116.5	114.0	4.4
	CACMW-004-160-121.75-090524-FM-G	116.75-121.75	119.3	5.6
	CACMW-004-160-127-090524-FM-G	122-127	124.5	7.4
	CACMW-004-160-132.25-090524-FM-G	127.25-132.25	129.8	4.5
	CACMW-004-160-137.5-081624-FM-G	132.5-137.5	135.0	7.6
	CACMW-004-160-142.75-081624-FM-G	137.75-142.75	140.3	8.8
	CACMW-004-160-148-081624-FM-G	143-148	145.5	6.4
	CACMW-004-160-153.25-081624-FM-G	148.25-153.25	150.8	7.6
	CACMW-004-160-158.5-081624-FM-G	153.5-158.5	156.0	9.7

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

Well ID	SAMPLE_ID for Darcy	Depth intervals for Darcy (ft)	Center point of PFM location (ft)	Darcy Velocity (cm/day)
MW-005-060	CACMW-005-060-16.5-090524-FM-G	11.5-16.5	14.0	5.0
	CACMW-005-060-21.75-090524-FM-G	16.75-21.75	19.3	3.7
	CACMW-005-060-27-090524-FM-G	22-27	24.5	4.9
	CACMW-005-060-32.25-090524-FM-G	27.25-32.25	29.8	5.4
	CACMW-005-060-37.5-081624-FM-G	32.5-37.5	35.0	15.2
	CACMW-005-060-42.75-081624-FM-G	37.75-42.75	40.3	14.5
	CACMW-005-060-48-081624-FM-G	43-48	45.5	15.8
	CACMW-005-060-53.25-081624-FM-G	48.25-53.25	50.8	15.1
	CACMW-005-060-58.5-081624-FM-G	53.5-58.5	56.0	15.8
MW-005-110	CACMW-005-110-66.5-090524-FM-G	61.5-66.5	64.0	7.1
	CACMW-005-110-71.75-090524-FM-G	66.75-71.75	69.3	11.3
	CACMW-005-110-77-090524-FM-G	72-77	74.5	16.7
	CACMW-005-110-82.25-090524-FM-G	77.25-82.25	79.8	15.3
	CACMW-005-110-87.5-081624-FM-G	82.5-87.5	85.0	17.8
	CACMW-005-110-92.75-081624-FM-G	87.75-92.75	90.3	15.1
	CACMW-005-110-98-081624-FM-G	93-98	95.5	14.3
	CACMW-005-110-103.25-081624-FM-G	98.25-103.25	100.8	13.4
	CACMW-005-110-108.5-081624-FM-G	103.5-108.5	106.0	10.7
MW-005-160	CACMW-005-160-116.5-090524-FM-G	111.5-116.5	114.0	6.4
	CACMW-005-160-121.75-090524-FM-G	116.75-121.75	118.8	5.9
	CACMW-005-160-127-090524-FM-G	122-127	124.5	6.3
	CACMW-005-160-132.25-090524-FM-G	127.25-132.25	129.8	6.1
	CACMW-005-160-137.5-081624-FM-G	132.5-137.5	135.0	12.1
	CACMW-005-160-142.75-081624-FM-G	137.75-142.75	140.3	11.2
	CACMW-005-160-148-081624-FM-G	143-148	145.5	8.0
	CACMW-005-160-153.25-081624-FM-G	148.25-153.25	150.8	9.0
	CACMW-005-160-158.5-081624-FM-G	153.5-158.5	156.0	7.9
MW-006-060	CACMW-006-060-16.5-090524-FM-G	11.5-16.5	14.0	9.4
	CACMW-006-060-21.75-090524-FM-G	16.75-21.75	19.3	9.7
	CACMW-006-060-27-090524-FM-G	22-27	24.5	7.5
	CACMW-006-060-32.25-090524-FM-G	27.25-32.25	29.8	10.1
	CACMW-006-060-37.5-081724-FM-G	32.5-37.5	35.0	17.6
	CACMW-006-060-42.75-081724-FM-G	37.75-42.75	40.3	17.0
	CACMW-006-060-48-081724-FM-G	43-48	45.5	14.6
	CACMW-006-060-53.25-081724-FM-G	48.25-53.25	50.8	12.2
	CACMW-006-060-58.5-081724-FM-G	53.5-58.5	56.0	9.5
MW-006-110	CACMW-006-110-66.5-090624-FM-G	61.5-66.5	64.0	7.7
	CACMW-006-110-71.75-090624-FM-G	66.75-71.75	69.3	7.0
	CACMW-006-110-77-090624-FM-G	72-77	74.5	8.7
	CACMW-006-110-82.25-090624-FM-G	77.25-82.25	79.8	11.4
	CACMW-006-110-87.5-081724-FM-G	82.5-87.5	85.0	18.0
	CACMW-006-110-92.75-081724-FM-G	87.75-92.75	90.3	17.9
	CACMW-006-110-98-081724-FM-G	93-98	95.5	15.5
	CACMW-006-110-103.25-081724-FM-G	98.25-103.25	100.8	17.3
	CACMW-006-110-108.5-081724-FM-G	103.5-108.5	106.0	13.9
MW-006-160	CACMW-006-160-116.5-090624-FM-G	111.5-116.5	114.0	8.9
	CACMW-006-160-121.75-090624-FM-G	116.75-121.75	118.8	9.0
	CACMW-006-160-127-090624-FM-G	122-127	124.5	6.0
	CACMW-006-160-132.25-090624-FM-G	127.25-132.25	129.8	2.5
	CACMW-006-160-137.5-081724-FM-G	132.5-137.5	135.0	16.4
	CACMW-006-160-142.75-081724-FM-G	137.75-142.75	140.3	10.8
	CACMW-006-160-148-081724-FM-G	143-148	145.5	13.7
	CACMW-006-160-153.25-081724-FM-G	148.25-153.25	150.8	10.4
	CACMW-006-160-158.5-081724-FM-G	153.5-158.5	156.0	12.8

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

Well ID	SAMPLE_ID for Darcy	Depth intervals for Darcy (ft)	Center point of PFM location (ft)	Darcy Velocity (cm/day)
MW-007-060	CACMW-007-060-16.5-090624-FM-G	11.5-16.5	14.0	5.3
	CACMW-007-060-21.75-090624-FM-G	16.75-21.75	19.3	2.0
	CACMW-007-060-27-090624-FM-G	22-27	24.5	1.9
	CACMW-007-060-32.25-090624-FM-G	27.25-32.25	29.8	1.9
	CACMW-007-060-37.5-081724-FM-G	32.5-37.5	35.0	13.1
	CACMW-007-060-42.75-081724-FM-G	37.75-42.75	40.3	13.8
	CACMW-007-060-48-081724-FM-G	43-48	45.5	15.7
	CACMW-007-060-53.25-081724-FM-G	48.25-53.25	50.8	18.7
	CACMW-007-060-58.5-081724-FM-G	53.5-58.5	56.0	17.5
MW-007-110	CACMW-007-110-66.5-090624-FM-G	61.5-66.5	64.0	6.8
	CACMW-007-110-71.75-090624-FM-G	66.75-71.75	69.3	5.5
	CACMW-007-110-77-090624-FM-G	72-77	74.5	6.5
	CACMW-007-110-82.25-090624-FM-G	77.25-82.25	79.8	8.5
	CACMW-007-110-87.5-081724-FM-G	82.5-87.5	85.0	21.5
	CACMW-007-110-92.75-081724-FM-G	87.75-92.75	90.3	18.9
	CACMW-007-110-98-081724-FM-G	93-98	95.5	15.8
	CACMW-007-110-103.25-081724-FM-G	98.25-103.25	100.8	19.0
	CACMW-007-110-108.5-081724-FM-G	103.5-108.5	106.0	15.6
MW-007-160	CACMW-007-160-116.5-090624-FM-G	111.5-116.5	114.0	17.9
	CACMW-007-160-121.75-090624-FM-G	116.75-121.75	118.8	15.5
	CACMW-007-160-127-090624-FM-G	122-127	124.5	3.9
	CACMW-007-160-132.25-090624-FM-G	127.25-132.25	129.8	3.4
	CACMW-007-160-137.5-081724-FM-G	132.5-137.5	135.0	18.1
	CACMW-007-160-142.75-081724-FM-G	137.75-142.75	140.3	16.0
	CACMW-007-160-148-081724-FM-G	143-148	145.5	13.4
	CACMW-007-160-153.25-081724-FM-G	148.25-153.25	150.8	13.6
	CACMW-007-160-158.5-081724-FM-G	153.5-158.5	156.0	10.1
MW-008-060	CACMW-008-060-16.5-090624-FM-G	11.5-16.5	14.0	4.6
	CACMW-008-060-21.75-090624-FM-G	16.75-21.75	19.3	2.6
	CACMW-008-060-27-090624-FM-G	22-27	24.5	5.4
	CACMW-008-060-32.25-090624-FM-G	27.25-32.25	29.8	6.5
	CACMW-008-060-37.5-081724-FM-G	32.5-37.5	34.8	17.3
	CACMW-008-060-42.75-081724-FM-G	37.75-42.75	40.3	20.0
	CACMW-008-060-48-081724-FM-G	43-48	45.5	24.0
	CACMW-008-060-53.25-081724-FM-G	48.25-53.25	50.8	20.3
	CACMW-008-060-58.5-081724-FM-G	53.5-58.5	56.0	15.0
MW-008-110	CACMW-008-110-66.5-090624-FM-G	61.5-66.5	64.0	6.1
	CACMW-008-110-71.75-090624-FM-G	66.75-71.75	69.3	5.5
	CACMW-008-110-77-090624-FM-G	72-77	74.5	6.7
	CACMW-008-110-82.25-090624-FM-G	77.25-82.25	79.8	2.4
	CACMW-008-110-87.5-081724-FM-G	82.5-87.5	85.0	18.6
	CACMW-008-110-92.75-081724-FM-G	87.75-92.75	90.3	18.3
	CACMW-008-110-98-081724-FM-G	93-98	95.5	14.5
	CACMW-008-110-103.25-081724-FM-G	98.25-103.25	100.8	13.8
	CACMW-008-110-108.5-081724-FM-G	103.5-108.5	106.0	14.7
MW-008-160	CACMW-008-160-116.5-090624-FM-G	111.5-116.5	114.0	7.2
	CACMW-008-160-121.75-090624-FM-G	116.75-121.75	119.3	9.4
	CACMW-008-160-127-090624-FM-G	122-127	124.5	1.1
	CACMW-008-160-132.25-090624-FM-G	127.25-132.25	129.8	3.2
	CACMW-008-160-137.5-081724-FM-G	132.5-137.5	135.0	18.2
	CACMW-008-160-142.75-081724-FM-G	137.75-142.75	140.3	14.6
	CACMW-008-160-148-081724-FM-G	143-148	145.5	13.1
	CACMW-008-160-153.25-081724-FM-G	148.25-153.25	150.8	14.8
	CACMW-008-160-158.5-081724-FM-G	153.5-158.5	156.0	13.9
Field Duplicate	FD-1-081624-FM-G			13.0
	FD-2-081724-FM-G			12.3
	FD-3-081724-FM-G			16.2
	FD-4-090424-FM-G			4.2
	FD-5-090424-FM-G			3.2
	FD-6-090524-FM-G			5.1
	FD-7-090524-FM-G			6.4
	FD-8-090524-FM-G			6.8
	FD-9-090624-FM-G			10.3
	FD-10-090624-FM-G			6.8

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorobutanoic acid (PFBA) (ug/m^2/day)	Perfluoropentanoic acid (PFPeA) (ug/m^2/day)	Perfluorohexanoic acid (PFHxA) (ug/m^2/day)	Perfluoroheptanoic acid (PFHpA) (ug/m^2/day)	Perfluorooctanoic acid (PFOA) (ug/m^2/day)
CACMW-001-060-16.5-090424-FM-R	11.5-16.5	<2.23	<1.11	0.43	0.22	0.26
CACMW-001-060-21.75-090424-FM-R	16.75-21.75	<2.23	1.60	1.67	1.25	1.65
CACMW-001-060-27-090424-FM-R	22-27	0.70	3.83	8.98	3.55	10.22
CACMW-001-060-32.25-090424-FM-R	27.25-32.25	<2.23	4.60	10.37	4.60	12.31
CACMW-001-060-37.5-081424-FM-R	32.5-37.5	<2.25	4.08	9.78	4.01	11.03
CACMW-001-060-42.75-081424-FM-R	37.75-42.75	<2.25	5.42	13.30	5.91	14.55
CACMW-001-060-48-081424-FM-R	43-48	0.77	5.72	14.57	6.00	16.51
CACMW-001-060-53.25-081524-FM-R	48.25-53.25	<2.1	4.27	9.77	4.00	10.94
CACMW-001-060-58.5-081524-FM-R	53.5-58.5	<2.1	3.41	8.46	3.35	9.63
CACMW-001-110-66.5-090424-FM-R	61.5-66.5	<2.23	2.23	4.31	1.67	4.37
CACMW-001-110-71.75-090424-FM-R	66.75-71.75	<2.23	2.44	5.50	2.37	6.74
CACMW-001-110-77-090424-FM-R	72-77	<2.23	5.36	15.94	6.69	18.58
CACMW-001-110-82.25-090424-FM-R	77.25-82.25	0.91	7.66	20.82	8.36	25.54
CACMW-001-110-87.5-081424-FM-R	82.5-87.5	0.83	6.26	15.92	6.61	19.94
CACMW-001-110-92.75-081424-FM-R	87.75-92.75	0.70	6.61	15.92	6.89	18.55
CACMW-001-110-98-081424-FM-R	93-98	0.97	5.56	13.84	5.84	15.77
CACMW-001-110-103.25-081424-FM-R	98.25-103.25	0.83	5.98	13.84	5.49	16.47
CACMW-001-110-108.5-081424-FM-R	103.5-108.5	<2.23	4.52	11.05	4.24	13.68
CACMW-001-160-117-090424-FM-R	112-117	<2.23	<1.11	1.04	0.41	1.03
CACMW-001-160-122.25-090424-FM-R	117.25-122.25	<2.23	<1.11	1.46	0.70	1.72
CACMW-001-160-127.5-090424-FM-R	122.5-127.5	<2.23	1.53	2.78	1.39	3.32
CACMW-001-160-132.75-090424-FM-R	127.75-132.75	<2.23	4.87	11.76	5.92	17.87
CACMW-001-160-138-081524-FM-R	133-138	0.86	4.94	10.46	5.00	15.59
CACMW-001-160-143.25-081524-FM-R	138.25-143.25	0.92	8.56	17.71	7.90	26.78
CACMW-001-160-148.5-081524-FM-R	143.5-148.5	<2.11	7.90	18.37	8.56	30.08
CACMW-001-160-153.75-081524-FM-R	148.75-153.75	0.72	5.53	11.78	6.12	16.91
CACMW-001-160-159-081524-FM-R	154-159	<2.11	<1.05	2.76	1.12	2.29
CACMW-002-060-16.5-090424-FM-R	11.5-16.5	<2.23	1.88	3.12	1.81	2.97
CACMW-002-060-21.75-090424-FM-R	16.75-21.75	<2.23	1.25	2.01	0.90	2.28
CACMW-002-060-27-090424-FM-R	22-27	<2.23	2.16	5.21	2.36	6.73
CACMW-002-060-32.25-090424-FM-R	27.25-32.25	<2.23	2.57	5.84	2.36	7.42
CACMW-002-060-37.5-081524-FM-R	32.5-37.5	<2.04	3.82	9.47	4.01	9.97
CACMW-002-060-42.75-081524-FM-R	37.75-42.75	<2.04	4.01	10.11	4.01	11.88
CACMW-002-060-48-081524-FM-R	43-48	0.55	3.82	9.47	3.69	8.06
CACMW-002-060-53.25-081524-FM-R	48.25-53.25	1.78	8.27	18.38	7.00	23.33
CACMW-002-060-58.5-081524-FM-R	53.5-58.5	0.76	5.85	15.83	7.00	23.96
CACMW-002-110-66.5-090424-FM-R	61.5-66.5	<2.22	2.01	4.64	1.67	5.67
CACMW-002-110-71.75-090424-FM-R	66.75-71.75	<2.22	2.43	6.66	2.71	7.41
CACMW-002-110-77-090424-FM-R	72-77	<2.22	2.85	6.87	2.98	8.80
CACMW-002-110-82.25-090424-FM-R	77.25-82.25	<2.22	3.05	7.56	3.33	9.49
CACMW-002-110-87.5-081524-FM-R	82.5-87.5	0.32	2.42	5.55	2.09	5.67
CACMW-002-110-92.75-081524-FM-R	87.75-92.75	0.39	3.07	7.77	3.20	8.94
CACMW-002-110-98-081524-FM-R	93-98	<2.09	2.81	6.07	2.35	6.98
CACMW-002-110-103.25-081524-FM-R	98.25-103.25	0.50	3.59	8.43	3.27	14.16
CACMW-002-110-108.5-081524-FM-R	103.5-108.5	0.46	2.88	7.12	2.81	9.59
CACMW-002-160-116.5-090424-FM-R	111.5-116.5	<2.22	2.02	4.51	1.88	4.57
CACMW-002-160-121.75-090424-FM-R	116.75-121.75	<2.22	2.57	5.97	2.22	6.03
CACMW-002-160-127-090424-FM-R	122-127	<2.22	3.06	6.74	2.64	6.73
CACMW-002-160-132.25-090424-FM-R	127.25-132.25	<2.22	2.29	5.00	2.16	5.68
CACMW-002-160-137.5-081524-FM-R	132.5-137.5	0.33	2.56	6.23	2.56	8.31
CACMW-002-160-142.75-081524-FM-R	137.75-142.75	0.35	3.41	8.45	3.61	12.25
CACMW-002-160-148-081524-FM-R	143-148	0.39	3.15	6.49	2.75	8.97
CACMW-002-160-153.25-081524-FM-R	148.25-153.25	0.28	1.84	3.86	1.51	3.92
CACMW-002-160-158.5-081524-FM-R	153.5-158.5	0.16	1.11	2.36	0.92	2.48

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorononanoic acid (PFNA) (ug/m^2/day)	Perfluorodecanoic acid (PFDA) (ug/m^2/day)	Perfluoroundecanoic acid (PFUdA) (ug/m^2/day)	Perfluorododecanoic acid (PFDoA) (ug/m^2/day)	Perfluorotridecanoic acid (PFTrDA) (ug/m^2/day)
CACMW-001-060-16.5-090424-FM-R	11.5-16.5	0.31	<0.56	<3.06	<0.56	<1.67
CACMW-001-060-21.75-090424-FM-R	16.75-21.75	0.17	<0.56	<3.06	<0.56	<1.67
CACMW-001-060-27-090424-FM-R	22-27	1.22	<0.56	<3.06	<0.56	<1.67
CACMW-001-060-32.25-090424-FM-R	27.25-32.25	1.22	0.49	<3.06	<0.56	<1.67
CACMW-001-060-37.5-081424-FM-R	32.5-37.5	1.16	0.46	<3.31	<0.56	<1.97
CACMW-001-060-42.75-081424-FM-R	37.75-42.75	2.36	0.40	<3.31	<0.56	<1.97
CACMW-001-060-48-081424-FM-R	43-48	2.13	0.56	<3.28	<0.56	<1.95
CACMW-001-060-53.25-081524-FM-R	48.25-53.25	1.08	<0.53	<3.08	<0.53	<1.84
CACMW-001-060-58.5-081524-FM-R	53.5-58.5	1.21	0.43	<3.08	<0.53	<1.84
CACMW-001-110-66.5-090424-FM-R	61.5-66.5	0.45	<0.56	<3.06	<0.56	<1.67
CACMW-001-110-71.75-090424-FM-R	66.75-71.75	0.73	<0.56	<3.06	<0.56	<1.67
CACMW-001-110-77-090424-FM-R	72-77	1.98	0.77	<3.06	<0.56	<1.67
CACMW-001-110-82.25-090424-FM-R	77.25-82.25	3.38	0.77	<3.06	<0.56	<1.67
CACMW-001-110-87.5-081424-FM-R	82.5-87.5	2.82	0.67	<3.27	<0.56	<1.95
CACMW-001-110-92.75-081424-FM-R	87.75-92.75	2.68	0.63	<3.27	<0.56	<1.95
CACMW-001-110-98-081424-FM-R	93-98	1.50	0.66	<3.27	<0.56	<1.95
CACMW-001-110-103.25-081424-FM-R	98.25-103.25	1.98	0.61	<3.27	<0.56	<1.95
CACMW-001-110-108.5-081424-FM-R	103.5-108.5	1.98	0.42	<3.27	<0.56	<1.95
CACMW-001-160-117-090424-FM-R	112-117	<0.10	<0.56	<3.06	<0.56	<1.67
CACMW-001-160-122.25-090424-FM-R	117.25-122.25	0.52	<0.56	<3.06	<0.56	<1.67
CACMW-001-160-127.5-090424-FM-R	122.5-127.5	0.38	<0.56	<3.06	<0.56	<1.67
CACMW-001-160-132.75-090424-FM-R	127.75-132.75	1.43	0.46	<3.06	<0.56	<1.67
CACMW-001-160-138-081524-FM-R	133-138	0.89	0.26	<3.09	<0.53	<1.84
CACMW-001-160-143.25-081524-FM-R	138.25-143.25	2.34	0.47	<3.09	<0.53	<1.84
CACMW-001-160-148.5-081524-FM-R	143.5-148.5	1.81	0.47	<3.09	<0.53	<1.84
CACMW-001-160-153.75-081524-FM-R	148.75-153.75	0.89	0.44	<3.09	<0.53	<1.84
CACMW-001-160-159-081524-FM-R	154-159	0.10	0.20	<3.09	<0.53	<1.84
CACMW-002-060-16.5-090424-FM-R	11.5-16.5	0.52	<0.56	<3.06	<0.56	<1.67
CACMW-002-060-21.75-090424-FM-R	16.75-21.75	0.59	0.20	<3.06	<0.56	<1.67
CACMW-002-060-27-090424-FM-R	22-27	0.94	0.20	<3.06	<0.56	<1.67
CACMW-002-060-32.25-090424-FM-R	27.25-32.25	0.52	<0.56	<3.06	<0.56	<1.67
CACMW-002-060-37.5-081524-FM-R	32.5-37.5	1.30	0.34	<2.99	<0.51	<1.78
CACMW-002-060-42.75-081524-FM-R	37.75-42.75	1.49	0.36	<2.99	<0.51	<1.78
CACMW-002-060-48-081524-FM-R	43-48	1.05	0.37	<2.99	<0.51	<1.78
CACMW-002-060-53.25-081524-FM-R	48.25-53.25	2.64	0.52	<2.99	<0.51	<1.78
CACMW-002-060-58.5-081524-FM-R	53.5-58.5	2.13	0.83	<2.99	<0.51	<1.78
CACMW-002-110-66.5-090424-FM-R	61.5-66.5	0.87	<0.56	<3.05	<0.56	<1.67
CACMW-002-110-71.75-090424-FM-R	66.75-71.75	0.94	<0.56	<3.05	<0.56	<1.67
CACMW-002-110-77-090424-FM-R	72-77	0.73	0.26	<3.05	<0.56	<1.67
CACMW-002-110-82.25-090424-FM-R	77.25-82.25	1.15	0.20	<3.05	<0.56	<1.67
CACMW-002-110-87.5-081524-FM-R	82.5-87.5	0.36	0.24	<3.07	<0.52	<1.83
CACMW-002-110-92.75-081524-FM-R	87.75-92.75	0.75	0.33	<3.07	<0.52	<1.83
CACMW-002-110-98-081524-FM-R	93-98	0.49	0.33	<3.07	<0.52	<1.83
CACMW-002-110-103.25-081524-FM-R	98.25-103.25	0.95	0.35	<3.07	0.09	<1.83
CACMW-002-110-108.5-081524-FM-R	103.5-108.5	0.62	0.29	<3.07	<0.52	<1.83
CACMW-002-160-116.5-090424-FM-R	111.5-116.5	0.59	<0.56	<3.06	<0.56	<1.67
CACMW-002-160-121.75-090424-FM-R	116.75-121.75	0.73	<0.56	<3.06	<0.56	<1.67
CACMW-002-160-127-090424-FM-R	122-127	0.80	<0.56	<3.06	<0.56	<1.67
CACMW-002-160-132.25-090424-FM-R	127.25-132.25	0.31	<0.56	<3.06	<0.56	<1.67
CACMW-002-160-137.5-081524-FM-R	132.5-137.5	0.23	0.18	<3.08	0.05	<1.84
CACMW-002-160-142.75-081524-FM-R	137.75-142.75	0.62	0.19	<3.08	0.06	<1.84
CACMW-002-160-148-081524-FM-R	143-148	0.56	0.19	<3.08	0.06	<1.84
CACMW-002-160-153.25-081524-FM-R	148.25-153.25	0.23	0.12	<3.08	0.06	<1.84
CACMW-002-160-158.5-081524-FM-R	153.5-158.5	0.10	0.10	<3.08	0.06	<1.84

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorotetradecanoic acid (PFTeDA) (ug/m^2/day)	Perfluorobutane sulfonic acid (PFBS) (ug/m^2/day)	Perfluoropentane sulfonate (PFPeS) (ug/m^2/day)	Perfluorohexane sulfonic acid (PFHxS) (ug/m^2/day)	Perfluoroheptane sulfonic acid (PFHpS) (ug/m^2/day)
CACMW-001-060-16.5-090424-FM-R	11.5-16.5	<0.6	<0.5	<0.5	1.5	<0.5
CACMW-001-060-21.75-090424-FM-R	16.75-21.75	<0.6	0.4	0.5	7.0	0.2
CACMW-001-060-27-090424-FM-R	22-27	<0.6	1.6	2.2	32.7	1.6
CACMW-001-060-32.25-090424-FM-R	27.25-32.25	<0.6	1.7	2.5	34.8	2.3
CACMW-001-060-37.5-081424-FM-R	32.5-37.5	<0.6	1.5	2.4	32.4	2.0
CACMW-001-060-42.75-081424-FM-R	37.75-42.75	<0.6	2.4	3.2	44.3	2.7
CACMW-001-060-48-081424-FM-R	43-48	<0.6	2.2	3.6	48.8	2.7
CACMW-001-060-53.25-081524-FM-R	48.25-53.25	<0.5	1.8	2.4	34.8	2.3
CACMW-001-060-58.5-081524-FM-R	53.5-58.5	<0.5	1.6	2.2	30.2	2.0
CACMW-001-110-66.5-090424-FM-R	61.5-66.5	<0.6	0.9	1.5	13.9	0.8
CACMW-001-110-71.75-090424-FM-R	66.75-71.75	<0.6	1.0	1.7	18.8	1.0
CACMW-001-110-77-090424-FM-R	72-77	<0.6	3.0	5.0	63.4	4.2
CACMW-001-110-82.25-090424-FM-R	77.25-82.25	<0.6	4.1	6.4	83.6	5.4
CACMW-001-110-87.5-081424-FM-R	82.5-87.5	<0.6	3.0	4.7	64.7	4.0
CACMW-001-110-92.75-081424-FM-R	87.75-92.75	<0.6	2.9	5.0	59.8	3.8
CACMW-001-110-98-081424-FM-R	93-98	<0.6	2.4	3.7	47.3	3.4
CACMW-001-110-103.25-081424-FM-R	98.25-103.25	<0.6	2.8	4.0	48.0	3.6
CACMW-001-110-108.5-081424-FM-R	103.5-108.5	<0.6	2.1	2.9	41.7	3.0
CACMW-001-160-117-090424-FM-R	112-117	<0.6	0.3	0.3	4.0	<0.5
CACMW-001-160-122.25-090424-FM-R	117.25-122.25	<0.6	0.4	0.5	6.4	0.4
CACMW-001-160-127.5-090424-FM-R	122.5-127.5	<0.6	1.1	1.6	14.6	0.8
CACMW-001-160-132.75-090424-FM-R	127.75-132.75	<0.6	3.9	6.8	69.6	5.0
CACMW-001-160-138-081524-FM-R	133-138	<0.5	3.6	6.3	57.9	4.6
CACMW-001-160-143.25-081524-FM-R	138.25-143.25	<0.5	5.9	9.2	98.8	7.2
CACMW-001-160-148.5-081524-FM-R	143.5-148.5	<0.5	7.2	11.2	111.9	8.6
CACMW-001-160-153.75-081524-FM-R	148.75-153.75	<0.5	4.4	6.6	61.9	4.3
CACMW-001-160-159-081524-FM-R	154-159	<0.5	0.9	1.2	10.5	0.5
CACMW-002-060-16.5-090424-FM-R	11.5-16.5	<0.6	0.7	1.0	9.7	0.5
CACMW-002-060-21.75-090424-FM-R	16.75-21.75	<0.6	0.4	0.6	7.7	0.4
CACMW-002-060-27-090424-FM-R	22-27	<0.6	1.0	1.6	19.5	1.1
CACMW-002-060-32.25-090424-FM-R	27.25-32.25	<0.6	1.0	1.4	19.5	1.5
CACMW-002-060-37.5-081524-FM-R	32.5-37.5	<0.5	1.3	2.2	29.3	1.7
CACMW-002-060-42.75-081524-FM-R	37.75-42.75	<0.5	1.5	2.4	31.8	1.9
CACMW-002-060-48-081524-FM-R	43-48	<0.1	1.5	2.5	34.3	2.1
CACMW-002-060-53.25-081524-FM-R	48.25-53.25	<0.1	3.0	5.2	62.3	4.2
CACMW-002-060-58.5-081524-FM-R	53.5-58.5	<0.1	2.7	4.3	57.9	4.3
CACMW-002-110-66.5-090424-FM-R	61.5-66.5	<0.6	0.8	1.0	15.3	0.9
CACMW-002-110-71.75-090424-FM-R	66.75-71.75	<0.6	1.2	1.5	23.6	1.6
CACMW-002-110-77-090424-FM-R	72-77	<0.6	1.3	2.0	29.1	1.9
CACMW-002-110-82.25-090424-FM-R	77.25-82.25	<0.6	1.5	2.4	29.8	2.1
CACMW-002-110-87.5-081524-FM-R	82.5-87.5	<0.1	1.1	1.6	19.0	1.4
CACMW-002-110-92.75-081524-FM-R	87.75-92.75	<0.1	1.6	2.4	31.4	2.4
CACMW-002-110-98-081524-FM-R	93-98	<0.5	1.5	2.0	22.2	1.3
CACMW-002-110-103.25-081524-FM-R	98.25-103.25	<0.1	2.0	3.1	35.9	2.6
CACMW-002-110-108.5-081524-FM-R	103.5-108.5	<0.1	1.7	2.7	30.1	2.2
CACMW-002-160-116.5-090424-FM-R	111.5-116.5	<0.6	1.6	2.3	22.2	1.6
CACMW-002-160-121.75-090424-FM-R	116.75-121.75	<0.6	2.2	2.8	25.7	1.9
CACMW-002-160-127-090424-FM-R	122-127	<0.6	2.3	3.5	29.9	2.0
CACMW-002-160-132.25-090424-FM-R	127.25-132.25	<0.6	1.8	2.6	24.3	1.7
CACMW-002-160-137.5-081524-FM-R	132.5-137.5	<0.1	2.3	3.5	32.1	2.4
CACMW-002-160-142.75-081524-FM-R	137.75-142.75	<0.1	3.0	4.7	53.1	3.3
CACMW-002-160-148-081524-FM-R	143-148	0.02	2.4	3.9	34.1	2.4
CACMW-002-160-153.25-081524-FM-R	148.25-153.25	0.03	1.4	1.8	17.1	1.3
CACMW-002-160-158.5-081524-FM-R	153.5-158.5	0.03	0.9	1.1	9.8	0.7

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorooctane sulfonic acid (PFOS) (ug/m^2/day)	Perfluorononane sulfonic acid (PFNS) (ug/m^2/day)	Perfluorodecane sulfonic acid (PFDS) (ug/m^2/day)	Perfluorododecane sulfonic acid (PFDOS) (ug/m^2/day)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ug/m^2/day)
CACMW-001-060-16.5-090424-FM-R	11.5-16.5	7.7	<0.5	<0.5	<0.5	<2.1
CACMW-001-060-21.75-090424-FM-R	16.75-21.75	21.6	<0.5	<0.5	<0.5	<2.1
CACMW-001-060-27-090424-FM-R	22-27	160.2	<0.5	<0.5	<0.5	<2.1
CACMW-001-060-32.25-090424-FM-R	27.25-32.25	188.0	0.2	<0.5	<0.5	<2.1
CACMW-001-060-37.5-081424-FM-R	32.5-37.5	161.9	<0.5	<0.5	<0.5	<2.1
CACMW-001-060-42.75-081424-FM-R	37.75-42.75	218.2	<0.5	<0.5	<0.5	<2.1
CACMW-001-060-48-081424-FM-R	43-48	216.1	<0.5	<0.5	<0.5	<2.1
CACMW-001-060-53.25-081524-FM-R	48.25-53.25	170.7	0.2	<0.5	<0.5	<2.0
CACMW-001-060-58.5-081524-FM-R	53.5-58.5	151.0	<0.5	<0.5	<0.5	<2.0
CACMW-001-110-66.5-090424-FM-R	61.5-66.5	76.6	<0.5	<0.5	<0.5	<2.1
CACMW-001-110-71.75-090424-FM-R	66.75-71.75	97.5	<0.5	<0.5	<0.5	<2.1
CACMW-001-110-77-090424-FM-R	72-77	327.3	0.3	<0.5	<0.5	<2.1
CACMW-001-110-82.25-090424-FM-R	77.25-82.25	445.7	0.4	<0.5	<0.5	<2.1
CACMW-001-110-87.5-081424-FM-R	82.5-87.5	326.9	0.4	<0.5	<0.5	<2.1
CACMW-001-110-92.75-081424-FM-R	87.75-92.75	306.0	0.3	<0.5	<0.5	<2.1
CACMW-001-110-98-081424-FM-R	93-98	264.3	0.3	0.3	<0.5	<2.1
CACMW-001-110-103.25-081424-FM-R	98.25-103.25	271.3	0.2	0.3	<0.5	<2.1
CACMW-001-110-108.5-081424-FM-R	103.5-108.5	222.6	0.2	<0.5	<0.5	<2.1
CACMW-001-160-117-090424-FM-R	112-117	10.4	<0.5	<0.5	<0.5	<2.1
CACMW-001-160-122.25-090424-FM-R	117.25-122.25	19.5	<0.5	<0.5	<0.5	<2.1
CACMW-001-160-127.5-090424-FM-R	122.5-127.5	43.2	<0.5	<0.5	<0.5	<2.1
CACMW-001-160-132.75-090424-FM-R	127.75-132.75	236.7	<0.5	<0.5	<0.5	<2.1
CACMW-001-160-138-081524-FM-R	133-138	197.5	<0.5	<0.5	<0.5	<2.0
CACMW-001-160-143.25-081524-FM-R	138.25-143.25	368.7	<0.5	<0.5	<0.5	0.7
CACMW-001-160-148.5-081524-FM-R	143.5-148.5	428.0	<0.5	<0.5	<0.5	0.8
CACMW-001-160-153.75-081524-FM-R	148.75-153.75	223.9	<0.5	<0.5	<0.5	<2.0
CACMW-001-160-159-081524-FM-R	154-159	32.9	<0.5	<0.5	<0.5	<2.0
CACMW-002-060-16.5-090424-FM-R	11.5-16.5	34.1	<0.5	<0.5	<0.5	<2.1
CACMW-002-060-21.75-090424-FM-R	16.75-21.75	36.2	<0.5	<0.5	<0.5	<2.1
CACMW-002-060-27-090424-FM-R	22-27	90.4	<0.5	<0.5	<0.5	<2.1
CACMW-002-060-32.25-090424-FM-R	27.25-32.25	104.3	<0.5	<0.5	<0.5	<2.1
CACMW-002-060-37.5-081524-FM-R	32.5-37.5	139.9	<0.5	<0.5	<0.5	<1.9
CACMW-002-060-42.75-081524-FM-R	37.75-42.75	171.7	0.2	0.2	<0.5	<1.9
CACMW-002-060-48-081524-FM-R	43-48	152.7	0.2	<0.5	<0.5	0.1
CACMW-002-060-53.25-081524-FM-R	48.25-53.25	356.2	0.3	<0.5	<0.5	0.2
CACMW-002-060-58.5-081524-FM-R	53.5-58.5	388.0	0.3	<0.05	<0.05	0.2
CACMW-002-110-66.5-090424-FM-R	61.5-66.5	83.3	<0.5	<0.5	<0.5	<2.1
CACMW-002-110-71.75-090424-FM-R	66.75-71.75	131.9	<0.5	<0.5	<0.5	<2.1
CACMW-002-110-77-090424-FM-R	72-77	159.6	<0.5	<0.5	<0.5	<2.1
CACMW-002-110-82.25-090424-FM-R	77.25-82.25	159.6	0.2	<0.5	<0.5	<2.1
CACMW-002-110-87.5-081524-FM-R	82.5-87.5	117.6	0.1	<0.1	<0.1	0.1
CACMW-002-110-92.75-081524-FM-R	87.75-92.75	156.8	0.1	<0.1	<0.1	0.1
CACMW-002-110-98-081524-FM-R	93-98	124.2	<0.5	<0.5	<0.5	<2.0
CACMW-002-110-103.25-081524-FM-R	98.25-103.25	254.9	0.1	<0.1	<0.1	0.1
CACMW-002-110-108.5-081524-FM-R	103.5-108.5	163.4	<0.5	<0.5	<0.5	0.1
CACMW-002-160-116.5-090424-FM-R	111.5-116.5	83.4	<0.5	<0.5	<0.5	<2.1
CACMW-002-160-121.75-090424-FM-R	116.75-121.75	90.4	<0.5	<0.5	<0.5	<2.1
CACMW-002-160-127-090424-FM-R	122-127	97.3	<0.5	<0.5	<0.5	<2.1
CACMW-002-160-132.25-090424-FM-R	127.25-132.25	90.4	<0.5	<0.5	<0.5	<2.1
CACMW-002-160-137.5-081524-FM-R	132.5-137.5	124.6	0.02	<0.1	<0.1	0.2
CACMW-002-160-142.75-081524-FM-R	137.75-142.75	157.4	0.1	<0.1	<0.1	0.3
CACMW-002-160-148-081524-FM-R	143-148	118.0	0.03	<0.1	<0.1	0.3
CACMW-002-160-153.25-081524-FM-R	148.25-153.25	65.6	0.02	<0.1	<0.1	0.2
CACMW-002-160-158.5-081524-FM-R	153.5-158.5	34.1	<0.1	<0.1	<0.1	0.1

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ug/m^2/day)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ug/m^2/day)
CACMW-001-060-16.5-090424-FM-R	11.5-16.5	5.0	<2.2	<0.6	<1.1	<5.6
CACMW-001-060-21.75-090424-FM-R	16.75-21.75	<0.17	<2.2	<0.6	<1.1	<5.6
CACMW-001-060-27-090424-FM-R	22-27	14.8	2.4	<0.6	2.3	<5.6
CACMW-001-060-32.25-090424-FM-R	27.25-32.25	11.3	5.1	<0.6	1.9	<5.6
CACMW-001-060-37.5-081424-FM-R	32.5-37.5	15.0	5.2	<0.6	1.8	<5.6
CACMW-001-060-42.75-081424-FM-R	37.75-42.75	33.3	6.5	<0.6	2.9	<5.6
CACMW-001-060-48-081424-FM-R	43-48	30.9	8.4	<0.6	3.1	<5.6
CACMW-001-060-53.25-081524-FM-R	48.25-53.25	21.8	4.5	<0.5	2.0	<5.3
CACMW-001-060-58.5-081524-FM-R	53.5-58.5	18.5	4.8	<0.5	1.6	<5.3
CACMW-001-110-66.5-090424-FM-R	61.5-66.5	8.5	<2.2	<0.6	0.7	<5.6
CACMW-001-110-71.75-090424-FM-R	66.75-71.75	9.9	1.5	<0.6	0.8	<5.6
CACMW-001-110-77-090424-FM-R	72-77	24.5	8.4	<0.6	3.3	<5.6
CACMW-001-110-82.25-090424-FM-R	77.25-82.25	37.8	9.7	<0.6	5.0	<5.6
CACMW-001-110-87.5-081424-FM-R	82.5-87.5	30.8	8.3	<0.6	3.6	<5.6
CACMW-001-110-92.75-081424-FM-R	87.75-92.75	32.9	8.3	<0.6	3.8	<5.6
CACMW-001-110-98-081424-FM-R	93-98	30.1	7.7	<0.6	2.9	<5.6
CACMW-001-110-103.25-081424-FM-R	98.25-103.25	25.2	6.9	<0.6	3.8	<5.6
CACMW-001-110-108.5-081424-FM-R	103.5-108.5	23.1	5.3	<0.6	2.2	<5.6
CACMW-001-160-117-090424-FM-R	112-117	<0.17	<2.2	<0.6	<1.1	<5.6
CACMW-001-160-122.25-090424-FM-R	117.25-122.25	2.3	1.0	<0.6	<1.1	<5.6
CACMW-001-160-127.5-090424-FM-R	122.5-127.5	6.4	1.0	<0.6	<1.1	<5.6
CACMW-001-160-132.75-090424-FM-R	127.75-132.75	45.4	6.9	<0.6	2.3	<5.6
CACMW-001-160-138-081524-FM-R	133-138	33.7	5.1	<0.5	2.0	<5.3
CACMW-001-160-143.25-081524-FM-R	138.25-143.25	62.7	8.6	<0.5	3.4	<5.3
CACMW-001-160-148.5-081524-FM-R	143.5-148.5	75.9	10.5	<0.5	4.1	<5.3
CACMW-001-160-153.75-081524-FM-R	148.75-153.75	43.0	6.6	<0.5	2.0	<5.3
CACMW-001-160-159-081524-FM-R	154-159	9.4	1.3	<0.5	<1.1	<5.3
CACMW-002-060-16.5-090424-FM-R	11.5-16.5	3.0	1.7	<0.6	<1.1	<5.6
CACMW-002-060-21.75-090424-FM-R	16.75-21.75	0.9	<2.2	<0.6	0.5	<5.6
CACMW-002-060-27-090424-FM-R	22-27	7.1	3.1	<0.6	1.0	<5.6
CACMW-002-060-32.25-090424-FM-R	27.25-32.25	9.2	2.9	<0.6	1.0	<5.6
CACMW-002-060-37.5-081524-FM-R	32.5-37.5	19.2	4.6	<0.5	1.5	<5.1
CACMW-002-060-42.75-081524-FM-R	37.75-42.75	16.1	4.6	<0.5	2.0	<5.1
CACMW-002-060-48-081524-FM-R	43-48	19.9	2.9	<0.5	1.7	<5.1
CACMW-002-060-53.25-081524-FM-R	48.25-53.25	28.1	8.9	<0.1	4.0	<5.1
CACMW-002-060-58.5-081524-FM-R	53.5-58.5	21.8	8.3	<0.1	3.8	<5.1
CACMW-002-110-66.5-090424-FM-R	61.5-66.5	9.9	2.0	<0.6	0.8	<5.6
CACMW-002-110-71.75-090424-FM-R	66.75-71.75	14.7	4.2	<0.6	1.6	<5.6
CACMW-002-110-77-090424-FM-R	72-77	7.8	3.4	<0.6	1.7	<5.6
CACMW-002-110-82.25-090424-FM-R	77.25-82.25	8.5	3.3	<0.6	1.4	<5.6
CACMW-002-110-87.5-081524-FM-R	82.5-87.5	4.1	2.8	<0.5	1.0	<5.2
CACMW-002-110-92.75-081524-FM-R	87.75-92.75	8.66	4.0	<0.5	1.8	<5.2
CACMW-002-110-98-081524-FM-R	93-98	12.6	2.7	<0.5	1.0	<5.2
CACMW-002-110-103.25-081524-FM-R	98.25-103.25	14.5	4.4	<0.1	1.7	<5.2
CACMW-002-110-108.5-081524-FM-R	103.5-108.5	8.0	3.6	<0.5	1.6	<5.2
CACMW-002-160-116.5-090424-FM-R	111.5-116.5	6.4	2.2	<0.6	0.8	<5.6
CACMW-002-160-121.75-090424-FM-R	116.75-121.75	13.4	2.3	<0.6	0.7	<5.6
CACMW-002-160-127-090424-FM-R	122-127	9.9	2.9	<0.6	0.8	<5.6
CACMW-002-160-132.25-090424-FM-R	127.25-132.25	11.3	2.1	<0.6	0.8	<5.6
CACMW-002-160-137.5-081524-FM-R	132.5-137.5	11.3	3.1	<0.1	1.0	<5.2
CACMW-002-160-142.75-081524-FM-R	137.75-142.75	21.1	4.0	<0.1	1.4	<5.2
CACMW-002-160-148-081524-FM-R	143-148	12.6	3.1	<0.1	1.1	<5.2
CACMW-002-160-153.25-081524-FM-R	148.25-153.25	10.7	1.4	<0.1	0.5	<5.2
CACMW-002-160-158.5-081524-FM-R	153.5-158.5	<1.5	0.9	<0.1	0.3	<5.2

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

.E_ID for PFAS	Depth intervals for PFAS (ft)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ug/m^2/day)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ug/m^2/day)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ug/m^2/day)	Perfluorooctane sulfonamide (PFOSA) (ug/m^2/day)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ug/m^2/day)
CACMW-001-060-16.5-090424-FM-R	11.5-16.5	<0.3	<0.6	<5.6	<0.3	<5.3
CACMW-001-060-21.75-090424-FM-R	16.75-21.75	<0.3	<0.6	<5.6	0.1	<5.3
CACMW-001-060-27-090424-FM-R	22-27	<0.3	1.3	<5.6	1.3	<5.3
CACMW-001-060-32.25-090424-FM-R	27.25-32.25	<0.3	2.1	<5.6	1.6	<5.3
CACMW-001-060-37.5-081424-FM-R	32.5-37.5	<0.3	1.6	<5.6	1.7	<5.3
CACMW-001-060-42.75-081424-FM-R	37.75-42.75	<0.3	3.0	<5.6	2.0	<5.3
CACMW-001-060-48-081424-FM-R	43-48	<0.3	2.8	<5.6	2.0	<5.3
CACMW-001-060-53.25-081524-FM-R	48.25-53.25	<0.3	2.0	<5.3	1.4	<5.0
CACMW-001-060-58.5-081524-FM-R	53.5-58.5	<0.3	1.4	<5.3	1.2	<5.0
CACMW-001-110-66.5-090424-FM-R	61.5-66.5	<0.3	0.4	<5.6	0.6	<5.3
CACMW-001-110-71.75-090424-FM-R	66.75-71.75	<0.3	1.0	<5.6	0.9	<5.3
CACMW-001-110-77-090424-FM-R	72-77	<0.3	3.1	<5.6	2.4	<5.3
CACMW-001-110-82.25-090424-FM-R	77.25-82.25	<0.3	4.2	<5.6	3.3	<5.3
CACMW-001-110-87.5-081424-FM-R	82.5-87.5	<0.3	3.6	<5.6	2.9	<5.3
CACMW-001-110-92.75-081424-FM-R	87.75-92.75	<0.3	3.2	<5.6	2.3	<5.3
CACMW-001-110-98-081424-FM-R	93-98	<0.3	3.1	<5.6	2.2	<5.3
CACMW-001-110-103.25-081424-FM-R	98.25-103.25	<0.3	3.0	<5.6	2.1	<5.3
CACMW-001-110-108.5-081424-FM-R	103.5-108.5	<0.3	1.9	<5.6	1.7	<5.3
CACMW-001-160-117-090424-FM-R	112-117	<0.3	<0.6	<5.6	0.2	<5.3
CACMW-001-160-122.25-090424-FM-R	117.25-122.25	<0.3	<0.6	<5.6	<0.3	<5.3
CACMW-001-160-127.5-090424-FM-R	122.5-127.5	<0.3	<0.6	<5.6	0.4	<5.3
CACMW-001-160-132.75-090424-FM-R	127.75-132.75	<0.3	1.7	<5.6	2.2	<5.3
CACMW-001-160-138-081524-FM-R	133-138	<0.3	1.4	<5.3	1.8	<5.0
CACMW-001-160-143.25-081524-FM-R	138.25-143.25	<0.3	2.0	<5.3	3.8	<5.0
CACMW-001-160-148.5-081524-FM-R	143.5-148.5	<0.3	2.8	<5.3	3.5	<5.0
CACMW-001-160-153.75-081524-FM-R	148.75-153.75	<0.3	1.4	<5.3	2.3	<5.0
CACMW-001-160-159-081524-FM-R	154-159	<0.3	<0.5	<5.3	0.5	<5.0
CACMW-002-060-16.5-090424-FM-R	11.5-16.5	<0.3	0.3	<5.6	0.4	<5.3
CACMW-002-060-21.75-090424-FM-R	16.75-21.75	<0.3	0.3	<5.6	0.4	<5.3
CACMW-002-060-27-090424-FM-R	22-27	<0.3	0.8	<5.6	0.8	<5.3
CACMW-002-060-32.25-090424-FM-R	27.25-32.25	<0.3	1.1	<5.6	1.0	<5.3
CACMW-002-060-37.5-081524-FM-R	32.5-37.5	<0.3	1.7	<5.1	1.3	<4.8
CACMW-002-060-42.75-081524-FM-R	37.75-42.75	<0.3	2.2	<5.1	1.5	<4.8
CACMW-002-060-48-081524-FM-R	43-48	<0.3	1.8	<5.1	1.1	<0.5
CACMW-002-060-53.25-081524-FM-R	48.25-53.25	<0.03	4.3	<5.1	2.8	<0.5
CACMW-002-060-58.5-081524-FM-R	53.5-58.5	0.0	4.4	<5.1	2.5	<0.5
CACMW-002-110-66.5-090424-FM-R	61.5-66.5	<0.3	0.7	<5.6	0.6	<5.3
CACMW-002-110-71.75-090424-FM-R	66.75-71.75	<0.3	1.2	<5.6	0.9	<5.3
CACMW-002-110-77-090424-FM-R	72-77	<0.3	1.5	<5.6	1.0	<5.3
CACMW-002-110-82.25-090424-FM-R	77.25-82.25	<0.3	1.5	<5.6	1.4	<5.3
CACMW-002-110-87.5-081524-FM-R	82.5-87.5	<0.3	1.0	<5.2	0.7	<0.5
CACMW-002-110-92.75-081524-FM-R	87.75-92.75	<0.03	1.8	<5.2	1.0	<0.5
CACMW-002-110-98-081524-FM-R	93-98	<0.3	0.8	<5.2	0.7	<5.0
CACMW-002-110-103.25-081524-FM-R	98.25-103.25	0.03	1.8	<5.2	1.0	<0.5
CACMW-002-110-108.5-081524-FM-R	103.5-108.5	<0.3	1.4	<5.2	0.9	<0.5
CACMW-002-160-116.5-090424-FM-R	111.5-116.5	<0.3	0.5	<5.6	<0.3	<5.3
CACMW-002-160-121.75-090424-FM-R	116.75-121.75	<0.3	<0.6	<5.6	0.6	<5.3
CACMW-002-160-127-090424-FM-R	122-127	<0.3	0.5	<5.6	0.4	<5.3
CACMW-002-160-132.25-090424-FM-R	127.25-132.25	<0.3	0.6	<5.6	<0.3	<5.3
CACMW-002-160-137.5-081524-FM-R	132.5-137.5	<0.03	0.6	<5.2	0.8	<0.5
CACMW-002-160-142.75-081524-FM-R	137.75-142.75	<0.03	0.9	<5.2	1.2	<0.5
CACMW-002-160-148-081524-FM-R	143-148	<0.03	0.6	<5.2	0.9	<0.5
CACMW-002-160-153.25-081524-FM-R	148.25-153.25	<0.03	0.4	<5.2	0.4	<0.5
CACMW-002-160-158.5-081524-FM-R	153.5-158.5	<0.03	0.2	<5.2	0.2	<0.5

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (ug/m^2/day)	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA) (ug/m^2/day)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ug/m^2/day)	Perfluoro-3-methoxypropanoic aci (PFMPA) (ug/m^2/day)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ug/m^2/day)
CACMW-001-060-16.5-090424-FM-R	11.5-16.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-060-21.75-090424-FM-R	16.75-21.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-060-27-090424-FM-R	22-27	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-060-32.25-090424-FM-R	27.25-32.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-060-37.5-081424-FM-R	32.5-37.5	<5.6	<5.6	<2.3	<2.3	<5.3
CACMW-001-060-42.75-081424-FM-R	37.75-42.75	<5.6	<5.6	<2.3	<2.3	<5.3
CACMW-001-060-48-081424-FM-R	43-48	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-060-53.25-081524-FM-R	48.25-53.25	<5.3	<5.3	<2.1	<2.1	<5.0
CACMW-001-060-58.5-081524-FM-R	53.5-58.5	<5.3	<5.3	<2.1	<2.1	<5.0
CACMW-001-110-66.5-090424-FM-R	61.5-66.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-110-71.75-090424-FM-R	66.75-71.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-110-77-090424-FM-R	72-77	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-110-82.25-090424-FM-R	77.25-82.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-110-87.5-081424-FM-R	82.5-87.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-110-92.75-081424-FM-R	87.75-92.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-110-98-081424-FM-R	93-98	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-110-103.25-081424-FM-R	98.25-103.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-110-108.5-081424-FM-R	103.5-108.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-160-117-090424-FM-R	112-117	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-160-122.25-090424-FM-R	117.25-122.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-160-127.5-090424-FM-R	122.5-127.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-160-132.75-090424-FM-R	127.75-132.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-001-160-138-081524-FM-R	133-138	<5.3	<5.3	<2.1	<2.1	<5.0
CACMW-001-160-143.25-081524-FM-R	138.25-143.25	<5.3	<5.3	<2.1	<2.1	<5.0
CACMW-001-160-148.5-081524-FM-R	143.5-148.5	<5.3	<5.3	<2.1	<2.1	<5.0
CACMW-001-160-153.75-081524-FM-R	148.75-153.75	<5.3	<5.3	<2.1	<2.1	<5.0
CACMW-001-160-159-081524-FM-R	154-159	<5.3	<5.3	<2.1	<2.1	<5.0
CACMW-002-060-16.5-090424-FM-R	11.5-16.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-060-21.75-090424-FM-R	16.75-21.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-060-27-090424-FM-R	22-27	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-060-32.25-090424-FM-R	27.25-32.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-060-37.5-081524-FM-R	32.5-37.5	<5.1	<5.1	<2.0	<2.0	<4.8
CACMW-002-060-42.75-081524-FM-R	37.75-42.75	<5.0	<5.0	<2.0	<2.0	<4.8
CACMW-002-060-48-081524-FM-R	43-48	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-060-53.25-081524-FM-R	48.25-53.25	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-060-58.5-081524-FM-R	53.5-58.5	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-110-66.5-090424-FM-R	61.5-66.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-110-71.75-090424-FM-R	66.75-71.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-110-77-090424-FM-R	72-77	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-110-82.25-090424-FM-R	77.25-82.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-110-87.5-081524-FM-R	82.5-87.5	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-110-92.75-081524-FM-R	87.75-92.75	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-110-98-081524-FM-R	93-98	<5.2	<5.2	<2.1	<2.1	<5.0
CACMW-002-110-103.25-081524-FM-R	98.25-103.25	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-110-108.5-081524-FM-R	103.5-108.5	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-160-116.5-090424-FM-R	111.5-116.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-160-121.75-090424-FM-R	116.75-121.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-160-127-090424-FM-R	122-127	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-160-132.25-090424-FM-R	127.25-132.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-002-160-137.5-081524-FM-R	132.5-137.5	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-160-142.75-081524-FM-R	137.75-142.75	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-160-148-081524-FM-R	143-148	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-160-153.25-081524-FM-R	148.25-153.25	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-002-160-158.5-081524-FM-R	153.5-158.5	<0.5	<0.5	<0.2	<0.2	<0.5

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ug/m^2/day)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ug/m^2/day)
CACMW-001-060-16.5-090424-FM-R	11.5-16.5	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-001-060-21.75-090424-FM-R	16.75-21.75	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-001-060-27-090424-FM-R	22-27	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-001-060-32.25-090424-FM-R	27.25-32.25	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-001-060-37.5-081424-FM-R	32.5-37.5	<5.2	<2.0	<5.6	<28.2	<28.2
CACMW-001-060-42.75-081424-FM-R	37.75-42.75	<5.3	<2.0	<5.6	<28.2	<28.2
CACMW-001-060-48-081424-FM-R	43-48	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-001-060-53.25-081524-FM-R	48.25-53.25	<4.9	<1.8	<5.3	<26.3	<26.3
CACMW-001-060-58.5-081524-FM-R	53.5-58.5	<4.9	<1.8	<5.3	<26.3	<26.3
CACMW-001-110-66.5-090424-FM-R	61.5-66.5	<5.2	<1.9	<5.6	<27.9	<27.9
CACMW-001-110-71.75-090424-FM-R	66.75-71.75	<5.2	<1.9	<5.6	<27.9	<27.9
CACMW-001-110-77-090424-FM-R	72-77	<5.2	<1.9	<5.6	<27.9	<27.9
CACMW-001-110-82.25-090424-FM-R	77.25-82.25	<5.2	<1.9	<5.6	<27.9	<27.9
CACMW-001-110-87.5-081424-FM-R	82.5-87.5	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-001-110-92.75-081424-FM-R	87.75-92.75	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-001-110-98-081424-FM-R	93-98	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-001-110-103.25-081424-FM-R	98.25-103.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-001-110-108.5-081424-FM-R	103.5-108.5	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-001-160-117-090424-FM-R	112-117	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-001-160-122.25-090424-FM-R	117.25-122.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-001-160-127.5-090424-FM-R	122.5-127.5	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-001-160-132.75-090424-FM-R	127.75-132.75	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-001-160-138-081524-FM-R	133-138	<4.9	<1.8	<5.3	<26.3	<26.3
CACMW-001-160-143.25-081524-FM-R	138.25-143.25	<4.9	<1.8	<5.3	<26.3	<26.3
CACMW-001-160-148.5-081524-FM-R	143.5-148.5	<4.9	<1.8	<5.3	<26.3	<26.3
CACMW-001-160-153.75-081524-FM-R	148.75-153.75	<4.9	<1.8	<5.3	<26.3	<26.3
CACMW-001-160-159-081524-FM-R	154-159	<4.9	<1.8	<5.3	<26.3	<26.3
CACMW-002-060-16.5-090424-FM-R	11.5-16.5	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-060-21.75-090424-FM-R	16.75-21.75	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-060-27-090424-FM-R	22-27	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-060-32.25-090424-FM-R	27.25-32.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-060-37.5-081524-FM-R	32.5-37.5	<4.8	<1.8	<5.1	<25.4	<25.4
CACMW-002-060-42.75-081524-FM-R	37.75-42.75	<4.6	<1.8	<5.0	<24.8	<24.8
CACMW-002-060-48-081524-FM-R	43-48	<0.5	<0.2	<0.5	1.0	<2.5
CACMW-002-060-53.25-081524-FM-R	48.25-53.25	<0.5	<0.2	<0.5	1.8	<2.5
CACMW-002-060-58.5-081524-FM-R	53.5-58.5	<0.5	<0.2	<0.5	1.7	<2.5
CACMW-002-110-66.5-090424-FM-R	61.5-66.5	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-110-71.75-090424-FM-R	66.75-71.75	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-110-77-090424-FM-R	72-77	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-110-82.25-090424-FM-R	77.25-82.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-110-87.5-081524-FM-R	82.5-87.5	<0.5	<0.2	<0.5	<2.6	<2.6
CACMW-002-110-92.75-081524-FM-R	87.75-92.75	<0.5	<0.2	<0.5	<2.6	<2.6
CACMW-002-110-98-081524-FM-R	93-98	<4.9	<1.8	<5.2	<26.1	<26.1
CACMW-002-110-103.25-081524-FM-R	98.25-103.25	<0.5	<0.2	<0.5	<2.6	<2.6
CACMW-002-110-108.5-081524-FM-R	103.5-108.5	<0.5	<0.2	<0.5	<2.6	<2.6
CACMW-002-160-116.5-090424-FM-R	111.5-116.5	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-160-121.75-090424-FM-R	116.75-121.75	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-160-127-090424-FM-R	122-127	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-160-132.25-090424-FM-R	127.25-132.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-002-160-137.5-081524-FM-R	132.5-137.5	<0.5	<0.2	<0.5	<2.6	<2.6
CACMW-002-160-142.75-081524-FM-R	137.75-142.75	<0.5	<0.2	<0.5	<2.6	<2.6
CACMW-002-160-148-081524-FM-R	143-148	<0.5	<0.2	<0.5	<2.6	<2.6
CACMW-002-160-153.25-081524-FM-R	148.25-153.25	<0.5	<0.2	<0.5	<2.6	<2.6
CACMW-002-160-158.5-081524-FM-R	153.5-158.5	<0.5	<0.2	<0.5	<2.6	<2.6

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorobutanoic acid (PFBA) (ug/m^2/day)	Perfluoropentanoic acid (PFPeA) (ug/m^2/day)	Perfluorohexanoic acid (PFHxA) (ug/m^2/day)	Perfluoroheptanoic acid (PFHpA) (ug/m^2/day)	Perfluorooctanoic acid (PFOA) (ug/m^2/day)
CACMW-003-060-16.5-090424-FM-R	11.5-16.5	<2.22	2.57	5.61	2.36	5.46
CACMW-003-060-21.75-090424-FM-R	16.75-21.75	<2.22	2.70	4.78	2.22	5.18
CACMW-003-060-27-090424-FM-R	22-27	0.97	6.66	15.88	7.63	17.11
CACMW-003-060-32.25-090424-FM-R	27.25-32.25	<2.22	4.85	9.64	5.13	12.26
CACMW-003-060-37.5-081624-FM-R	32.5-37.5	0.68	5.04	9.89	4.98	11.62
CACMW-003-060-42.75-081624-FM-R	37.75-42.75	0.54	3.24	6.78	3.11	6.64
CACMW-003-060-48-081624-FM-R	43-48	0.58	3.86	10.51	3.98	14.11
CACMW-003-060-53.25-081624-FM-R	48.25-53.25	0.81	6.85	15.49	6.10	19.72
CACMW-003-060-58.5-081624-FM-R	53.5-58.5	0.54	3.61	9.27	4.29	12.87
CACMW-003-110-66.5-090524-FM-R	61.5-66.5	<2.23	<1.12	0.83	0.33	0.89
CACMW-003-110-71.75-090524-FM-R	66.75-71.75	<2.23	1.39	2.51	0.91	2.56
CACMW-003-110-77-090524-FM-R	72-77	<2.23	2.65	5.78	2.51	8.14
CACMW-003-110-82.25-090524-FM-R	77.25-82.25	<2.23	4.74	10.39	4.74	15.12
CACMW-003-110-87.5-081624-FM-R	82.5-87.5	0.75	5.13	13.07	5.13	16.06
CACMW-003-110-92.75-081624-FM-R	87.75-92.75	0.63	5.07	12.44	5.13	14.81
CACMW-003-110-98-081624-FM-R	93-98	0.57	4.44	12.44	5.82	16.06
CACMW-003-110-103.25-081624-FM-R	98.25-103.25	0.88	6.25	14.32	5.44	17.93
CACMW-003-110-108.5-081624-FM-R	103.5-108.5	0.44	2.88	8.06	3.19	9.80
CACMW-003-160-116.5-090424-FM-R	111.5-116.5	<2.22	0.54	0.90	0.35	0.33
CACMW-003-160-121.75-090424-FM-R	116.75-121.75	<2.22	1.04	1.73	0.83	1.58
CACMW-003-160-127-090424-FM-R	122-127	<2.22	1.32	2.35	1.38	2.96
CACMW-003-160-132.25-090424-FM-R	127.25-132.25	<2.22	1.80	3.73	1.87	5.04
CACMW-003-160-137.5-081524-FM-R	132.5-137.5	0.23	1.71	3.21	1.37	4.22
CACMW-003-160-142.75-081524-FM-R	137.75-142.75	0.25	2.05	4.16	1.98	5.31
CACMW-003-160-148-081524-FM-R	143-148	0.22	1.78	3.62	1.57	4.01
CACMW-003-160-153.25-081524-FM-R	148.25-153.25	0.23	1.64	3.00	1.30	3.33
CACMW-003-160-158.5-081524-FM-R	153.5-158.5	<2.19	1.09	2.05	0.89	2.65
CACMW-004-060-16.5-090524-FM-R	11.5-16.5	<2.23	1.32	2.16	1.05	2.07
CACMW-004-060-21.75-090524-FM-R	16.75-21.75	<2.23	1.32	2.71	0.98	2.49
CACMW-004-060-27-090524-FM-R	22-27	<2.23	2.86	6.90	3.07	8.14
CACMW-004-060-32.25-090524-FM-R	27.25-32.25	0.91	7.67	18.06	9.07	25.58
CACMW-004-060-37.5-081624-FM-R	32.5-37.5	1.30	8.45	18.12	8.45	22.53
CACMW-004-060-42.75-081624-FM-R	37.75-42.75	0.65	6.43	14.22	6.50	17.98
CACMW-004-060-48-081624-FM-R	43-48	<2.08	3.44	7.73	3.31	8.89
CACMW-004-060-53.25-081624-FM-R	48.25-53.25	<2.08	2.79	7.73	3.12	9.54
CACMW-004-060-58.5-081624-FM-R	53.5-58.5	<2.08	4.48	10.33	4.68	14.08
CACMW-004-110-66.5-090524-FM-R	61.5-66.5	<2.16	2.92	7.57	2.71	8.81
CACMW-004-110-71.75-090524-FM-R	66.75-71.75	0.76	5.35	11.75	4.66	11.60
CACMW-004-110-77-090524-FM-R	72-77	<2.23	5.01	12.44	5.49	15.77
CACMW-004-110-82.25-090524-FM-R	77.25-82.25	1.04	5.56	13.83	5.22	14.38
CACMW-004-110-87.5-081624-FM-R	82.5-87.5	0.97	6.47	14.80	6.01	17.90
CACMW-004-110-92.75-081624-FM-R	87.75-92.75	1.03	6.47	18.68	7.11	23.72
CACMW-004-110-98-081624-FM-R	93-98	1.03	5.17	12.86	5.50	15.96
CACMW-004-110-103.25-081624-FM-R	98.25-103.25	<2.07	5.11	13.51	5.24	15.96
CACMW-004-110-108.5-081624-FM-R	103.5-108.5	<2.07	3.88	8.98	4.14	12.72
CACMW-004-160-116.5-090524-FM-R	111.5-116.5	<2.23	1.88	3.89	1.60	4.86
CACMW-004-160-121.75-090524-FM-R	116.75-121.75	<2.23	2.23	4.38	1.67	5.27
CACMW-004-160-127-090524-FM-R	122-127	<2.23	2.44	5.36	2.37	6.04
CACMW-004-160-132.25-090524-FM-R	127.25-132.25	<2.23	2.72	5.56	2.09	6.04
CACMW-004-160-137.5-081624-FM-R	132.5-137.5	<2.07	2.14	5.05	2.01	5.62
CACMW-004-160-142.75-081624-FM-R	137.75-142.75	<2.07	2.20	5.05	1.94	5.62
CACMW-004-160-148-081624-FM-R	143-148	<2.07	1.75	4.14	1.49	4.45
CACMW-004-160-153.25-081624-FM-R	148.25-153.25	<2.07	1.81	4.01	1.49	4.26
CACMW-004-160-158.5-081624-FM-R	153.5-158.5	<2.07	0.97	2.00	0.71	2.25

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

PLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorononanoic acid (PFNA) (ug/m^2/day)	Perfluorodecanoic acid (PFDA) (ug/m^2/day)	Perfluoroundecanoic acid (PFUdA) (ug/m^2/day)	Perfluorododecanoic acid (PFDoA) (ug/m^2/day)	Perfluorotridecanoic acid (PFTrDA) (ug/m^2/day)
CACMW-003-060-16.5-090424-FM-R	11.5-16.5	1.08	<0.55	<3.05	<0.55	<1.66
CACMW-003-060-21.75-090424-FM-R	16.75-21.75	0.59	<0.55	<3.05	<0.55	<1.66
CACMW-003-060-27-090424-FM-R	22-27	2.39	0.76	<3.05	<0.55	<1.66
CACMW-003-060-32.25-090424-FM-R	27.25-32.25	1.98	0.59	<3.05	<0.55	<1.66
CACMW-003-060-37.5-081624-FM-R	32.5-37.5	1.34	0.37	<2.93	0.05	<1.74
CACMW-003-060-42.75-081624-FM-R	37.75-42.75	0.96	0.22	<2.93	0.06	<1.74
CACMW-003-060-48-081624-FM-R	43-48	1.34	0.45	<2.93	0.06	<1.74
CACMW-003-060-53.25-081624-FM-R	48.25-53.25	2.46	0.62	<2.93	0.06	<1.74
CACMW-003-060-58.5-081624-FM-R	53.5-58.5	1.46	0.43	<2.93	0.07	<1.74
CACMW-003-110-66.5-090524-FM-R	61.5-66.5	0.10	<0.56	<3.07	<0.56	<1.67
CACMW-003-110-71.75-090524-FM-R	66.75-71.75	0.38	<0.56	<3.07	<0.56	<1.67
CACMW-003-110-77-090524-FM-R	72-77	0.94	0.38	<3.07	<0.56	<1.67
CACMW-003-110-82.25-090524-FM-R	77.25-82.25	1.57	0.50	<3.07	<0.56	<1.67
CACMW-003-110-87.5-081624-FM-R	82.5-87.5	2.03	0.50	<2.94	0.06	<1.75
CACMW-003-110-92.75-081624-FM-R	87.75-92.75	1.97	0.43	<2.94	0.06	<1.75
CACMW-003-110-98-081624-FM-R	93-98	2.16	0.53	<2.94	0.06	<1.75
CACMW-003-110-103.25-081624-FM-R	98.25-103.25	1.91	0.51	<2.94	0.06	<1.75
CACMW-003-110-108.5-081624-FM-R	103.5-108.5	1.03	0.33	<2.94	0.06	<1.75
CACMW-003-160-116.5-090424-FM-R	111.5-116.5	0.10	<0.55	<3.05	<0.55	<1.66
CACMW-003-160-121.75-090424-FM-R	116.75-121.75	0.10	<0.55	<3.05	<0.55	<1.66
CACMW-003-160-127-090424-FM-R	122-127	0.31	<0.55	<3.05	<0.55	<1.66
CACMW-003-160-132.25-090424-FM-R	127.25-132.25	0.38	<0.55	<3.05	<0.55	<1.66
CACMW-003-160-137.5-081524-FM-R	132.5-137.5	0.17	0.13	<3.21	0.06	<1.91
CACMW-003-160-142.75-081524-FM-R	137.75-142.75	0.24	0.14	<3.21	0.05	<1.91
CACMW-003-160-148-081524-FM-R	143-148	0.10	0.13	<3.21	0.06	<1.91
CACMW-003-160-153.25-081524-FM-R	148.25-153.25	0.10	0.11	<3.21	0.06	<1.91
CACMW-003-160-158.5-081524-FM-R	153.5-158.5	<0.10	<0.55	<3.21	<0.55	<1.91
CACMW-004-060-16.5-090524-FM-R	11.5-16.5	0.31	<0.56	<3.07	<0.56	<1.67
CACMW-004-060-21.75-090524-FM-R	16.75-21.75	0.52	<0.56	<3.07	<0.56	<1.67
CACMW-004-060-27-090524-FM-R	22-27	0.87	0.29	<3.07	<0.56	<1.67
CACMW-004-060-32.25-090524-FM-R	27.25-32.25	3.59	0.98	<3.07	<0.56	<1.67
CACMW-004-060-37.5-081624-FM-R	32.5-37.5	3.02	0.71	<3.05	<0.52	<1.82
CACMW-004-060-42.75-081624-FM-R	37.75-42.75	2.24	0.61	<3.05	<0.52	<1.82
CACMW-004-060-48-081624-FM-R	43-48	1.01	0.46	<3.05	<0.52	<1.82
CACMW-004-060-53.25-081624-FM-R	48.25-53.25	1.01	<0.52	<3.05	<0.52	<1.82
CACMW-004-060-58.5-081624-FM-R	53.5-58.5	1.66	<0.52	<3.05	<0.52	<1.82
CACMW-004-110-66.5-090524-FM-R	61.5-66.5	0.87	0.56	<3.06	<0.56	<1.67
CACMW-004-110-71.75-090524-FM-R	66.75-71.75	1.77	0.52	<3.06	<0.56	<1.67
CACMW-004-110-77-090524-FM-R	72-77	2.19	0.54	<3.06	<0.56	<1.67
CACMW-004-110-82.25-090524-FM-R	77.25-82.25	1.84	0.63	<3.06	<0.56	<1.67
CACMW-004-110-87.5-081624-FM-R	82.5-87.5	1.78	0.65	<3.04	<0.52	<1.81
CACMW-004-110-92.75-081624-FM-R	87.75-92.75	2.88	0.71	<3.04	<0.52	<1.81
CACMW-004-110-98-081624-FM-R	93-98	1.84	0.47	<3.04	<0.52	<1.81
CACMW-004-110-103.25-081624-FM-R	98.25-103.25	2.10	0.52	<3.04	<0.52	<1.81
CACMW-004-110-108.5-081624-FM-R	103.5-108.5	1.78	<0.52	<3.04	<0.52	<1.81
CACMW-004-160-116.5-090524-FM-R	111.5-116.5	0.73	0.25	<3.06	<0.56	<1.67
CACMW-004-160-121.75-090524-FM-R	116.75-121.75	0.52	<0.56	<3.06	<0.56	<1.67
CACMW-004-160-127-090524-FM-R	122-127	0.24	<0.56	<3.06	<0.56	<1.67
CACMW-004-160-132.25-090524-FM-R	127.25-132.25	0.24	0.23	<3.06	<0.56	<1.67
CACMW-004-160-137.5-081624-FM-R	132.5-137.5	0.49	<0.52	<3.05	<0.52	<1.81
CACMW-004-160-142.75-081624-FM-R	137.75-142.75	0.42	<0.52	<3.05	<0.52	<1.81
CACMW-004-160-148-081624-FM-R	143-148	0.36	<0.52	<3.05	<0.52	<1.81
CACMW-004-160-153.25-081624-FM-R	148.25-153.25	0.23	<0.52	<3.05	<0.52	<1.81
CACMW-004-160-158.5-081624-FM-R	153.5-158.5	0.29	<0.52	<3.05	<0.52	<1.81

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorotetradecanoic acid (PFTeDA) (ug/m^2/day)	Perfluorobutane sulfonic acid (PFBS) (ug/m^2/day)	Perfluoropentane sulfonate (PFPeS) (ug/m^2/day)	Perfluorohexane sulfonic acid (PFHxS) (ug/m^2/day)	Perfluoroheptane sulfonic acid (PFHpS) (ug/m^2/day)
CACMW-003-060-16.5-090424-FM-R	11.5-16.5	<0.6	1.0	1.2	17.3	1.0
CACMW-003-060-21.75-090424-FM-R	16.75-21.75	<0.6	0.9	1.2	16.0	0.9
CACMW-003-060-27-090424-FM-R	22-27	<0.6	2.6	3.3	49.2	3.3
CACMW-003-060-32.25-090424-FM-R	27.25-32.25	<0.6	1.7	2.2	36.1	2.4
CACMW-003-060-37.5-081624-FM-R	32.5-37.5	0.02	1.7	2.9	33.0	2.2
CACMW-003-060-42.75-081624-FM-R	37.75-42.75	0.02	1.1	1.6	23.7	1.3
CACMW-003-060-48-081624-FM-R	43-48	<0.05	1.8	2.9	43.6	3.0
CACMW-003-060-53.25-081624-FM-R	48.25-53.25	0.03	2.6	4.0	68.5	4.7
CACMW-003-060-58.5-081624-FM-R	53.5-58.5	0.03	1.4	2.6	38.6	2.6
CACMW-003-110-66.5-090524-FM-R	61.5-66.5	<0.6	0.2	0.2	2.0	<0.5
CACMW-003-110-71.75-090524-FM-R	66.75-71.75	<0.6	0.5	0.5	7.7	0.6
CACMW-003-110-77-090524-FM-R	72-77	<0.6	1.2	1.7	22.3	1.2
CACMW-003-110-82.25-090524-FM-R	77.25-82.25	<0.6	1.9	3.2	44.6	3.2
CACMW-003-110-87.5-081624-FM-R	82.5-87.5	<0.1	2.3	3.4	46.9	4.1
CACMW-003-110-92.75-081624-FM-R	87.75-92.75	0.02	2.2	3.7	46.3	3.7
CACMW-003-110-98-081624-FM-R	93-98	0.03	2.4	3.9	52.5	4.5
CACMW-003-110-103.25-081624-FM-R	98.25-103.25	<0.1	2.8	4.4	55.0	4.9
CACMW-003-110-108.5-081624-FM-R	103.5-108.5	<0.1	1.6	2.6	35.0	2.8
CACMW-003-160-116.5-090424-FM-R	111.5-116.5	<0.6	0.3	0.4	2.6	<0.5
CACMW-003-160-121.75-090424-FM-R	116.75-121.75	<0.6	0.7	0.9	7.6	0.5
CACMW-003-160-127-090424-FM-R	122-127	<0.6	0.8	1.5	11.8	0.6
CACMW-003-160-132.25-090424-FM-R	127.25-132.25	<0.6	1.4	2.0	20.8	1.0
CACMW-003-160-137.5-081524-FM-R	132.5-137.5	<0.1	1.1	1.8	15.0	0.9
CACMW-003-160-142.75-081524-FM-R	137.75-142.75	0.03	1.6	2.2	21.2	1.2
CACMW-003-160-148-081524-FM-R	143-148	0.02	1.2	2.0	17.1	1.2
CACMW-003-160-153.25-081524-FM-R	148.25-153.25	0.03	1.1	1.5	13.0	0.9
CACMW-003-160-158.5-081524-FM-R	153.5-158.5	<0.5	0.8	1.1	9.6	0.3
CACMW-004-060-16.5-090524-FM-R	11.5-16.5	<0.6	0.4	0.6	6.8	0.3
CACMW-004-060-21.75-090524-FM-R	16.75-21.75	<0.6	0.5	0.7	9.1	0.4
CACMW-004-060-27-090524-FM-R	22-27	<0.6	1.3	1.8	27.2	1.5
CACMW-004-060-32.25-090524-FM-R	27.25-32.25	<0.6	3.3	5.0	76.7	5.5
CACMW-004-060-37.5-081624-FM-R	32.5-37.5	<0.5	3.0	4.5	65.0	4.0
CACMW-004-060-42.75-081624-FM-R	37.75-42.75	<0.5	2.4	4.3	57.8	3.1
CACMW-004-060-48-081624-FM-R	43-48	<0.5	1.4	1.8	28.6	1.8
CACMW-004-060-53.25-081624-FM-R	48.25-53.25	<0.5	1.5	2.3	29.9	1.7
CACMW-004-060-58.5-081624-FM-R	53.5-58.5	<0.5	1.8	2.9	39.0	2.5
CACMW-004-110-66.5-090524-FM-R	61.5-66.5	<0.6	1.3	1.8	26.4	1.7
CACMW-004-110-71.75-090524-FM-R	66.75-71.75	<0.6	2.2	2.9	42.4	2.6
CACMW-004-110-77-090524-FM-R	72-77	<0.6	2.5	3.9	54.2	3.3
CACMW-004-110-82.25-090524-FM-R	77.25-82.25	<0.6	2.5	3.9	54.9	3.7
CACMW-004-110-87.5-081624-FM-R	82.5-87.5	<0.5	2.8	4.3	56.9	4.0
CACMW-004-110-92.75-081624-FM-R	87.75-92.75	<0.5	3.7	4.5	71.1	4.5
CACMW-004-110-98-081624-FM-R	93-98	<0.5	2.5	3.9	50.4	3.7
CACMW-004-110-103.25-081624-FM-R	98.25-103.25	<0.5	2.7	4.0	50.4	3.2
CACMW-004-110-108.5-081624-FM-R	103.5-108.5	<0.5	1.7	2.9	36.2	2.2
CACMW-004-160-116.5-090524-FM-R	111.5-116.5	<0.6	1.2	1.9	18.8	1.4
CACMW-004-160-121.75-090524-FM-R	116.75-121.75	<0.6	1.5	1.7	18.1	1.3
CACMW-004-160-127-090524-FM-R	122-127	<0.6	1.8	2.6	27.2	2.0
CACMW-004-160-132.25-090524-FM-R	127.25-132.25	<0.6	1.8	2.7	24.4	1.9
CACMW-004-160-137.5-081624-FM-R	132.5-137.5	<0.5	1.7	2.5	24.0	1.9
CACMW-004-160-142.75-081624-FM-R	137.75-142.75	<0.5	1.8	3.0	28.5	1.7
CACMW-004-160-148-081624-FM-R	143-148	<0.5	1.4	2.1	21.4	1.2
CACMW-004-160-153.25-081624-FM-R	148.25-153.25	<0.5	1.4	2.0	18.1	1.1
CACMW-004-160-158.5-081624-FM-R	153.5-158.5	<0.5	0.7	1.0	7.8	0.5

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorooctane sulfonic acid (PFOS) (ug/m^2/day)	Perfluorononane sulfonic acid (PFNS) (ug/m^2/day)	Perfluorodecane sulfonic acid (PFDS) (ug/m^2/day)	Perfluorododecane sulfonic acid (PFDOS) (ug/m^2/day)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ug/m^2/day)
CACMW-003-060-16.5-090424-FM-R	11.5-16.5	83.2	<0.5	<0.5	<0.5	<2.1
CACMW-003-060-21.75-090424-FM-R	16.75-21.75	69.4	<0.5	<0.5	<0.5	<2.1
CACMW-003-060-27-090424-FM-R	22-27	249.7	0.3	<0.5	<0.5	<2.1
CACMW-003-060-32.25-090424-FM-R	27.25-32.25	166.5	<0.5	<0.5	<0.5	<2.1
CACMW-003-060-37.5-081624-FM-R	32.5-37.5	161.8	0.1	<0.05	<0.05	0.1
CACMW-003-060-42.75-081624-FM-R	37.75-42.75	99.6	0.1	<0.05	<0.05	0.1
CACMW-003-060-48-081624-FM-R	43-48	205.4	0.2	0.03	<0.05	0.1
CACMW-003-060-53.25-081624-FM-R	48.25-53.25	292.5	0.4	0.04	<0.05	0.2
CACMW-003-060-58.5-081624-FM-R	53.5-58.5	193.0	0.2	0.03	<0.05	0.1
CACMW-003-110-66.5-090524-FM-R	61.5-66.5	11.2	<0.5	<0.5	<0.5	<2.1
CACMW-003-110-71.75-090524-FM-R	66.75-71.75	43.2	<0.5	<0.5	<0.5	<2.1
CACMW-003-110-77-090524-FM-R	72-77	104.6	<0.5	<0.5	<0.5	<2.1
CACMW-003-110-82.25-090524-FM-R	77.25-82.25	230.2	0.3	<0.5	<0.5	<2.1
CACMW-003-110-87.5-081624-FM-R	82.5-87.5	281.5	0.3	0.03	<0.05	0.2
CACMW-003-110-92.75-081624-FM-R	87.75-92.75	187.6	0.3	0.03	<0.05	0.2
CACMW-003-110-98-081624-FM-R	93-98	275.2	0.4	0.03	<0.05	0.2
CACMW-003-110-103.25-081624-FM-R	98.25-103.25	331.5	0.3	0.04	<0.05	0.2
CACMW-003-110-108.5-081624-FM-R	103.5-108.5	181.4	0.2	<0.05	<0.05	0.1
CACMW-003-160-116.5-090424-FM-R	111.5-116.5	8.3	<0.5	<0.5	<0.5	<2.1
CACMW-003-160-121.75-090424-FM-R	116.75-121.75	22.9	<0.5	<0.5	<0.5	<2.1
CACMW-003-160-127-090424-FM-R	122-127	31.9	<0.5	<0.5	<0.5	<2.1
CACMW-003-160-132.25-090424-FM-R	127.25-132.25	47.1	<0.5	<0.5	<0.5	<2.1
CACMW-003-160-137.5-081524-FM-R	132.5-137.5	47.2	0.02	<0.1	<0.1	0.2
CACMW-003-160-142.75-081524-FM-R	137.75-142.75	66.3	0.02	<0.1	<0.1	0.2
CACMW-003-160-148-081524-FM-R	143-148	60.8	0.02	<0.1	<0.1	0.2
CACMW-003-160-153.25-081524-FM-R	148.25-153.25	42.4	<0.1	<0.1	<0.1	0.1
CACMW-003-160-158.5-081524-FM-R	153.5-158.5	27.3	<0.5	<0.5	<0.5	<2.1
CACMW-004-060-16.5-090524-FM-R	11.5-16.5	32.8	<0.5	<0.5	<0.5	<2.1
CACMW-004-060-21.75-090524-FM-R	16.75-21.75	34.9	<0.5	<0.5	<0.5	<2.1
CACMW-004-060-27-090524-FM-R	22-27	139.5	<0.5	<0.5	<0.5	<2.1
CACMW-004-060-32.25-090524-FM-R	27.25-32.25	432.4	0.4	<0.5	<0.5	<2.1
CACMW-004-060-37.5-081624-FM-R	32.5-37.5	305.4	0.3	<0.5	<0.5	<1.9
CACMW-004-060-42.75-081624-FM-R	37.75-42.75	246.9	0.2	<0.5	<0.5	<1.9
CACMW-004-060-48-081624-FM-R	43-48	136.4	<0.5	<0.5	<0.5	<1.9
CACMW-004-060-53.25-081624-FM-R	48.25-53.25	142.9	<0.5	<0.5	<0.5	<1.9
CACMW-004-060-58.5-081624-FM-R	53.5-58.5	214.4	<0.5	<0.5	<0.5	<1.9
CACMW-004-110-66.5-090524-FM-R	61.5-66.5	139.1	<0.5	<0.5	<0.5	<2.0
CACMW-004-110-71.75-090524-FM-R	66.75-71.75	215.6	0.2	<0.5	<0.5	<2.1
CACMW-004-110-77-090524-FM-R	72-77	285.1	0.2	<0.5	<0.5	<2.1
CACMW-004-110-82.25-090524-FM-R	77.25-82.25	285.1	<0.5	<0.5	<0.5	<2.1
CACMW-004-110-87.5-081624-FM-R	82.5-87.5	316.9	0.3	0.3	<0.5	<1.9
CACMW-004-110-92.75-081624-FM-R	87.75-92.75	375.1	0.4	0.3	<0.5	<1.9
CACMW-004-110-98-081624-FM-R	93-98	291.0	0.3	<0.5	<0.5	<1.9
CACMW-004-110-103.25-081624-FM-R	98.25-103.25	271.6	0.4	<0.5	<0.5	<1.9
CACMW-004-110-108.5-081624-FM-R	103.5-108.5	194.0	0.5	<0.5	<0.5	<1.9
CACMW-004-160-116.5-090524-FM-R	111.5-116.5	76.6	<0.5	<0.5	<0.5	<2.1
CACMW-004-160-121.75-090524-FM-R	116.75-121.75	69.6	<0.5	<0.5	<0.5	<2.1
CACMW-004-160-127-090524-FM-R	122-127	90.5	<0.5	<0.5	<0.5	<2.1
CACMW-004-160-132.25-090524-FM-R	127.25-132.25	90.5	<0.5	<0.5	<0.5	<2.1
CACMW-004-160-137.5-081624-FM-R	132.5-137.5	97.2	<0.5	<0.5	<0.5	<1.9
CACMW-004-160-142.75-081624-FM-R	137.75-142.75	84.2	<0.5	<0.5	<0.5	<1.9
CACMW-004-160-148-081624-FM-R	143-148	64.8	<0.5	<0.5	<0.5	<1.9
CACMW-004-160-153.25-081624-FM-R	148.25-153.25	53.8	<0.5	<0.5	<0.5	<1.9
CACMW-004-160-158.5-081624-FM-R	153.5-158.5	24.0	<0.5	<0.5	<0.5	<1.9

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

.MPLE_ID for PFAS	Depth intervals for PFAS (ft)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ug/m^2/day)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ug/m^2/day)
CACMW-003-060-16.5-090424-FM-R	11.5-16.5	17.5	3.2	<0.6	0.7	<5.5
CACMW-003-060-21.75-090424-FM-R	16.75-21.75	11.3	3.4	<0.6	0.7	<5.5
CACMW-003-060-27-090424-FM-R	22-27	24.4	7.6	<0.6	2.7	<5.5
CACMW-003-060-32.25-090424-FM-R	27.25-32.25	20.3	5.8	<0.6	1.6	<5.5
CACMW-003-060-37.5-081624-FM-R	32.5-37.5	12.0	6.8	<0.05	1.9	<5.0
CACMW-003-060-42.75-081624-FM-R	37.75-42.75	7.0	3.2	<0.05	1.2	<5.0
CACMW-003-060-48-081624-FM-R	43-48	10.1	4.7	<0.05	2.3	<5.0
CACMW-003-060-53.25-081624-FM-R	48.25-53.25	17.6	7.5	<0.05	4.0	<5.0
CACMW-003-060-58.5-081624-FM-R	53.5-58.5	10.7	4.6	<0.05	2.1	<5.0
CACMW-003-110-66.5-090524-FM-R	61.5-66.5	<0.17	<2.2	<0.6	<1.1	<5.6
CACMW-003-110-71.75-090524-FM-R	66.75-71.75	5.8	0.7	<0.6	0.3	<5.6
CACMW-003-110-77-090524-FM-R	72-77	12.7	2.9	<0.6	1.3	<5.6
CACMW-003-110-82.25-090524-FM-R	77.25-82.25	19.7	5.4	<0.6	2.7	<5.6
CACMW-003-110-87.5-081624-FM-R	82.5-87.5	13.9	6.3	<0.1	3.1	<5.0
CACMW-003-110-92.75-081624-FM-R	87.75-92.75	19.5	6.2	<0.1	3.1	<5.0
CACMW-003-110-98-081624-FM-R	93-98	14.5	6.9	<0.1	3.3	<5.0
CACMW-003-110-103.25-081624-FM-R	98.25-103.25	18.3	6.9	<0.1	3.1	<5.0
CACMW-003-110-108.5-081624-FM-R	103.5-108.5	17.7	5.4	<0.1	2.1	<5.0
CACMW-003-160-116.5-090424-FM-R	111.5-116.5	<0.17	<2.1	<0.6	<1.1	<5.5
CACMW-003-160-121.75-090424-FM-R	116.75-121.75	6.4	<2.1	<0.6	<1.1	<5.5
CACMW-003-160-127-090424-FM-R	122-127	7.1	0.6	<0.6	0.5	<5.5
CACMW-003-160-132.25-090424-FM-R	127.25-132.25	21.6	1.3	<0.6	0.8	<5.5
CACMW-003-160-137.5-081524-FM-R	132.5-137.5	5.6	1.4	<0.1	0.5	<5.5
CACMW-003-160-142.75-081524-FM-R	137.75-142.75	9.1	2.1	<0.1	0.9	<5.5
CACMW-003-160-148-081524-FM-R	143-148	9.1	1.8	<0.1	0.6	<5.5
CACMW-003-160-153.25-081524-FM-R	148.25-153.25	8.4	1.4	<0.1	0.5	<5.5
CACMW-003-160-158.5-081524-FM-R	153.5-158.5	4.3	1.0	<0.5	<1.1	<5.5
CACMW-004-060-16.5-090524-FM-R	11.5-16.5	<0.17	0.7	<0.6	0.5	<5.6
CACMW-004-060-21.75-090524-FM-R	16.75-21.75	0.2	0.9	<0.6	0.6	<5.6
CACMW-004-060-27-090524-FM-R	22-27	9.2	3.9	<0.6	1.4	<5.6
CACMW-004-060-32.25-090524-FM-R	27.25-32.25	28.8	11.2	<0.6	5.1	<5.6
CACMW-004-060-37.5-081624-FM-R	32.5-37.5	30.7	9.1	<0.5	3.3	<5.2
CACMW-004-060-42.75-081624-FM-R	37.75-42.75	33.9	7.8	<0.5	2.8	<5.2
CACMW-004-060-48-081624-FM-R	43-48	18.4	3.6	<0.5	1.6	<5.2
CACMW-004-060-53.25-081624-FM-R	48.25-53.25	18.4	3.6	<0.5	1.8	<5.2
CACMW-004-060-58.5-081624-FM-R	53.5-58.5	23.6	5.7	<0.5	2.5	<5.2
CACMW-004-110-66.5-090524-FM-R	61.5-66.5	8.5	2.9	<0.6	1.6	<5.6
CACMW-004-110-71.75-090524-FM-R	66.75-71.75	13.4	5.5	<0.6	2.2	<5.6
CACMW-004-110-77-090524-FM-R	72-77	17.6	6.4	<0.6	3.0	<5.6
CACMW-004-110-82.25-090524-FM-R	77.25-82.25	25.9	6.6	<0.6	3.2	<5.6
CACMW-004-110-87.5-081624-FM-R	82.5-87.5	29.9	7.1	<0.5	3.7	<5.2
CACMW-004-110-92.75-081624-FM-R	87.75-92.75	42.2	8.4	<0.5	4.1	<5.2
CACMW-004-110-98-081624-FM-R	93-98	27.3	6.5	<0.5	2.9	<5.2
CACMW-004-110-103.25-081624-FM-R	98.25-103.25	21.5	5.9	<0.5	2.9	<5.2
CACMW-004-110-108.5-081624-FM-R	103.5-108.5	16.3	5.3	<0.5	2.1	<5.2
CACMW-004-160-116.5-090524-FM-R	111.5-116.5	15.5	1.6	<0.6	0.5	<5.6
CACMW-004-160-121.75-090524-FM-R	116.75-121.75	14.1	1.0	<0.6	0.5	<5.6
CACMW-004-160-127-090524-FM-R	122-127	11.3	2.5	<0.6	0.7	<5.6
CACMW-004-160-132.25-090524-FM-R	127.25-132.25	12.0	2.4	<0.6	0.5	<5.6
CACMW-004-160-137.5-081624-FM-R	132.5-137.5	18.3	2.3	<0.5	0.8	<5.2
CACMW-004-160-142.75-081624-FM-R	137.75-142.75	19.0	2.5	<0.5	0.8	<5.2
CACMW-004-160-148-081624-FM-R	143-148	14.4	1.9	<0.5	0.5	<5.2
CACMW-004-160-153.25-081624-FM-R	148.25-153.25	14.4	2.1	<0.5	0.4	<5.2
CACMW-004-160-158.5-081624-FM-R	153.5-158.5	5.3	0.6	<0.5	<1.0	<5.2

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ug/m^2/day)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ug/m^2/day)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ug/m^2/day)	Perfluorooctane sulfonamide (PFOSA) (ug/m^2/day)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ug/m^2/day)
CACMW-003-060-16.5-090424-FM-R	11.5-16.5	<0.3	0.8	<5.5	1.2	<5.3
CACMW-003-060-21.75-090424-FM-R	16.75-21.75	<0.3	0.8	<5.5	0.7	<5.3
CACMW-003-060-27-090424-FM-R	22-27	<0.3	2.6	<5.5	2.3	<5.3
CACMW-003-060-32.25-090424-FM-R	27.25-32.25	<0.3	1.6	<5.5	1.2	<5.3
CACMW-003-060-37.5-081624-FM-R	32.5-37.5	0.04	1.7	<5.0	1.4	<0.5
CACMW-003-060-42.75-081624-FM-R	37.75-42.75	<0.02	0.9	<5.0	0.9	<0.5
CACMW-003-060-48-081624-FM-R	43-48	0.02	2.4	<5.0	1.4	<0.5
CACMW-003-060-53.25-081624-FM-R	48.25-53.25	<0.02	3.6	<5.0	2.2	<0.5
CACMW-003-060-58.5-081624-FM-R	53.5-58.5	<0.02	2.1	<5.0	1.4	<0.5
CACMW-003-110-66.5-090524-FM-R	61.5-66.5	<0.3	<0.6	<5.6	<0.3	<5.3
CACMW-003-110-71.75-090524-FM-R	66.75-71.75	<0.3	0.3	<5.6	0.3	<5.3
CACMW-003-110-77-090524-FM-R	72-77	<0.3	1.2	<5.6	1.0	<5.3
CACMW-003-110-82.25-090524-FM-R	77.25-82.25	<0.3	2.4	<5.6	1.4	<5.3
CACMW-003-110-87.5-081624-FM-R	82.5-87.5	<0.03	2.7	<5.0	1.8	<0.5
CACMW-003-110-92.75-081624-FM-R	87.75-92.75	<0.03	2.6	<5.0	1.7	<0.5
CACMW-003-110-98-081624-FM-R	93-98	0.02	2.8	<5.0	1.9	<0.5
CACMW-003-110-103.25-081624-FM-R	98.25-103.25	0.02	2.9	<5.0	1.9	<0.5
CACMW-003-110-108.5-081624-FM-R	103.5-108.5	0.03	1.4	<5.0	1.1	<0.5
CACMW-003-160-116.5-090424-FM-R	111.5-116.5	<0.3	<0.6	<5.5	<0.3	<5.3
CACMW-003-160-121.75-090424-FM-R	116.75-121.75	<0.3	0.3	<5.5	0.3	<5.3
CACMW-003-160-127-090424-FM-R	122-127	<0.3	<0.6	<5.5	0.4	<5.3
CACMW-003-160-132.25-090424-FM-R	127.25-132.25	<0.3	0.4	<5.5	0.6	<5.3
CACMW-003-160-137.5-081524-FM-R	132.5-137.5	<0.03	0.3	<5.5	0.5	<0.5
CACMW-003-160-142.75-081524-FM-R	137.75-142.75	<0.03	0.5	<5.5	0.7	<0.5
CACMW-003-160-148-081524-FM-R	143-148	<0.03	0.4	<5.5	0.6	<0.5
CACMW-003-160-153.25-081524-FM-R	148.25-153.25	<0.03	0.3	<0.5	0.4	<0.5
CACMW-003-160-158.5-081524-FM-R	153.5-158.5	<0.3	<0.5	<5.5	<0.3	<5.2
CACMW-004-060-16.5-090524-FM-R	11.5-16.5	<0.3	0.4	<5.6	0.3	<5.4
CACMW-004-060-21.75-090524-FM-R	16.75-21.75	<0.3	0.4	<5.6	0.3	<5.3
CACMW-004-060-27-090524-FM-R	22-27	<0.3	1.5	<5.6	1.0	<5.2
CACMW-004-060-32.25-090524-FM-R	27.25-32.25	0.1	4.5	<5.6	3.3	<5.2
CACMW-004-060-37.5-081624-FM-R	32.5-37.5	<0.3	3.5	<5.2	2.8	<4.9
CACMW-004-060-42.75-081624-FM-R	37.75-42.75	<0.3	3.5	<5.2	2.2	<4.9
CACMW-004-060-48-081624-FM-R	43-48	<0.3	1.6	<5.2	1.2	<4.9
CACMW-004-060-53.25-081624-FM-R	48.25-53.25	<0.3	1.8	<5.2	1.2	<4.9
CACMW-004-060-58.5-081624-FM-R	53.5-58.5	<0.3	2.5	<5.2	1.7	<4.9
CACMW-004-110-66.5-090524-FM-R	61.5-66.5	<0.3	1.4	<5.6	1.0	<5.1
CACMW-004-110-71.75-090524-FM-R	66.75-71.75	<0.3	2.5	<5.6	1.5	<5.2
CACMW-004-110-77-090524-FM-R	72-77	<0.3	2.8	<5.6	1.9	<5.3
CACMW-004-110-82.25-090524-FM-R	77.25-82.25	<0.3	3.3	<5.6	2.0	<5.3
CACMW-004-110-87.5-081624-FM-R	82.5-87.5	<0.3	3.2	<5.2	2.0	<4.9
CACMW-004-110-92.75-081624-FM-R	87.75-92.75	<0.3	4.3	<5.2	2.4	<4.9
CACMW-004-110-98-081624-FM-R	93-98	<0.3	3.4	<5.2	1.9	<4.9
CACMW-004-110-103.25-081624-FM-R	98.25-103.25	<0.3	2.8	<5.2	1.8	<4.9
CACMW-004-110-108.5-081624-FM-R	103.5-108.5	<0.3	2.1	<5.2	1.3	<4.9
CACMW-004-160-116.5-090524-FM-R	111.5-116.5	<0.3	0.5	<5.6	0.3	<5.3
CACMW-004-160-121.75-090524-FM-R	116.75-121.75	<0.3	0.5	<5.6	0.4	<5.3
CACMW-004-160-127-090524-FM-R	122-127	<0.3	0.6	<5.6	0.5	<5.3
CACMW-004-160-132.25-090524-FM-R	127.25-132.25	<0.3	0.6	<5.6	0.5	<5.3
CACMW-004-160-137.5-081624-FM-R	132.5-137.5	<0.3	0.6	<5.2	0.9	<4.9
CACMW-004-160-142.75-081624-FM-R	137.75-142.75	<0.3	0.7	<5.2	0.7	<4.9
CACMW-004-160-148-081624-FM-R	143-148	<0.3	0.4	<5.2	0.5	<4.9
CACMW-004-160-153.25-081624-FM-R	148.25-153.25	<0.3	0.3	<5.2	0.4	<4.9
CACMW-004-160-158.5-081624-FM-R	153.5-158.5	<0.3	<0.5	<5.2	<0.3	<4.9

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (ug/m^2/day)	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA) (ug/m^2/day)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ug/m^2/day)	Perfluoro-3-methoxypropanoic aci (PFMPA) (ug/m^2/day)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ug/m^2/day)
CACMW-003-060-16.5-090424-FM-R	11.5-16.5	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-003-060-21.75-090424-FM-R	16.75-21.75	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-003-060-27-090424-FM-R	22-27	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-003-060-32.25-090424-FM-R	27.25-32.25	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-003-060-37.5-081624-FM-R	32.5-37.5	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-060-42.75-081624-FM-R	37.75-42.75	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-060-48-081624-FM-R	43-48	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-060-53.25-081624-FM-R	48.25-53.25	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-060-58.5-081624-FM-R	53.5-58.5	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-110-66.5-090524-FM-R	61.5-66.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-003-110-71.75-090524-FM-R	66.75-71.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-003-110-77-090524-FM-R	72-77	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-003-110-82.25-090524-FM-R	77.25-82.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-003-110-87.5-081624-FM-R	82.5-87.5	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-110-92.75-081624-FM-R	87.75-92.75	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-110-98-081624-FM-R	93-98	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-110-103.25-081624-FM-R	98.25-103.25	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-110-108.5-081624-FM-R	103.5-108.5	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-160-116.5-090424-FM-R	111.5-116.5	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-003-160-121.75-090424-FM-R	116.75-121.75	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-003-160-127-090424-FM-R	122-127	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-003-160-132.25-090424-FM-R	127.25-132.25	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-003-160-137.5-081524-FM-R	132.5-137.5	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-160-142.75-081524-FM-R	137.75-142.75	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-160-148-081524-FM-R	143-148	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-160-153.25-081524-FM-R	148.25-153.25	<0.5	<0.5	<0.2	<0.2	<0.5
CACMW-003-160-158.5-081524-FM-R	153.5-158.5	<5.5	<5.5	<2.2	<2.2	<5.2
CACMW-004-060-16.5-090524-FM-R	11.5-16.5	<5.6	<5.6	<2.2	<2.2	<5.4
CACMW-004-060-21.75-090524-FM-R	16.75-21.75	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-004-060-27-090524-FM-R	22-27	<5.4	<5.4	<2.2	<2.2	<5.2
CACMW-004-060-32.25-090524-FM-R	27.25-32.25	<5.4	<5.4	<2.2	<2.2	<5.2
CACMW-004-060-37.5-081624-FM-R	32.5-37.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-060-42.75-081624-FM-R	37.75-42.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-060-48-081624-FM-R	43-48	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-060-53.25-081624-FM-R	48.25-53.25	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-060-58.5-081624-FM-R	53.5-58.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-110-66.5-090524-FM-R	61.5-66.5	<5.4	<5.4	<2.2	<2.2	<5.1
CACMW-004-110-71.75-090524-FM-R	66.75-71.75	<5.5	<5.5	<2.2	<2.2	<5.2
CACMW-004-110-77-090524-FM-R	72-77	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-004-110-82.25-090524-FM-R	77.25-82.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-004-110-87.5-081624-FM-R	82.5-87.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-110-92.75-081624-FM-R	87.75-92.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-110-98-081624-FM-R	93-98	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-110-103.25-081624-FM-R	98.25-103.25	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-110-108.5-081624-FM-R	103.5-108.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-160-116.5-090524-FM-R	111.5-116.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-004-160-121.75-090524-FM-R	116.75-121.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-004-160-127-090524-FM-R	122-127	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-004-160-132.25-090524-FM-R	127.25-132.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-004-160-137.5-081624-FM-R	132.5-137.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-160-142.75-081624-FM-R	137.75-142.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-160-148-081624-FM-R	143-148	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-160-153.25-081624-FM-R	148.25-153.25	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-004-160-158.5-081624-FM-R	153.5-158.5	<5.2	<5.2	<2.1	<2.1	<4.9

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ug/m^2/day)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ug/m^2/day)
CACMW-003-060-16.5-090424-FM-R	11.5-16.5	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-003-060-21.75-090424-FM-R	16.75-21.75	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-003-060-27-090424-FM-R	22-27	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-003-060-32.25-090424-FM-R	27.25-32.25	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-003-060-37.5-081624-FM-R	32.5-37.5	<0.5	<0.2	<0.5	<2.5	<2.5
CACMW-003-060-42.75-081624-FM-R	37.75-42.75	<0.5	<0.2	<0.5	<2.5	<2.5
CACMW-003-060-48-081624-FM-R	43-48	<0.5	<0.2	<0.5	1.0	<2.5
CACMW-003-060-53.25-081624-FM-R	48.25-53.25	<0.5	<0.2	<0.5	1.6	<2.5
CACMW-003-060-58.5-081624-FM-R	53.5-58.5	<0.5	<0.2	<0.5	0.9	<2.5
CACMW-003-110-66.5-090524-FM-R	61.5-66.5	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-003-110-71.75-090524-FM-R	66.75-71.75	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-003-110-77-090524-FM-R	72-77	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-003-110-82.25-090524-FM-R	77.25-82.25	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-003-110-87.5-081624-FM-R	82.5-87.5	<0.5	<0.2	<0.5	1.3	<2.5
CACMW-003-110-92.75-081624-FM-R	87.75-92.75	<0.5	<0.2	<0.5	1.2	<2.5
CACMW-003-110-98-081624-FM-R	93-98	<0.5	<0.2	<0.5	1.3	<2.5
CACMW-003-110-103.25-081624-FM-R	98.25-103.25	<0.5	<0.2	<0.5	1.3	<2.5
CACMW-003-110-108.5-081624-FM-R	103.5-108.5	<0.5	<0.2	<0.5	<2.5	<2.5
CACMW-003-160-116.5-090424-FM-R	111.5-116.5	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-003-160-121.75-090424-FM-R	116.75-121.75	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-003-160-127-090424-FM-R	122-127	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-003-160-132.25-090424-FM-R	127.25-132.25	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-003-160-137.5-081524-FM-R	132.5-137.5	<0.5	<0.2	<0.5	<2.7	<2.7
CACMW-003-160-142.75-081524-FM-R	137.75-142.75	<0.5	<0.2	<0.5	<2.7	<2.7
CACMW-003-160-148-081524-FM-R	143-148	<0.5	<0.2	<0.5	<2.7	<2.7
CACMW-003-160-153.25-081524-FM-R	148.25-153.25	<0.5	<0.2	<0.5	<2.7	<2.7
CACMW-003-160-158.5-081524-FM-R	153.5-158.5	<5.1	<1.9	<5.5	<27.3	<27.3
CACMW-004-060-16.5-090524-FM-R	11.5-16.5	<5.2	<2.0	<5.6	<28.6	<28.6
CACMW-004-060-21.75-090524-FM-R	16.75-21.75	<5.2	<2.0	<5.5	<27.9	<27.9
CACMW-004-060-27-090524-FM-R	22-27	<5.1	<2.0	<5.4	<27.2	<27.2
CACMW-004-060-32.25-090524-FM-R	27.25-32.25	<5.1	<2.0	<5.4	<27.2	<27.2
CACMW-004-060-37.5-081624-FM-R	32.5-37.5	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-004-060-42.75-081624-FM-R	37.75-42.75	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-004-060-48-081624-FM-R	43-48	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-004-060-53.25-081624-FM-R	48.25-53.25	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-004-060-58.5-081624-FM-R	53.5-58.5	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-004-110-66.5-090524-FM-R	61.5-66.5	<5.1	<1.9	5.42	<27.1	<27.1
CACMW-004-110-71.75-090524-FM-R	66.75-71.75	<5.1	<1.9	<5.5	<27.1	<27.1
CACMW-004-110-77-090524-FM-R	72-77	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-004-110-82.25-090524-FM-R	77.25-82.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-004-110-87.5-081624-FM-R	82.5-87.5	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-004-110-92.75-081624-FM-R	87.75-92.75	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-004-110-98-081624-FM-R	93-98	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-004-110-103.25-081624-FM-R	98.25-103.25	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-004-110-108.5-081624-FM-R	103.5-108.5	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-004-160-116.5-090524-FM-R	111.5-116.5	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-004-160-121.75-090524-FM-R	116.75-121.75	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-004-160-127-090524-FM-R	122-127	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-004-160-132.25-090524-FM-R	127.25-132.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-004-160-137.5-081624-FM-R	132.5-137.5	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-004-160-142.75-081624-FM-R	137.75-142.75	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-004-160-148-081624-FM-R	143-148	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-004-160-153.25-081624-FM-R	148.25-153.25	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-004-160-158.5-081624-FM-R	153.5-158.5	<4.9	<1.8	<5.2	<25.9	<25.9

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorobutanoic acid (PFBA) (ug/m^2/day)	Perfluoropentanoic acid (PFPeA) (ug/m^2/day)	Perfluorohexanoic acid (PFHxA) (ug/m^2/day)	Perfluoroheptanoic acid (PFHpA) (ug/m^2/day)	Perfluorooctanoic acid (PFOA) (ug/m^2/day)
CACMW-005-060-16.5-090524-FM-R	11.5-16.5	<2.22	1.95	3.75	1.67	5.12
CACMW-005-060-21.75-090524-FM-R	16.75-21.75	<2.22	2.15	4.09	1.81	4.29
CACMW-005-060-27-090524-FM-R	22-27	<2.22	3.82	9.65	3.89	12.28
CACMW-005-060-32.25-090524-FM-R	27.25-32.25	<2.22	4.65	11.04	4.31	15.06
CACMW-005-060-37.5-081624-FM-R	32.5-37.5	<2.07	3.87	8.97	3.74	10.12
CACMW-005-060-42.75-081624-FM-R	37.75-42.75	0.84	6.20	14.77	6.26	17.86
CACMW-005-060-48-081624-FM-R	43-48	0.65	4.58	11.55	4.90	13.99
CACMW-005-060-53.25-081624-FM-R	48.25-53.25	0.77	5.94	14.77	6.20	19.80
CACMW-005-060-58.5-081624-FM-R	53.5-58.5	0.90	6.45	18.00	7.74	22.38
CACMW-005-110-66.5-090524-FM-R	61.5-66.5	<2.22	1.60	3.47	1.18	3.80
CACMW-005-110-71.75-090524-FM-R	66.75-71.75	<2.22	4.93	11.03	4.44	14.35
CACMW-005-110-77-090524-FM-R	72-77	1.18	11.80	33.94	14.58	56.69
CACMW-005-110-82.25-090524-FM-R	77.25-82.25	0.76	6.73	17.28	8.33	30.31
CACMW-005-110-87.5-081624-FM-R	82.5-87.5	1.09	7.72	21.80	8.36	28.09
CACMW-005-110-92.75-081624-FM-R	87.75-92.75	1.22	12.86	33.38	12.86	40.96
CACMW-005-110-98-081624-FM-R	93-98	1.09	6.43	20.51	8.36	25.52
CACMW-005-110-103.25-081624-FM-R	98.25-103.25	0.77	5.60	15.37	6.11	18.44
CACMW-005-110-108.5-081624-FM-R	103.5-108.5	<2.06	2.77	6.36	2.96	7.51
CACMW-005-160-116.5-090524-FM-R	111.5-116.5	<2.22	0.90	1.94	0.69	2.00
CACMW-005-160-121.75-090524-FM-R	116.75-121.75	<2.22	1.18	2.35	0.83	2.34
CACMW-005-160-127-090524-FM-R	122-127	<2.22	1.18	2.35	0.90	2.55
CACMW-005-160-132.25-090524-FM-R	127.25-132.25	<2.22	0.83	1.66	0.67	1.79
CACMW-005-160-137.5-081624-FM-R	132.5-137.5	<2.06	1.35	2.70	1.16	3.27
CACMW-005-160-142.75-081624-FM-R	137.75-142.75	<2.06	1.29	2.38	1.03	2.95
CACMW-005-160-148-081624-FM-R	143-148	<2.06	<1.03	1.80	0.77	2.11
CACMW-005-160-153.25-081624-FM-R	148.25-153.25	<2.06	0.90	1.61	0.61	1.14
CACMW-005-160-158.5-081624-FM-R	153.5-158.5	<2.06	0.71	1.09	0.49	0.95
CACMW-006-060-16.5-090524-FM-R	11.5-16.5	<2.22	<1.11	2.21	1.18	1.92
CACMW-006-060-21.75-090524-FM-R	16.75-21.75	<2.22	2.70	3.39	2.15	3.59
CACMW-006-060-27-090524-FM-R	22-27	<2.22	2.29	4.36	2.36	5.25
CACMW-006-060-32.25-090524-FM-R	27.25-32.25	1.39	8.31	17.25	7.62	21.95
CACMW-006-060-37.5-081724-FM-R	32.5-37.5	1.11	8.67	20.36	9.29	27.65
CACMW-006-060-42.75-081724-FM-R	37.75-42.75	1.24	9.29	21.60	10.52	28.27
CACMW-006-060-48-081724-FM-R	43-48	1.61	11.76	26.55	13.00	35.70
CACMW-006-060-53.25-081724-FM-R	48.25-53.25	1.18	14.24	40.79	18.57	48.08
CACMW-006-060-58.5-081724-FM-R	53.5-58.5	<1.98	2.79	6.06	2.97	7.85
CACMW-006-110-66.5-090624-FM-R	61.5-66.5	<2.23	1.88	3.97	1.74	5.49
CACMW-006-110-71.75-090624-FM-R	66.75-71.75	0.77	3.55	7.59	3.20	10.22
CACMW-006-110-77-090624-FM-R	72-77	<2.23	5.71	14.56	6.48	19.28
CACMW-006-110-82.25-090624-FM-R	77.25-82.25	0.98	6.90	14.56	5.43	16.49
CACMW-006-110-87.5-081724-FM-R	82.5-87.5	1.04	5.53	14.90	5.60	16.06
CACMW-006-110-92.75-081724-FM-R	87.75-92.75	<2.08	5.73	15.55	5.86	18.01
CACMW-006-110-98-081724-FM-R	93-98	<2.08	4.88	11.65	4.95	14.76
CACMW-006-110-103.25-081724-FM-R	98.25-103.25	0.98	6.38	14.90	6.51	18.66
CACMW-006-110-108.5-081724-FM-R	103.5-108.5	<2.08	3.45	9.04	3.84	10.20
CACMW-006-160-116.5-090624-FM-R	111.5-116.5	<2.23	0.98	1.88	0.77	1.45
CACMW-006-160-121.75-090624-FM-R	116.75-121.75	<2.23	<1.12	2.44	0.91	1.93
CACMW-006-160-127-090624-FM-R	122-127	<2.23	1.32	2.44	1.05	2.63
CACMW-006-160-132.25-090624-FM-R	127.25-132.25	<2.23	<1.12	1.74	0.77	1.66
CACMW-006-160-137.5-081724-FM-R	132.5-137.5	<2.09	1.17	2.15	0.91	2.46
CACMW-006-160-142.75-081724-FM-R	137.75-142.75	<2.09	1.76	3.38	1.37	3.89
CACMW-006-160-148-081724-FM-R	143-148	<2.09	1.63	3.19	1.30	3.83
CACMW-006-160-153.25-081724-FM-R	148.25-153.25	<2.09	1.63	2.86	1.50	3.37
CACMW-006-160-158.5-081724-FM-R	153.5-158.5	<2.09	0.78	1.43	0.61	1.42

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

.E_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorononanoic acid (PFNA) (ug/m^2/day)	Perfluorodecanoic acid (PFDA) (ug/m^2/day)	Perfluoroundecanoic acid (PFUdA) (ug/m^2/day)	Perfluorododecanoic acid (PFDoA) (ug/m^2/day)	Perfluorotridecanoic acid (PFTrDA) (ug/m^2/day)
CACMW-005-060-16.5-090524-FM-R	11.5-16.5	0.66	<0.56	<3.06	<0.56	<1.67
CACMW-005-060-21.75-090524-FM-R	16.75-21.75	0.52	0.26	<3.06	<0.56	<1.67
CACMW-005-060-27-090524-FM-R	22-27	1.22	0.47	<3.06	<0.56	<1.67
CACMW-005-060-32.25-090524-FM-R	27.25-32.25	1.70	0.58	<3.06	<0.56	<1.67
CACMW-005-060-37.5-081624-FM-R	32.5-37.5	1.39	<0.52	<3.03	<0.52	<1.81
CACMW-005-060-42.75-081624-FM-R	37.75-42.75	2.16	0.63	<3.03	<0.52	<1.81
CACMW-005-060-48-081624-FM-R	43-48	1.52	0.51	<3.03	<0.52	<1.81
CACMW-005-060-53.25-081624-FM-R	48.25-53.25	2.55	0.77	<3.03	<0.52	<1.81
CACMW-005-060-58.5-081624-FM-R	53.5-58.5	3.13	0.71	<3.03	<0.52	<1.81
CACMW-005-110-66.5-090524-FM-R	61.5-66.5	0.17	<0.56	<3.05	<0.56	<1.67
CACMW-005-110-71.75-090524-FM-R	66.75-71.75	1.56	0.47	<3.05	<0.56	<1.67
CACMW-005-110-77-090524-FM-R	72-77	6.49	1.67	<3.05	<0.56	<1.67
CACMW-005-110-82.25-090524-FM-R	77.25-82.25	3.16	0.97	<3.05	<0.56	<1.67
CACMW-005-110-87.5-081624-FM-R	82.5-87.5	3.25	1.03	<3.02	<0.51	<1.80
CACMW-005-110-92.75-081624-FM-R	87.75-92.75	5.37	1.22	<3.02	<0.51	<1.80
CACMW-005-110-98-081624-FM-R	93-98	2.93	0.96	<3.02	<0.51	<1.80
CACMW-005-110-103.25-081624-FM-R	98.25-103.25	2.28	0.57	<3.02	<0.51	<1.80
CACMW-005-110-108.5-081624-FM-R	103.5-108.5	1.00	0.35	<3.02	<0.51	<1.80
CACMW-005-160-116.5-090524-FM-R	111.5-116.5	<0.10	<0.56	<3.05	<0.56	<1.67
CACMW-005-160-121.75-090524-FM-R	116.75-121.75	0.17	<0.56	<3.05	<0.56	<1.67
CACMW-005-160-127-090524-FM-R	122-127	0.17	<0.56	<3.05	<0.56	<1.67
CACMW-005-160-132.25-090524-FM-R	127.25-132.25	<0.10	<0.56	<3.05	<0.56	<1.67
CACMW-005-160-137.5-081624-FM-R	132.5-137.5	0.10	<0.52	<3.03	<0.52	<1.80
CACMW-005-160-142.75-081624-FM-R	137.75-142.75	0.48	<0.52	<3.03	<0.52	<1.80
CACMW-005-160-148-081624-FM-R	143-148	0.10	<0.52	<3.03	<0.52	<1.80
CACMW-005-160-153.25-081624-FM-R	148.25-153.25	0.03	<0.52	<3.03	<0.52	<1.80
CACMW-005-160-158.5-081624-FM-R	153.5-158.5	<0.10	<0.52	<3.03	<0.52	<1.80
CACMW-006-060-16.5-090524-FM-R	11.5-16.5	0.24	<0.55	<3.05	<0.55	<1.66
CACMW-006-060-21.75-090524-FM-R	16.75-21.75	0.38	0.22	<3.05	<0.55	<1.66
CACMW-006-060-27-090524-FM-R	22-27	0.66	<0.55	<3.05	<0.55	<1.66
CACMW-006-060-32.25-090524-FM-R	27.25-32.25	2.60	0.69	<3.05	<0.55	<1.66
CACMW-006-060-37.5-081724-FM-R	32.5-37.5	3.25	0.80	<2.91	<0.50	<1.73
CACMW-006-060-42.75-081724-FM-R	37.75-42.75	3.62	0.68	<2.91	<0.50	<1.73
CACMW-006-060-48-081724-FM-R	43-48	4.24	1.24	<2.91	<0.50	<1.73
CACMW-006-060-53.25-081724-FM-R	48.25-53.25	5.11	1.42	<2.91	<0.50	<1.73
CACMW-006-060-58.5-081724-FM-R	53.5-58.5	0.77	0.24	<2.91	<0.50	<1.73
CACMW-006-110-66.5-090624-FM-R	61.5-66.5	0.52	0.28	<3.07	<0.56	<1.67
CACMW-006-110-71.75-090624-FM-R	66.75-71.75	0.80	0.33	<3.07	<0.56	<1.67
CACMW-006-110-77-090624-FM-R	72-77	2.19	0.70	<3.07	<0.56	<1.67
CACMW-006-110-82.25-090624-FM-R	77.25-82.25	1.99	0.57	<3.07	<0.56	<1.67
CACMW-006-110-87.5-081724-FM-R	82.5-87.5	1.66	0.59	<3.06	<0.52	<1.82
CACMW-006-110-92.75-081724-FM-R	87.75-92.75	1.66	0.64	<3.06	<0.52	<1.82
CACMW-006-110-98-081724-FM-R	93-98	1.53	0.60	<3.06	<0.52	<1.82
CACMW-006-110-103.25-081724-FM-R	98.25-103.25	2.31	0.61	<3.06	<0.52	<1.82
CACMW-006-110-108.5-081724-FM-R	103.5-108.5	1.20	0.27	<3.06	<0.52	<1.82
CACMW-006-160-116.5-090624-FM-R	111.5-116.5	0.17	<0.56	<3.07	<0.56	<1.67
CACMW-006-160-121.75-090624-FM-R	116.75-121.75	0.03	0.28	<3.07	<0.56	<1.67
CACMW-006-160-127-090624-FM-R	122-127	0.10	<0.56	<3.07	<0.56	<1.67
CACMW-006-160-132.25-090624-FM-R	127.25-132.25	0.03	<0.56	<3.07	<0.56	<1.67
CACMW-006-160-137.5-081724-FM-R	132.5-137.5	0.16	<0.52	<3.06	<0.52	<1.82
CACMW-006-160-142.75-081724-FM-R	137.75-142.75	0.29	<0.52	<3.06	<0.52	<1.82
CACMW-006-160-148-081724-FM-R	143-148	0.36	<0.52	<3.06	<0.52	<1.82
CACMW-006-160-153.25-081724-FM-R	148.25-153.25	0.16	<0.52	<3.06	<0.52	<1.82
CACMW-006-160-158.5-081724-FM-R	153.5-158.5	<0.10	<0.52	<3.06	<0.52	<1.82

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorotetradecanoic acid (PFTeDA) (ug/m^2/day)	Perfluorobutane sulfonic acid (PFBS) (ug/m^2/day)	Perfluoropentane sulfonate (PFPeS) (ug/m^2/day)	Perfluorohexane sulfonic acid (PFHxS) (ug/m^2/day)	Perfluoroheptane sulfonic acid (PFHpS) (ug/m^2/day)
CACMW-005-060-16.5-090524-FM-R	11.5-16.5	<0.6	0.6	0.9	13.9	1.0
CACMW-005-060-21.75-090524-FM-R	16.75-21.75	<0.6	0.7	1.3	15.3	0.8
CACMW-005-060-27-090524-FM-R	22-27	<0.6	1.7	2.6	39.6	2.7
CACMW-005-060-32.25-090524-FM-R	27.25-32.25	<0.6	2.2	3.3	47.2	3.0
CACMW-005-060-37.5-081624-FM-R	32.5-37.5	<0.5	1.5	2.2	33.6	2.1
CACMW-005-060-42.75-081624-FM-R	37.75-42.75	<0.5	2.5	4.2	57.4	3.4
CACMW-005-060-48-081624-FM-R	43-48	<0.5	2.1	3.2	46.5	2.6
CACMW-005-060-53.25-081624-FM-R	48.25-53.25	<0.5	2.5	4.6	62.0	3.8
CACMW-005-060-58.5-081624-FM-R	53.5-58.5	<0.5	3.0	4.7	64.5	4.6
CACMW-005-110-66.5-090524-FM-R	61.5-66.5	<0.6	0.6	0.8	11.1	0.6
CACMW-005-110-71.75-090524-FM-R	66.75-71.75	<0.6	1.7	3.1	44.4	2.4
CACMW-005-110-77-090524-FM-R	72-77	<0.6	5.9	10.4	152.7	11.1
CACMW-005-110-82.25-090524-FM-R	77.25-82.25	<0.6	2.9	5.6	76.4	5.2
CACMW-005-110-87.5-081624-FM-R	82.5-87.5	<0.5	3.3	5.7	83.6	5.2
CACMW-005-110-92.75-081624-FM-R	87.75-92.75	<0.5	5.3	9.0	135.1	9.6
CACMW-005-110-98-081624-FM-R	93-98	<0.5	3.9	5.0	77.2	4.4
CACMW-005-110-103.25-081624-FM-R	98.25-103.25	<0.5	2.3	4.2	58.5	3.6
CACMW-005-110-108.5-081624-FM-R	103.5-108.5	<0.5	1.2	1.8	24.4	1.7
CACMW-005-160-116.5-090524-FM-R	111.5-116.5	<0.6	0.6	0.8	7.6	0.5
CACMW-005-160-121.75-090524-FM-R	116.75-121.75	<0.6	0.8	1.0	9.0	0.8
CACMW-005-160-127-090524-FM-R	122-127	<0.6	0.8	1.2	10.4	1.0
CACMW-005-160-132.25-090524-FM-R	127.25-132.25	<0.6	0.7	0.9	6.9	0.5
CACMW-005-160-137.5-081624-FM-R	132.5-137.5	<0.5	1.0	1.5	13.5	0.6
CACMW-005-160-142.75-081624-FM-R	137.75-142.75	<0.5	1.0	1.2	12.2	0.6
CACMW-005-160-148-081624-FM-R	143-148	<0.5	0.7	0.8	8.4	0.4
CACMW-005-160-153.25-081624-FM-R	148.25-153.25	<0.5	0.6	0.6	6.4	<0.5
CACMW-005-160-158.5-081624-FM-R	153.5-158.5	<0.5	0.4	0.5	5.2	<0.5
CACMW-006-060-16.5-090524-FM-R	11.5-16.5	<0.6	0.4	0.5	7.6	0.4
CACMW-006-060-21.75-090524-FM-R	16.75-21.75	<0.6	0.8	1.0	11.8	0.5
CACMW-006-060-27-090524-FM-R	22-27	<0.6	0.8	1.3	17.3	0.9
CACMW-006-060-32.25-090524-FM-R	27.25-32.25	<0.6	2.6	4.4	61.0	3.3
CACMW-006-060-37.5-081724-FM-R	32.5-37.5	<0.5	3.6	5.0	80.5	4.6
CACMW-006-060-42.75-081724-FM-R	37.75-42.75	<0.5	3.8	5.4	86.7	4.6
CACMW-006-060-48-081724-FM-R	43-48	<0.5	4.7	6.8	99.0	5.8
CACMW-006-060-53.25-081724-FM-R	48.25-53.25	<0.5	6.2	8.7	142.4	8.7
CACMW-006-060-58.5-081724-FM-R	53.5-58.5	<0.5	1.2	1.5	21.7	1.1
CACMW-006-110-66.5-090624-FM-R	61.5-66.5	<0.6	0.8	1.3	16.0	0.8
CACMW-006-110-71.75-090624-FM-R	66.75-71.75	<0.6	1.5	2.1	32.7	2.0
CACMW-006-110-77-090624-FM-R	72-77	<0.6	3.0	4.2	61.3	4.2
CACMW-006-110-82.25-090624-FM-R	77.25-82.25	<0.6	2.8	3.8	48.1	3.5
CACMW-006-110-87.5-081724-FM-R	82.5-87.5	<0.5	2.7	3.9	56.0	3.5
CACMW-006-110-92.75-081724-FM-R	87.75-92.75	<0.5	3.0	4.2	57.3	3.4
CACMW-006-110-98-081724-FM-R	93-98	<0.5	2.7	3.3	47.5	2.7
CACMW-006-110-103.25-081724-FM-R	98.25-103.25	<0.5	3.1	4.5	60.5	3.6
CACMW-006-110-108.5-081724-FM-R	103.5-108.5	<0.5	1.8	2.0	30.6	2.0
CACMW-006-160-116.5-090624-FM-R	111.5-116.5	<0.6	0.7	0.9	7.7	0.4
CACMW-006-160-121.75-090624-FM-R	116.75-121.75	<0.6	0.8	1.0	9.1	0.6
CACMW-006-160-127-090624-FM-R	122-127	<0.6	1.0	0.9	9.1	0.8
CACMW-006-160-132.25-090624-FM-R	127.25-132.25	<0.6	0.7	0.8	6.6	0.5
CACMW-006-160-137.5-081724-FM-R	132.5-137.5	<0.5	1.0	1.1	9.8	0.6
CACMW-006-160-142.75-081724-FM-R	137.75-142.75	<0.5	1.3	1.6	15.6	0.9
CACMW-006-160-148-081724-FM-R	143-148	<0.5	1.4	1.7	14.3	0.6
CACMW-006-160-153.25-081724-FM-R	148.25-153.25	<0.5	1.2	1.7	14.3	0.5
CACMW-006-160-158.5-081724-FM-R	153.5-158.5	<0.5	0.6	0.8	6.5	<1.3

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorooctane sulfonic acid (PFOS) (ug/m^2/day)	Perfluorononane sulfonic acid (PFNS) (ug/m^2/day)	Perfluorodecane sulfonic acid (PFDS) (ug/m^2/day)	Perfluorododecane sulfonic acid (PFDOS) (ug/m^2/day)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ug/m^2/day)
CACMW-005-060-16.5-090524-FM-R	11.5-16.5	69.5	<0.5	<0.5	<0.5	<2.1
CACMW-005-060-21.75-090524-FM-R	16.75-21.75	76.4	<0.5	<0.5	<0.5	<2.1
CACMW-005-060-27-090524-FM-R	22-27	201.5	<0.5	<0.5	<0.5	<2.1
CACMW-005-060-32.25-090524-FM-R	27.25-32.25	250.1	0.2	<0.5	<0.5	<2.1
CACMW-005-060-37.5-081624-FM-R	32.5-37.5	161.3	0.2	<0.5	<0.5	<1.9
CACMW-005-060-42.75-081624-FM-R	37.75-42.75	290.4	0.4	<0.5	<0.5	<1.9
CACMW-005-060-48-081624-FM-R	43-48	232.3	<0.5	<0.5	<0.5	<1.9
CACMW-005-060-53.25-081624-FM-R	48.25-53.25	309.8	0.3	<0.5	<0.5	<1.9
CACMW-005-060-58.5-081624-FM-R	53.5-58.5	367.8	0.5	<0.5	<0.5	<1.9
CACMW-005-110-66.5-090524-FM-R	61.5-66.5	52.1	<0.5	<0.5	<0.5	<2.1
CACMW-005-110-71.75-090524-FM-R	66.75-71.75	222.1	0.2	<0.5	<0.5	<2.1
CACMW-005-110-77-090524-FM-R	72-77	832.9	1.0	<0.5	<0.5	<2.1
CACMW-005-110-82.25-090524-FM-R	77.25-82.25	437.3	0.4	<0.5	<0.5	<2.1
CACMW-005-110-87.5-081624-FM-R	82.5-87.5	424.5	0.4	<0.5	<0.5	<1.9
CACMW-005-110-92.75-081624-FM-R	87.75-92.75	707.6	0.6	<0.5	<0.5	<1.9
CACMW-005-110-98-081624-FM-R	93-98	431.0	<0.5	<0.5	<0.5	<1.9
CACMW-005-110-103.25-081624-FM-R	98.25-103.25	302.3	0.5	<0.5	<0.5	<1.9
CACMW-005-110-108.5-081624-FM-R	103.5-108.5	122.2	0.2	<0.5	<0.5	<1.9
CACMW-005-160-116.5-090524-FM-R	111.5-116.5	29.1	<0.5	<0.5	<0.5	<2.1
CACMW-005-160-121.75-090524-FM-R	116.75-121.75	36.1	<0.5	<0.5	<0.5	<2.1
CACMW-005-160-127-090524-FM-R	122-127	39.6	<0.5	<0.5	<0.5	<2.1
CACMW-005-160-132.25-090524-FM-R	127.25-132.25	24.3	<0.5	<0.5	<0.5	<2.1
CACMW-005-160-137.5-081624-FM-R	132.5-137.5	41.2	<0.5	<0.5	<0.5	<1.9
CACMW-005-160-142.75-081624-FM-R	137.75-142.75	39.9	<0.5	<0.5	<0.5	<1.9
CACMW-005-160-148-081624-FM-R	143-148	29.0	<0.5	<0.5	<0.5	<1.9
CACMW-005-160-153.25-081624-FM-R	148.25-153.25	21.9	<0.5	<0.5	<0.5	<1.9
CACMW-005-160-158.5-081624-FM-R	153.5-158.5	14.2	<0.5	<0.5	<0.5	<1.9
CACMW-006-060-16.5-090524-FM-R	11.5-16.5	42.3	<0.5	<0.5	<0.5	<2.1
CACMW-006-060-21.75-090524-FM-R	16.75-21.75	45.0	<0.5	<0.5	<0.5	<2.1
CACMW-006-060-27-090524-FM-R	22-27	64.4	<0.5	<0.5	<0.5	<2.1
CACMW-006-060-32.25-090524-FM-R	27.25-32.25	284.1	0.3	<0.5	<0.5	<2.1
CACMW-006-060-37.5-081724-FM-R	32.5-37.5	414.7	0.4	<0.5	<0.5	<1.9
CACMW-006-060-42.75-081724-FM-R	37.75-42.75	383.8	0.4	<0.5	<0.5	<1.9
CACMW-006-060-48-081724-FM-R	43-48	526.2	0.4	<0.5	<0.5	<1.9
CACMW-006-060-53.25-081724-FM-R	48.25-53.25	680.9	0.7	<0.5	<0.5	<1.9
CACMW-006-060-58.5-081724-FM-R	53.5-58.5	99.0	<0.5	<0.5	<0.5	<1.9
CACMW-006-110-66.5-090624-FM-R	61.5-66.5	83.6	<0.5	<0.5	<0.5	<2.1
CACMW-006-110-71.75-090624-FM-R	66.75-71.75	167.2	0.2	<0.5	<0.5	<2.1
CACMW-006-110-77-090624-FM-R	72-77	348.4	0.3	<0.5	<0.5	<2.1
CACMW-006-110-82.25-090624-FM-R	77.25-82.25	271.7	0.2	<0.5	<0.5	<2.1
CACMW-006-110-87.5-081724-FM-R	82.5-87.5	292.9	0.3	<0.5	<0.5	<2.0
CACMW-006-110-92.75-081724-FM-R	87.75-92.75	325.4	0.3	<0.5	<0.5	<2.0
CACMW-006-110-98-081724-FM-R	93-98	247.3	0.2	<0.5	<0.5	<2.0
CACMW-006-110-103.25-081724-FM-R	98.25-103.25	312.4	0.4	<0.5	<0.5	<2.0
CACMW-006-110-108.5-081724-FM-R	103.5-108.5	162.7	<0.5	<0.5	<0.5	<2.0
CACMW-006-160-116.5-090624-FM-R	111.5-116.5	23.0	<0.5	<0.5	<0.5	<2.1
CACMW-006-160-121.75-090624-FM-R	116.75-121.75	30.7	<0.5	<0.5	<0.5	<2.1
CACMW-006-160-127-090624-FM-R	122-127	35.6	<0.5	<0.5	<0.5	<2.1
CACMW-006-160-132.25-090624-FM-R	127.25-132.25	23.0	<0.5	<0.5	<0.5	<2.1
CACMW-006-160-137.5-081724-FM-R	132.5-137.5	33.9	<0.5	<0.5	<0.5	<2.0
CACMW-006-160-142.75-081724-FM-R	137.75-142.75	50.8	<0.5	<0.5	<0.5	<2.0
CACMW-006-160-148-081724-FM-R	143-148	45.6	<0.5	<0.5	<0.5	<2.0
CACMW-006-160-153.25-081724-FM-R	148.25-153.25	41.7	<0.5	<0.5	<0.5	<2.0
CACMW-006-160-158.5-081724-FM-R	153.5-158.5	20.2	<0.5	<0.5	<0.5	<2.0

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ug/m^2/day)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ug/m^2/day)
CACMW-005-060-16.5-090524-FM-R	11.5-16.5	6.4	1.5	<0.6	0.8	<5.6
CACMW-005-060-21.75-090524-FM-R	16.75-21.75	9.2	1.5	<0.6	0.9	<5.6
CACMW-005-060-27-090524-FM-R	22-27	21.7	4.5	<0.6	2.2	<5.6
CACMW-005-060-32.25-090524-FM-R	27.25-32.25	27.3	5.5	<0.6	2.8	<5.6
CACMW-005-060-37.5-081624-FM-R	32.5-37.5	18.9	5.0	<0.5	2.2	<5.2
CACMW-005-060-42.75-081624-FM-R	37.75-42.75	27.9	7.1	<0.5	3.2	<5.2
CACMW-005-060-48-081624-FM-R	43-48	17.6	5.9	<0.5	2.3	<5.2
CACMW-005-060-53.25-081624-FM-R	48.25-53.25	29.2	9.0	<0.5	3.4	<5.2
CACMW-005-060-58.5-081624-FM-R	53.5-58.5	29.8	8.4	<0.5	4.1	<5.2
CACMW-005-110-66.5-090524-FM-R	61.5-66.5	6.4	0.9	<0.6	0.7	<5.6
CACMW-005-110-71.75-090524-FM-R	66.75-71.75	20.3	5.2	<0.6	2.5	<5.6
CACMW-005-110-77-090524-FM-R	72-77	66.1	20.1	<0.6	11.1	<5.6
CACMW-005-110-82.25-090524-FM-R	77.25-82.25	31.4	9.7	<0.6	5.0	<5.6
CACMW-005-110-87.5-081624-FM-R	82.5-87.5	42.0	9.0	<0.5	4.8	<5.1
CACMW-005-110-92.75-081624-FM-R	87.75-92.75	61.3	17.4	<0.5	7.7	<5.1
CACMW-005-110-98-081624-FM-R	93-98	35.5	9.6	<0.5	5.4	<5.1
CACMW-005-110-103.25-081624-FM-R	98.25-103.25	25.9	7.7	<0.5	4.6	<5.1
CACMW-005-110-108.5-081624-FM-R	103.5-108.5	13.0	3.3	<0.5	1.5	<5.1
CACMW-005-160-116.5-090524-FM-R	111.5-116.5	2.3	<2.2	<0.6	<1.1	<5.6
CACMW-005-160-121.75-090524-FM-R	116.75-121.75	3.6	1.0	<0.6	0.3	<5.6
CACMW-005-160-127-090524-FM-R	122-127	5.0	0.6	<0.6	<1.1	<5.6
CACMW-005-160-132.25-090524-FM-R	127.25-132.25	<0.17	<2.2	<0.6	<1.1	<5.6
CACMW-005-160-137.5-081624-FM-R	132.5-137.5	4.7	1.1	<0.5	<1.0	<5.2
CACMW-005-160-142.75-081624-FM-R	137.75-142.75	5.3	1.1	<0.5	0.3	<5.2
CACMW-005-160-148-081624-FM-R	143-148	4.7	1.2	<0.5	<1.0	<5.2
CACMW-005-160-153.25-081624-FM-R	148.25-153.25	4.0	0.8	<0.5	<1.0	<5.2
CACMW-005-160-158.5-081624-FM-R	153.5-158.5	6.0	<2.0	<0.5	<1.0	<5.2
CACMW-006-060-16.5-090524-FM-R	11.5-16.5	1.6	1.0	<0.6	<1.1	<5.5
CACMW-006-060-21.75-090524-FM-R	16.75-21.75	7.8	1.6	<0.6	0.4	<5.5
CACMW-006-060-27-090524-FM-R	22-27	7.8	2.2	<0.6	0.8	<5.5
CACMW-006-060-32.25-090524-FM-R	27.25-32.25	30.7	8.3	<0.6	3.5	<5.5
CACMW-006-060-37.5-081724-FM-R	32.5-37.5	46.6	11.1	<0.5	4.7	<5.0
CACMW-006-060-42.75-081724-FM-R	37.75-42.75	46.6	9.3	<0.5	4.6	<5.0
CACMW-006-060-48-081724-FM-R	43-48	46.6	13.0	<0.5	6.0	<5.0
CACMW-006-060-53.25-081724-FM-R	48.25-53.25	65.2	17.3	<0.5	8.7	<5.0
CACMW-006-060-58.5-081724-FM-R	53.5-58.5	8.2	2.5	<0.5	1.2	<5.0
CACMW-006-110-66.5-090624-FM-R	61.5-66.5	0.2	1.2	<0.6	0.8	<5.6
CACMW-006-110-71.75-090624-FM-R	66.75-71.75	11.3	3.5	<0.6	1.7	<5.6
CACMW-006-110-77-090624-FM-R	72-77	22.5	7.7	<0.6	3.3	<5.6
CACMW-006-110-82.25-090624-FM-R	77.25-82.25	22.5	6.3	<0.6	3.1	<5.6
CACMW-006-110-87.5-081724-FM-R	82.5-87.5	20.3	5.3	<0.5	2.8	<5.2
CACMW-006-110-92.75-081724-FM-R	87.75-92.75	32.7	7.2	<0.5	3.3	<5.2
CACMW-006-110-98-081724-FM-R	93-98	16.4	6.3	<0.5	3.4	<5.2
CACMW-006-110-103.25-081724-FM-R	98.25-103.25	36.0	7.8	<0.5	3.2	<5.2
CACMW-006-110-108.5-081724-FM-R	103.5-108.5	10.6	3.6	<0.5	2.0	<5.2
CACMW-006-160-116.5-090624-FM-R	111.5-116.5	3.7	<2.2	<0.6	<1.1	<5.6
CACMW-006-160-121.75-090624-FM-R	116.75-121.75	4.4	<2.1	<0.6	<1.1	<5.6
CACMW-006-160-127-090624-FM-R	122-127	8.5	<2.2	<0.6	<1.1	<5.6
CACMW-006-160-132.25-090624-FM-R	127.25-132.25	3.0	<2.2	<0.6	<1.1	<5.6
CACMW-006-160-137.5-081724-FM-R	132.5-137.5	9.3	1.3	<0.5	0.3	<5.2
CACMW-006-160-142.75-081724-FM-R	137.75-142.75	8.0	1.2	<0.5	<1.0	<5.2
CACMW-006-160-148-081724-FM-R	143-148	13.8	1.6	<0.5	0.5	<5.2
CACMW-006-160-153.25-081724-FM-R	148.25-153.25	6.0	1.5	<0.5	<1.0	<5.2
CACMW-006-160-158.5-081724-FM-R	153.5-158.5	1.5	<2.0	<0.5	<1.0	<5.2

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ug/m^2/day)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ug/m^2/day)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ug/m^2/day)	Perfluorooctane sulfonamide (PFOSA) (ug/m^2/day)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ug/m^2/day)
CACMW-005-060-16.5-090524-FM-R	11.5-16.5	<0.3	0.7	<5.6	0.4	<5.3
CACMW-005-060-21.75-090524-FM-R	16.75-21.75	<0.3	0.8	<5.6	0.5	<5.3
CACMW-005-060-27-090524-FM-R	22-27	<0.3	2.4	<5.6	1.4	<5.3
CACMW-005-060-32.25-090524-FM-R	27.25-32.25	<0.3	2.6	<5.6	1.7	<5.3
CACMW-005-060-37.5-081624-FM-R	32.5-37.5	<0.3	1.9	<5.2	1.4	<4.9
CACMW-005-060-42.75-081624-FM-R	37.75-42.75	<0.3	3.0	<5.2	2.1	<4.9
CACMW-005-060-48-081624-FM-R	43-48	<0.3	3.0	<5.2	1.6	<4.9
CACMW-005-060-53.25-081624-FM-R	48.25-53.25	<0.3	3.9	<5.2	2.2	<4.9
CACMW-005-060-58.5-081624-FM-R	53.5-58.5	<0.3	3.9	<5.2	2.6	<4.9
CACMW-005-110-66.5-090524-FM-R	61.5-66.5	<0.3	0.6	<5.6	0.3	<5.3
CACMW-005-110-71.75-090524-FM-R	66.75-71.75	<0.3	2.8	<5.6	1.5	<5.3
CACMW-005-110-77-090524-FM-R	72-77	<0.3	11.1	<5.6	6.5	<5.3
CACMW-005-110-82.25-090524-FM-R	77.25-82.25	<0.3	5.0	<5.6	3.2	<5.3
CACMW-005-110-87.5-081624-FM-R	82.5-87.5	<0.3	5.1	<5.1	3.2	<4.9
CACMW-005-110-92.75-081624-FM-R	87.75-92.75	<0.3	7.7	<5.1	5.3	<4.9
CACMW-005-110-98-081624-FM-R	93-98	<0.3	5.3	<5.1	3.2	<4.9
CACMW-005-110-103.25-081624-FM-R	98.25-103.25	<0.3	3.8	<5.1	2.1	<4.9
CACMW-005-110-108.5-081624-FM-R	103.5-108.5	<0.3	1.4	<5.1	0.9	<4.9
CACMW-005-160-116.5-090524-FM-R	111.5-116.5	<0.3	<0.6	<5.6	0.1	<5.3
CACMW-005-160-121.75-090524-FM-R	116.75-121.75	<0.3	<0.6	<5.6	0.1	<5.3
CACMW-005-160-127-090524-FM-R	122-127	<0.3	0.3	<5.6	0.2	<5.3
CACMW-005-160-132.25-090524-FM-R	127.25-132.25	<0.3	<0.6	<5.6	0.2	<5.3
CACMW-005-160-137.5-081624-FM-R	132.5-137.5	<0.3	<0.5	<5.2	0.4	<4.9
CACMW-005-160-142.75-081624-FM-R	137.75-142.75	<0.3	<0.5	<5.2	0.4	<4.9
CACMW-005-160-148-081624-FM-R	143-148	<0.3	<0.5	<5.2	<0.3	<4.9
CACMW-005-160-153.25-081624-FM-R	148.25-153.25	<0.3	<0.5	<5.2	<0.3	<4.9
CACMW-005-160-158.5-081624-FM-R	153.5-158.5	<0.3	<0.5	<5.2	<0.3	<4.9
CACMW-006-060-16.5-090524-FM-R	11.5-16.5	<0.3	<0.6	<5.5	<0.3	<5.3
CACMW-006-060-21.75-090524-FM-R	16.75-21.75	<0.3	<0.6	<5.5	0.4	<5.3
CACMW-006-060-27-090524-FM-R	22-27	<0.3	0.6	<5.5	0.6	<5.3
CACMW-006-060-32.25-090524-FM-R	27.25-32.25	<0.3	3.6	<5.5	2.6	<5.3
CACMW-006-060-37.5-081724-FM-R	32.5-37.5	<0.2	5.6	<5.0	3.5	<4.7
CACMW-006-060-42.75-081724-FM-R	37.75-42.75	<0.2	5.4	<5.0	3.3	<4.7
CACMW-006-060-48-081724-FM-R	43-48	<0.2	6.2	<5.0	4.5	<4.7
CACMW-006-060-53.25-081724-FM-R	48.25-53.25	0.1	9.9	1.4	6.8	<4.7
CACMW-006-060-58.5-081724-FM-R	53.5-58.5	<0.2	1.3	<5.0	0.9	<4.7
CACMW-006-110-66.5-090624-FM-R	61.5-66.5	<0.3	0.8	<5.6	0.6	<5.3
CACMW-006-110-71.75-090624-FM-R	66.75-71.75	<0.3	1.6	<5.6	1.1	<5.3
CACMW-006-110-77-090624-FM-R	72-77	<0.3	3.7	<5.6	2.2	<5.3
CACMW-006-110-82.25-090624-FM-R	77.25-82.25	<0.3	2.4	<5.6	1.7	<5.2
CACMW-006-110-87.5-081724-FM-R	82.5-87.5	<0.3	3.5	<5.2	2.0	<4.9
CACMW-006-110-92.75-081724-FM-R	87.75-92.75	<0.3	3.1	<5.2	2.3	<4.9
CACMW-006-110-98-081724-FM-R	93-98	<0.3	2.5	<5.2	1.8	<4.9
CACMW-006-110-103.25-081724-FM-R	98.25-103.25	<0.3	3.4	<5.2	2.2	<4.9
CACMW-006-110-108.5-081724-FM-R	103.5-108.5	<0.3	2.0	<5.2	1.2	<4.9
CACMW-006-160-116.5-090624-FM-R	111.5-116.5	<0.3	<0.6	<5.6	0.2	<5.3
CACMW-006-160-121.75-090624-FM-R	116.75-121.75	<0.3	<0.6	<5.6	0.2	<5.2
CACMW-006-160-127-090624-FM-R	122-127	<0.3	<0.6	<5.6	0.3	<5.3
CACMW-006-160-132.25-090624-FM-R	127.25-132.25	<0.3	<0.6	<5.6	0.2	<5.3
CACMW-006-160-137.5-081724-FM-R	132.5-137.5	<0.3	<0.5	<5.2	<0.3	<5.0
CACMW-006-160-142.75-081724-FM-R	137.75-142.75	<0.3	<0.5	<5.2	0.5	<5.0
CACMW-006-160-148-081724-FM-R	143-148	<0.3	<0.5	<5.2	<0.3	<5.0
CACMW-006-160-153.25-081724-FM-R	148.25-153.25	<0.3	<0.5	<5.2	0.5	<5.0
CACMW-006-160-158.5-081724-FM-R	153.5-158.5	<0.3	<0.5	<5.2	<0.3	<5.0

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (ug/m^2/day)	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA) (ug/m^2/day)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ug/m^2/day)	Perfluoro-3-methoxypropanoic aci (PFMPA) (ug/m^2/day)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ug/m^2/day)
CACMW-005-060-16.5-090524-FM-R	11.5-16.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-060-21.75-090524-FM-R	16.75-21.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-060-27-090524-FM-R	22-27	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-060-32.25-090524-FM-R	27.25-32.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-060-37.5-081624-FM-R	32.5-37.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-005-060-42.75-081624-FM-R	37.75-42.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-005-060-48-081624-FM-R	43-48	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-005-060-53.25-081624-FM-R	48.25-53.25	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-005-060-58.5-081624-FM-R	53.5-58.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-005-110-66.5-090524-FM-R	61.5-66.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-110-71.75-090524-FM-R	66.75-71.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-110-77-090524-FM-R	72-77	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-110-82.25-090524-FM-R	77.25-82.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-110-87.5-081624-FM-R	82.5-87.5	<5.1	<5.1	<2.1	<2.1	<4.9
CACMW-005-110-92.75-081624-FM-R	87.75-92.75	<5.1	<5.1	<2.1	<2.1	<4.9
CACMW-005-110-98-081624-FM-R	93-98	<5.1	<5.1	<2.1	<2.1	<4.9
CACMW-005-110-103.25-081624-FM-R	98.25-103.25	<5.1	<5.1	<2.1	<2.1	<4.9
CACMW-005-110-108.5-081624-FM-R	103.5-108.5	<5.1	<5.1	<2.1	<2.1	<4.9
CACMW-005-160-116.5-090524-FM-R	111.5-116.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-160-121.75-090524-FM-R	116.75-121.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-160-127-090524-FM-R	122-127	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-160-132.25-090524-FM-R	127.25-132.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-005-160-137.5-081624-FM-R	132.5-137.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-005-160-142.75-081624-FM-R	137.75-142.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-005-160-148-081624-FM-R	143-148	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-005-160-153.25-081624-FM-R	148.25-153.25	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-005-160-158.5-081624-FM-R	153.5-158.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-006-060-16.5-090524-FM-R	11.5-16.5	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-006-060-21.75-090524-FM-R	16.75-21.75	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-006-060-27-090524-FM-R	22-27	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-006-060-32.25-090524-FM-R	27.25-32.25	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-006-060-37.5-081724-FM-R	32.5-37.5	<5.0	<5.0	<2.0	<2.0	<4.7
CACMW-006-060-42.75-081724-FM-R	37.75-42.75	<5.0	<5.0	<2.0	<2.0	<4.7
CACMW-006-060-48-081724-FM-R	43-48	<5.0	<5.0	<2.0	<2.0	<4.7
CACMW-006-060-53.25-081724-FM-R	48.25-53.25	<5.0	<5.0	<2.0	<2.0	<4.7
CACMW-006-060-58.5-081724-FM-R	53.5-58.5	<5.0	<5.0	<2.0	<2.0	<4.7
CACMW-006-110-66.5-090624-FM-R	61.5-66.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-006-110-71.75-090624-FM-R	66.75-71.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-006-110-77-090624-FM-R	72-77	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-006-110-82.25-090624-FM-R	77.25-82.25	<5.5	<5.5	<2.2	<2.2	<5.2
CACMW-006-110-87.5-081724-FM-R	82.5-87.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-006-110-92.75-081724-FM-R	87.75-92.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-006-110-98-081724-FM-R	93-98	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-006-110-103.25-081724-FM-R	98.25-103.25	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-006-110-108.5-081724-FM-R	103.5-108.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-006-160-116.5-090624-FM-R	111.5-116.5	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-006-160-121.75-090624-FM-R	116.75-121.75	<5.5	<5.5	<2.2	<2.2	<5.2
CACMW-006-160-127-090624-FM-R	122-127	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-006-160-132.25-090624-FM-R	127.25-132.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-006-160-137.5-081724-FM-R	132.5-137.5	<5.2	<5.2	<2.1	<2.1	<5.0
CACMW-006-160-142.75-081724-FM-R	137.75-142.75	<5.2	<5.2	<2.1	<2.1	<5.0
CACMW-006-160-148-081724-FM-R	143-148	<5.2	<5.2	<2.1	<2.1	<5.0
CACMW-006-160-153.25-081724-FM-R	148.25-153.25	<5.2	<5.2	<2.1	<2.1	<5.0
CACMW-006-160-158.5-081724-FM-R	153.5-158.5	<5.2	<5.2	<2.1	<2.1	<5.0

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

MPLE_ID for PFAS	Depth intervals for PFAS (ft)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ug/m^2/day)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ug/m^2/day)
CACMW-005-060-16.5-090524-FM-R	11.5-16.5	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-060-21.75-090524-FM-R	16.75-21.75	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-060-27-090524-FM-R	22-27	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-060-32.25-090524-FM-R	27.25-32.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-060-37.5-081624-FM-R	32.5-37.5	<4.8	<1.8	<5.2	<25.8	<25.8
CACMW-005-060-42.75-081624-FM-R	37.75-42.75	<4.8	<1.8	<5.2	<25.8	<25.8
CACMW-005-060-48-081624-FM-R	43-48	<4.8	<1.8	<5.2	<25.8	<25.8
CACMW-005-060-53.25-081624-FM-R	48.25-53.25	<4.8	<1.8	<5.2	<25.8	<25.8
CACMW-005-060-58.5-081624-FM-R	53.5-58.5	<4.8	<1.8	<5.2	<25.8	<25.8
CACMW-005-110-66.5-090524-FM-R	61.5-66.5	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-110-71.75-090524-FM-R	66.75-71.75	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-110-77-090524-FM-R	72-77	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-110-82.25-090524-FM-R	77.25-82.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-110-87.5-081624-FM-R	82.5-87.5	<4.8	<1.8	<5.1	<25.7	<25.7
CACMW-005-110-92.75-081624-FM-R	87.75-92.75	<4.8	<1.8	<5.1	<25.7	<25.7
CACMW-005-110-98-081624-FM-R	93-98	<4.8	<1.8	<5.1	<25.7	<25.7
CACMW-005-110-103.25-081624-FM-R	98.25-103.25	<4.8	<1.8	<5.1	<25.7	<25.7
CACMW-005-110-108.5-081624-FM-R	103.5-108.5	<4.8	<1.8	<5.1	<25.7	<25.7
CACMW-005-160-116.5-090524-FM-R	111.5-116.5	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-160-121.75-090524-FM-R	116.75-121.75	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-160-127-090524-FM-R	122-127	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-160-132.25-090524-FM-R	127.25-132.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-005-160-137.5-081624-FM-R	132.5-137.5	<4.8	<1.8	<5.2	<25.8	<25.8
CACMW-005-160-142.75-081624-FM-R	137.75-142.75	<4.8	<1.8	<5.2	<25.8	<25.8
CACMW-005-160-148-081624-FM-R	143-148	<4.8	<1.8	<5.2	<25.8	<25.8
CACMW-005-160-153.25-081624-FM-R	148.25-153.25	<4.8	<1.8	<5.2	<25.8	<25.8
CACMW-005-160-158.5-081624-FM-R	153.5-158.5	<4.8	<1.8	<5.2	<25.8	<25.8
CACMW-006-060-16.5-090524-FM-R	11.5-16.5	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-006-060-21.75-090524-FM-R	16.75-21.75	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-006-060-27-090524-FM-R	22-27	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-006-060-32.25-090524-FM-R	27.25-32.25	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-006-060-37.5-081724-FM-R	32.5-37.5	<4.6	<1.7	<5.0	<24.8	<24.8
CACMW-006-060-42.75-081724-FM-R	37.75-42.75	<4.6	<1.7	<5.0	<24.8	<24.8
CACMW-006-060-48-081724-FM-R	43-48	<4.6	<1.7	<5.0	<24.8	<24.8
CACMW-006-060-53.25-081724-FM-R	48.25-53.25	<4.6	<1.7	<5.0	<24.8	<24.8
CACMW-006-060-58.5-081724-FM-R	53.5-58.5	<4.6	<1.7	<5.0	<24.8	<24.8
CACMW-006-110-66.5-090624-FM-R	61.5-66.5	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-006-110-71.75-090624-FM-R	66.75-71.75	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-006-110-77-090624-FM-R	72-77	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-006-110-82.25-090624-FM-R	77.25-82.25	<5.2	<2.0	<5.5	<27.9	<27.9
CACMW-006-110-87.5-081724-FM-R	82.5-87.5	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-006-110-92.75-081724-FM-R	87.75-92.75	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-006-110-98-081724-FM-R	93-98	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-006-110-103.25-081724-FM-R	98.25-103.25	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-006-110-108.5-081724-FM-R	103.5-108.5	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-006-160-116.5-090624-FM-R	111.5-116.5	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-006-160-121.75-090624-FM-R	116.75-121.75	<5.2	<2.0	<5.5	<27.2	<27.2
CACMW-006-160-127-090624-FM-R	122-127	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-006-160-132.25-090624-FM-R	127.25-132.25	<5.2	<2.0	<5.6	<27.9	<27.9
CACMW-006-160-137.5-081724-FM-R	132.5-137.5	<4.9	<1.8	<5.2	<26.1	<26.1
CACMW-006-160-142.75-081724-FM-R	137.75-142.75	<4.9	<1.8	<5.2	<26.1	<26.1
CACMW-006-160-148-081724-FM-R	143-148	<4.9	<1.8	<5.2	<26.1	<26.1
CACMW-006-160-153.25-081724-FM-R	148.25-153.25	<4.9	<1.8	<5.2	<26.1	<26.1
CACMW-006-160-158.5-081724-FM-R	153.5-158.5	<4.9	<1.8	<5.2	<26.1	<26.1

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorobutanoic acid (PFBA) (ug/m^2/day)	Perfluoropentanoic acid (PFPeA) (ug/m^2/day)	Perfluorohexanoic acid (PFHxA) (ug/m^2/day)	Perfluoroheptanoic acid (PFHpA) (ug/m^2/day)	Perfluorooctanoic acid (PFOA) (ug/m^2/day)
CACMW-007-060-16.5-090624-FM-R	11.5-16.5	2.37	3.07	5.92	2.72	7.45
CACMW-007-060-21.75-090624-FM-R	16.75-21.75	<2.23	2.02	3.27	1.53	3.40
CACMW-007-060-27-090624-FM-R	22-27	<2.16	2.93	6.34	2.79	10.24
CACMW-007-060-32.25-090624-FM-R	27.25-32.25	<2.23	1.67	2.85	1.26	3.61
CACMW-007-060-37.5-081724-FM-R	32.5-37.5	<2.08	3.90	8.39	4.29	10.20
CACMW-007-060-42.75-081724-FM-R	37.75-42.75	0.85	7.81	20.10	9.11	23.86
CACMW-007-060-48-081724-FM-R	43-48	1.24	9.76	26.60	12.36	35.57
CACMW-007-060-53.25-081724-FM-R	48.25-53.25	0.85	4.81	10.34	4.42	12.15
CACMW-007-060-58.5-081724-FM-R	53.5-58.5	<2.08	3.45	8.39	3.25	9.55
CACMW-007-110-66.5-090624-FM-R	61.5-66.5	<2.22	3.40	7.56	3.61	10.88
CACMW-007-110-71.75-090624-FM-R	66.75-71.75	<2.22	3.96	9.65	3.96	11.58
CACMW-007-110-77-090624-FM-R	72-77	0.97	6.74	15.90	6.32	20.61
CACMW-007-110-82.25-090624-FM-R	77.25-82.25	<2.22	3.75	8.95	3.33	11.58
CACMW-007-110-87.5-081724-FM-R	82.5-87.5	1.05	7.19	17.58	7.19	22.02
CACMW-007-110-92.75-081724-FM-R	87.75-92.75	0.92	6.47	15.62	6.08	19.40
CACMW-007-110-98-081724-FM-R	93-98	0.65	4.05	9.74	4.18	12.21
CACMW-007-110-103.25-081724-FM-R	98.25-103.25	0.78	4.31	10.39	3.99	10.90
CACMW-007-110-108.5-081724-FM-R	103.5-108.5	<2.09	2.75	7.12	3.07	8.29
CACMW-007-160-116.5-090624-FM-R	111.5-116.5	<2.22	1.39	2.57	1.04	2.62
CACMW-007-160-121.75-090624-FM-R	116.75-121.75	<2.22	1.46	2.64	1.04	2.48
CACMW-007-160-127-090624-FM-R	122-127	<2.22	1.32	2.84	0.97	3.53
CACMW-007-160-132.25-090624-FM-R	127.25-132.25	<2.22	1.32	2.57	0.97	3.25
CACMW-007-160-137.5-081724-FM-R	132.5-137.5	<2.08	1.17	2.14	0.84	2.52
CACMW-007-160-142.75-081724-FM-R	137.75-142.75	<2.08	<1.04	2.14	0.52	2.39
CACMW-007-160-148-081724-FM-R	143-148	<2.08	1.10	2.01	0.78	2.13
CACMW-007-160-153.25-081724-FM-R	148.25-153.25	<2.08	0.62	1.03	0.33	1.48
CACMW-007-160-158.5-081724-FM-R	153.5-158.5	<2.08	<1.04	0.57	<1.30	0.50
CACMW-008-060-16.5-090624-FM-R	11.5-16.5	<2.22	1.25	1.59	0.67	1.23
CACMW-008-060-21.75-090624-FM-R	16.75-21.75	<2.15	1.80	2.70	1.39	3.86
CACMW-008-060-27-090624-FM-R	22-27	<2.15	2.91	5.12	2.50	5.67
CACMW-008-060-32.25-090624-FM-R	27.25-32.25	<2.15	4.16	9.63	3.74	11.56
CACMW-008-060-37.5-081724-FM-R	32.5-37.5	1.04	7.15	16.82	7.15	19.93
CACMW-008-060-42.75-081724-FM-R	37.75-42.75	2.01	9.75	24.62	13.64	34.87
CACMW-008-060-48-081724-FM-R	43-48	1.69	18.84	41.51	19.49	55.66
CACMW-008-060-53.25-081724-FM-R	48.25-53.25	2.01	16.89	42.81	17.54	51.76
CACMW-008-060-58.5-081724-FM-R	53.5-58.5	<2.08	2.92	6.43	3.05	8.88
CACMW-008-110-66.5-090624-FM-R	61.5-66.5	<2.21	3.39	7.53	3.11	9.45
CACMW-008-110-71.75-090624-FM-R	66.75-71.75	0.83	4.98	13.75	5.67	17.75
CACMW-008-110-77-090624-FM-R	72-77	0.69	6.36	15.82	6.91	22.59
CACMW-008-110-82.25-090624-FM-R	77.25-82.25	1.11	3.73	8.22	3.04	10.14
CACMW-008-110-87.5-081724-FM-R	82.5-87.5	0.84	5.51	14.20	5.58	17.95
CACMW-008-110-92.75-081724-FM-R	87.75-92.75	0.91	6.49	15.50	5.90	17.95
CACMW-008-110-98-081724-FM-R	93-98	0.71	5.25	13.55	5.32	16.65
CACMW-008-110-103.25-081724-FM-R	98.25-103.25	<2.08	3.89	10.96	4.28	13.41
CACMW-008-110-108.5-081724-FM-R	103.5-108.5	<2.08	2.85	6.42	2.59	7.57
CACMW-008-160-116.5-090624-FM-R	111.5-116.5	<2.22	1.18	2.28	0.97	2.27
CACMW-008-160-121.75-090624-FM-R	116.75-121.75	<2.22	1.25	2.76	0.69	2.41
CACMW-008-160-127-090624-FM-R	122-127	<2.22	1.73	3.66	1.52	3.72
CACMW-008-160-132.25-090624-FM-R	127.25-132.25	<2.22	1.32	2.35	0.97	2.20
CACMW-008-160-137.5-081724-FM-R	132.5-137.5	<2.08	1.43	3.37	1.17	4.33
CACMW-008-160-142.75-081724-FM-R	137.75-142.75	<2.08	1.43	3.50	1.43	3.75
CACMW-008-160-148-081724-FM-R	143-148	<2.08	<1.04	2.53	1.04	2.97
CACMW-008-160-153.25-081724-FM-R	148.25-153.25	<2.08	<1.04	2.07	0.84	2.13
CACMW-008-160-158.5-081724-FM-R	153.5-158.5	<2.08	<1.04	0.97	0.33	0.76
FD-1-081624-FM-R		1.69	11.70	25.92	11.70	33.58
FD-2-081724-FM-R		<2.08	<1.04	1.88	0.71	1.67
FD-3-081724-FM-R		0.78	5.71	13.55	5.51	15.35
FD-4-090424-FM-R		<2.22	3.19	7.56	2.78	9.49
FD-5-090424-FM-R		<2.22	1.32	2.49	1.11	2.75
FD-6-090524-FM-R		<2.23	3.28	7.60	2.93	8.14
FD-7-090524-FM-R		<2.23	5.77	15.92	6.33	20.64
FD-8-090524-FM-R		<2.22	1.87	3.39	1.46	3.52
FD-09-090624-FM-R		<2.23	2.30	5.15	1.88	5.49
FD-10-090624-FM-R		<2.22	3.54	7.56	3.12	10.88

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorononanoic acid (PFNA) (ug/m^2/day)	Perfluorodecanoic acid (PFDA) (ug/m^2/day)	Perfluoroundecanoic acid (PFUdA) (ug/m^2/day)	Perfluorododecanoic acid (PFDoA) (ug/m^2/day)	Perfluorotridecanoic acid (PFTrDA) (ug/m^2/day)
CACMW-007-060-16.5-090624-FM-R	11.5-16.5	0.94	0.22	<3.07	<0.56	<1.67
CACMW-007-060-21.75-090624-FM-R	16.75-21.75	0.45	<0.56	<3.07	<0.56	<1.67
CACMW-007-060-27-090624-FM-R	22-27	0.87	0.27	<3.07	<0.56	<1.67
CACMW-007-060-32.25-090624-FM-R	27.25-32.25	0.45	<0.56	<3.07	<0.56	<1.67
CACMW-007-060-37.5-081724-FM-R	32.5-37.5	0.94	0.44	<3.06	<0.52	<1.82
CACMW-007-060-42.75-081724-FM-R	37.75-42.75	3.03	0.72	<3.06	<0.52	<1.82
CACMW-007-060-48-081724-FM-R	43-48	4.46	1.11	<3.06	<0.52	<1.82
CACMW-007-060-53.25-081724-FM-R	48.25-53.25	1.40	0.38	<3.06	<0.52	<1.82
CACMW-007-060-58.5-081724-FM-R	53.5-58.5	1.14	<0.52	<3.06	<0.52	<1.82
CACMW-007-110-66.5-090624-FM-R	61.5-66.5	1.70	0.33	<3.06	<0.56	<1.67
CACMW-007-110-71.75-090624-FM-R	66.75-71.75	1.35	<0.56	<3.06	<0.56	<1.67
CACMW-007-110-77-090624-FM-R	72-77	2.40	0.62	<3.06	<0.53	<1.67
CACMW-007-110-82.25-090624-FM-R	77.25-82.25	1.08	0.40	<3.06	<0.56	<1.67
CACMW-007-110-87.5-081724-FM-R	82.5-87.5	2.32	0.85	<3.07	<0.52	<1.83
CACMW-007-110-92.75-081724-FM-R	87.75-92.75	2.12	0.62	<3.07	<0.52	<1.83
CACMW-007-110-98-081724-FM-R	93-98	1.14	0.48	<3.07	<0.52	<1.83
CACMW-007-110-103.25-081724-FM-R	98.25-103.25	1.01	<0.52	<3.07	<0.52	<1.83
CACMW-007-110-108.5-081724-FM-R	103.5-108.5	0.88	0.41	<3.07	<0.52	<1.83
CACMW-007-160-116.5-090624-FM-R	111.5-116.5	0.31	0.23	<3.06	<0.56	<1.67
CACMW-007-160-121.75-090624-FM-R	116.75-121.75	0.31	0.24	<3.06	<0.56	<1.67
CACMW-007-160-127-090624-FM-R	122-127	0.10	<0.56	<3.06	<0.56	<1.67
CACMW-007-160-132.25-090624-FM-R	127.25-132.25	0.24	<0.56	<3.06	<0.56	<1.67
CACMW-007-160-137.5-081724-FM-R	132.5-137.5	<0.10	<0.52	<3.05	<0.52	<1.82
CACMW-007-160-142.75-081724-FM-R	137.75-142.75	0.23	<0.52	<3.05	<0.52	<1.82
CACMW-007-160-148-081724-FM-R	143-148	0.03	<0.52	<3.05	<0.52	<1.82
CACMW-007-160-153.25-081724-FM-R	148.25-153.25	0.29	<0.52	<3.05	<0.52	<1.82
CACMW-007-160-158.5-081724-FM-R	153.5-158.5	<0.10	<0.52	<3.05	<0.52	<1.82
CACMW-008-060-16.5-090624-FM-R	11.5-16.5	0.24	<0.55	<3.05	<0.55	<1.66
CACMW-008-060-21.75-090624-FM-R	16.75-21.75	0.38	<1.39	<0.53	<0.53	<1.66
CACMW-008-060-27-090624-FM-R	22-27	0.66	0.21	<3.05	<0.53	<1.66
CACMW-008-060-32.25-090624-FM-R	27.25-32.25	1.21	0.42	<3.05	<0.53	<1.66
CACMW-008-060-37.5-081724-FM-R	32.5-37.5	2.50	0.57	<3.05	<0.52	<1.82
CACMW-008-060-42.75-081724-FM-R	37.75-42.75	4.65	1.17	<3.05	<0.52	<1.82
CACMW-008-060-48-081724-FM-R	43-48	6.72	1.56	<3.05	<0.52	<1.82
CACMW-008-060-53.25-081724-FM-R	48.25-53.25	7.37	1.75	<3.05	<0.52	<1.82
CACMW-008-060-58.5-081724-FM-R	53.5-58.5	1.20	<0.52	<3.05	<0.52	<1.82
CACMW-008-110-66.5-090624-FM-R	61.5-66.5	1.21	0.34	<3.04	<0.55	<1.66
CACMW-008-110-71.75-090624-FM-R	66.75-71.75	2.32	0.44	<3.04	<0.55	<1.66
CACMW-008-110-77-090624-FM-R	72-77	1.90	0.56	<3.04	<0.55	<1.66
CACMW-008-110-82.25-090624-FM-R	77.25-82.25	1.07	0.39	<3.04	<0.55	<1.66
CACMW-008-110-87.5-081724-FM-R	82.5-87.5	1.91	0.62	<3.05	<0.52	<1.82
CACMW-008-110-92.75-081724-FM-R	87.75-92.75	2.04	<0.52	<3.05	<0.52	<1.82
CACMW-008-110-98-081724-FM-R	93-98	2.50	<0.52	<3.05	<0.52	<1.82
CACMW-008-110-103.25-081724-FM-R	98.25-103.25	1.39	0.40	<3.05	<0.52	<1.82
CACMW-008-110-108.5-081724-FM-R	103.5-108.5	0.88	0.34	<3.05	<0.52	<1.82
CACMW-008-160-116.5-090624-FM-R	111.5-116.5	<0.10	<0.55	<3.05	<0.55	<1.66
CACMW-008-160-121.75-090624-FM-R	116.75-121.75	<0.10	<0.55	<3.05	<0.55	<1.66
CACMW-008-160-127-090624-FM-R	122-127	0.38	<0.55	<3.05	<0.55	<1.66
CACMW-008-160-132.25-090624-FM-R	127.25-132.25	<0.10	<0.55	<3.05	<0.55	<1.66
CACMW-008-160-137.5-081724-FM-R	132.5-137.5	0.29	<0.52	<3.05	<0.52	<1.82
CACMW-008-160-142.75-081724-FM-R	137.75-142.75	0.42	0.19	<3.05	<0.52	<1.82
CACMW-008-160-148-081724-FM-R	143-148	0.29	0.21	<3.05	<0.52	<1.82
CACMW-008-160-153.25-081724-FM-R	148.25-153.25	0.23	<0.52	<3.05	<0.52	<1.82
CACMW-008-160-158.5-081724-FM-R	153.5-158.5	<0.10	<0.52	<3.05	<0.52	<1.82
FD-1-081624-FM-R		4.06	0.91	<3.05	<0.52	<1.82
FD-2-081724-FM-R		0.16	<0.52	<3.05	<0.52	<1.82
FD-3-081724-FM-R		1.98	<0.52	<3.05	<0.52	<1.82
FD-4-090424-FM-R		0.94	0.34	<3.05	<0.56	<1.67
FD-5-090424-FM-R		0.03	<0.55	<3.05	<0.55	<1.66
FD-6-090524-FM-R		1.29	0.46	<3.07	<0.56	<1.67
FD-7-090524-FM-R		2.19	0.67	<3.06	<0.56	<1.67
FD-8-090524-FM-R		0.45	<0.55	<3.05	<0.55	<1.66
FD-09-090624-FM-R		0.45	<0.56	3.07	<0.56	<1.67
FD-10-090624-FM-R		1.22	0.46	<3.06	<0.56	<1.67

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorotetradecanoic acid (PFTeDA) (ug/m^2/day)	Perfluorobutane sulfonic acid (PFBS) (ug/m^2/day)	Perfluoropentane sulfonate (PFPeS) (ug/m^2/day)	Perfluorohexane sulfonic acid (PFHxS) (ug/m^2/day)	Perfluoroheptane sulfonic acid (PFHpS) (ug/m^2/day)
CACMW-007-060-16.5-090624-FM-R	11.5-16.5	<0.6	3.0	1.4	19.5	0.9
CACMW-007-060-21.75-090624-FM-R	16.75-21.75	<0.6	0.6	0.9	11.2	0.5
CACMW-007-060-27-090624-FM-R	22-27	<0.6	1.0	1.7	22.3	1.1
CACMW-007-060-32.25-090624-FM-R	27.25-32.25	<0.6	0.5	0.8	9.8	0.5
CACMW-007-060-37.5-081724-FM-R	32.5-37.5	<0.5	1.6	2.0	31.9	1.7
CACMW-007-060-42.75-081724-FM-R	37.75-42.75	<0.5	3.8	5.3	78.1	4.3
CACMW-007-060-48-081724-FM-R	43-48	<0.5	4.6	7.2	110.6	6.2
CACMW-007-060-53.25-081724-FM-R	48.25-53.25	<0.5	2.0	2.4	33.8	2.2
CACMW-007-060-58.5-081724-FM-R	53.5-58.5	<0.5	1.6	1.8	29.3	1.6
CACMW-007-110-66.5-090624-FM-R	61.5-66.5	<0.6	1.4	2.4	28.5	2.0
CACMW-007-110-71.75-090624-FM-R	66.75-71.75	<0.6	1.9	2.6	35.4	2.7
CACMW-007-110-77-090624-FM-R	72-77	<0.5	3.1	4.7	60.4	4.2
CACMW-007-110-82.25-090624-FM-R	77.25-82.25	<0.6	1.8	3.1	42.4	2.6
CACMW-007-110-87.5-081724-FM-R	82.5-87.5	<0.5	4.0	5.0	71.9	4.4
CACMW-007-110-92.75-081724-FM-R	87.75-92.75	<0.5	3.3	5.0	62.1	3.5
CACMW-007-110-98-081724-FM-R	93-98	<0.5	2.2	3.3	44.5	2.6
CACMW-007-110-103.25-081724-FM-R	98.25-103.25	<0.5	2.2	2.4	34.0	2.1
CACMW-007-110-108.5-081724-FM-R	103.5-108.5	<0.5	1.5	2.0	26.2	1.6
CACMW-007-160-116.5-090624-FM-R	111.5-116.5	<0.6	1.0	1.2	10.4	0.9
CACMW-007-160-121.75-090624-FM-R	116.75-121.75	<0.6	0.9	1.0	9.7	0.8
CACMW-007-160-127-090624-FM-R	122-127	<0.6	1.0	1.5	12.5	0.8
CACMW-007-160-132.25-090624-FM-R	127.25-132.25	<0.6	0.8	1.2	10.4	0.7
CACMW-007-160-137.5-081724-FM-R	132.5-137.5	<0.5	0.8	1.2	9.7	0.5
CACMW-007-160-142.75-081724-FM-R	137.75-142.75	<0.5	0.9	0.5	9.7	0.5
CACMW-007-160-148-081724-FM-R	143-148	<0.5	0.7	0.9	9.1	0.5
CACMW-007-160-153.25-081724-FM-R	148.25-153.25	<0.5	0.4	0.5	4.3	<1.3
CACMW-007-160-158.5-081724-FM-R	153.5-158.5	<0.5	0.2	<1.3	1.6	<1.3
CACMW-008-060-16.5-090624-FM-R	11.5-16.5	<0.6	0.3	0.3	4.4	0.3
CACMW-008-060-21.75-090624-FM-R	16.75-21.75	<0.5	0.5	0.7	9.0	0.5
CACMW-008-060-27-090624-FM-R	22-27	<0.5	0.9	1.2	15.2	1.0
CACMW-008-060-32.25-090624-FM-R	27.25-32.25	<0.5	1.4	1.9	29.1	1.9
CACMW-008-060-37.5-081724-FM-R	32.5-37.5	<0.5	2.8	3.4	57.2	3.1
CACMW-008-060-42.75-081724-FM-R	37.75-42.75	<0.5	4.3	7.1	104.0	5.9
CACMW-008-060-48-081724-FM-R	43-48	<0.5	7.1	10.4	149.4	9.1
CACMW-008-060-53.25-081724-FM-R	48.25-53.25	<0.5	7.1	9.7	149.4	9.1
CACMW-008-060-58.5-081724-FM-R	53.5-58.5	<0.5	1.0	1.5	22.1	1.4
CACMW-008-110-66.5-090624-FM-R	61.5-66.5	<0.6	1.3	1.8	26.3	1.8
CACMW-008-110-71.75-090624-FM-R	66.75-71.75	<0.6	2.5	4.0	56.7	3.1
CACMW-008-110-77-090624-FM-R	72-77	<0.6	3.0	5.3	65.7	5.0
CACMW-008-110-82.25-090624-FM-R	77.25-82.25	<0.6	1.5	2.0	27.7	1.7
CACMW-008-110-87.5-081724-FM-R	82.5-87.5	<0.5	2.6	4.1	56.4	3.8
CACMW-008-110-92.75-081724-FM-R	87.75-92.75	<0.5	2.8	3.9	49.9	3.6
CACMW-008-110-98-081724-FM-R	93-98	<0.5	2.5	3.8	51.2	3.1
CACMW-008-110-103.25-081724-FM-R	98.25-103.25	<0.5	1.8	3.2	42.2	2.1
CACMW-008-110-108.5-081724-FM-R	103.5-108.5	<0.5	1.3	1.9	22.1	1.4
CACMW-008-160-116.5-090624-FM-R	111.5-116.5	<0.6	0.8	1.0	9.0	0.8
CACMW-008-160-121.75-090624-FM-R	116.75-121.75	<0.6	0.8	0.9	10.4	0.8
CACMW-008-160-127-090624-FM-R	122-127	<0.6	1.2	1.7	15.2	1.0
CACMW-008-160-132.25-090624-FM-R	127.25-132.25	<0.6	0.9	1.2	10.4	0.5
CACMW-008-160-137.5-081724-FM-R	132.5-137.5	<0.5	1.3	1.8	15.6	0.9
CACMW-008-160-142.75-081724-FM-R	137.75-142.75	<0.5	1.2	1.9	16.2	1.1
CACMW-008-160-148-081724-FM-R	143-148	<0.5	0.9	1.4	11.7	0.8
CACMW-008-160-153.25-081724-FM-R	148.25-153.25	<0.5	0.7	0.9	9.7	0.6
CACMW-008-160-158.5-081724-FM-R	153.5-158.5	<0.5	0.3	0.4	3.8	<0.5
FD-1-081624-FM-R		<0.52	3.70	5.91	90.97	5.13
FD-2-081724-FM-R		<0.52	0.60	1.04	9.09	0.49
FD-3-081724-FM-R		<0.52	2.40	3.63	44.75	3.11
FD-4-090424-FM-R		<0.56	1.32	2.01	27.76	1.94
FD-5-090424-FM-R		<0.55	0.90	1.18	10.39	0.57
FD-6-090524-FM-R		<0.56	1.19	1.88	30.68	1.88
FD-7-090524-FM-R		<0.56	2.85	4.17	62.59	4.87
FD-8-090524-FM-R		<0.55	0.57	0.83	10.39	0.55
FD-09-090624-FM-R		<0.56	1.05	1.60	17.42	1.32
FD-10-090624-FM-R		<0.56	1.67	2.15	32.64	2.22

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorooctane sulfonic acid (PFOS) (ug/m^2/day)	Perfluorononane sulfonic acid (PFNS) (ug/m^2/day)	Perfluorodecane sulfonic acid (PFDS) (ug/m^2/day)	Perfluorododecane sulfonic acid (PFDOS) (ug/m^2/day)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ug/m^2/day)
CACMW-007-060-16.5-090624-FM-R	11.5-16.5	76.7	<0.5	<0.5	<0.5	<2.1
CACMW-007-060-21.75-090624-FM-R	16.75-21.75	48.1	<0.5	<0.5	<0.5	<2.1
CACMW-007-060-27-090624-FM-R	22-27	97.6	<0.5	<0.5	<0.5	<2.0
CACMW-007-060-32.25-090624-FM-R	27.25-32.25	41.2	<0.5	<0.5	<0.5	<2.1
CACMW-007-060-37.5-081724-FM-R	32.5-37.5	143.1	<0.5	<0.5	<0.5	<2.0
CACMW-007-060-42.75-081724-FM-R	37.75-42.75	370.8	0.4	<0.5	<0.5	<2.0
CACMW-007-060-48-081724-FM-R	43-48	559.5	0.5	<0.5	<0.5	<2.0
CACMW-007-060-53.25-081724-FM-R	48.25-53.25	188.7	<0.5	<0.5	<0.5	<2.0
CACMW-007-060-58.5-081724-FM-R	53.5-58.5	149.6	<0.5	<0.5	<0.5	<2.0
CACMW-007-110-66.5-090624-FM-R	61.5-66.5	173.6	<0.5	<0.5	<0.5	<2.1
CACMW-007-110-71.75-090624-FM-R	66.75-71.75	194.4	0.3	<0.5	<0.5	<2.1
CACMW-007-110-77-090624-FM-R	72-77	326.4	0.3	<0.5	<0.5	<2.0
CACMW-007-110-82.25-090624-FM-R	77.25-82.25	194.4	0.2	<0.5	<0.5	<2.1
CACMW-007-110-87.5-081724-FM-R	82.5-87.5	411.9	0.4	<0.5	<0.5	<2.0
CACMW-007-110-92.75-081724-FM-R	87.75-92.75	353.0	0.3	<0.5	<0.5	<2.0
CACMW-007-110-98-081724-FM-R	93-98	235.4	0.2	<0.5	<0.5	<2.0
CACMW-007-110-103.25-081724-FM-R	98.25-103.25	209.2	<0.5	<0.5	<0.5	<2.0
CACMW-007-110-108.5-081724-FM-R	103.5-108.5	150.4	<0.5	<0.5	<0.5	<2.0
CACMW-007-160-116.5-090624-FM-R	111.5-116.5	45.2	<0.5	<0.5	<0.5	<2.1
CACMW-007-160-121.75-090624-FM-R	116.75-121.75	47.2	<0.5	<0.5	<0.5	<2.1
CACMW-007-160-127-090624-FM-R	122-127	56.3	<0.5	<0.5	<0.5	<2.1
CACMW-007-160-132.25-090624-FM-R	127.25-132.25	37.5	<0.5	<0.5	<0.5	<2.1
CACMW-007-160-137.5-081724-FM-R	132.5-137.5	33.8	<0.5	<0.5	<0.5	<1.9
CACMW-007-160-142.75-081724-FM-R	137.75-142.75	31.8	<0.5	<0.5	<0.5	<1.9
CACMW-007-160-148-081724-FM-R	143-148	27.9	<0.5	<0.5	<0.5	<1.9
CACMW-007-160-153.25-081724-FM-R	148.25-153.25	11.7	<0.5	<0.5	<0.5	<1.9
CACMW-007-160-158.5-081724-FM-R	153.5-158.5	5.1	<0.5	<0.5	<0.5	<1.9
CACMW-008-060-16.5-090624-FM-R	11.5-16.5	20.1	<0.5	<0.5	<0.5	<2.1
CACMW-008-060-21.75-090624-FM-R	16.75-21.75	45.0	<0.5	<0.5	<0.5	<2.0
CACMW-008-060-27-090624-FM-R	22-27	83.2	<0.5	<0.5	<0.5	<2.0
CACMW-008-060-32.25-090624-FM-R	27.25-32.25	145.5	<0.5	<0.5	<0.5	<2.0
CACMW-008-060-37.5-081724-FM-R	32.5-37.5	253.4	0.2	<0.5	<0.5	<1.9
CACMW-008-060-42.75-081724-FM-R	37.75-42.75	493.8	0.6	<0.5	<0.5	<1.9
CACMW-008-060-48-081724-FM-R	43-48	714.7	0.6	<0.5	<0.5	<1.9
CACMW-008-060-53.25-081724-FM-R	48.25-53.25	714.7	0.7	0.3	<0.5	<1.9
CACMW-008-060-58.5-081724-FM-R	53.5-58.5	97.5	<0.5	<1.3	<0.5	<1.9
CACMW-008-110-66.5-090624-FM-R	61.5-66.5	152.1	<0.5	<0.5	<0.5	<2.1
CACMW-008-110-71.75-090624-FM-R	66.75-71.75	283.4	0.3	<0.5	<0.5	<2.1
CACMW-008-110-77-090624-FM-R	72-77	373.3	0.3	<0.5	<0.5	<2.1
CACMW-008-110-82.25-090624-FM-R	77.25-82.25	145.2	<0.5	<0.5	<0.5	<2.1
CACMW-008-110-87.5-081724-FM-R	82.5-87.5	317.8	0.3	<0.5	<0.5	<1.9
CACMW-008-110-92.75-081724-FM-R	87.75-92.75	291.9	0.4	0.3	<0.5	<1.9
CACMW-008-110-98-081724-FM-R	93-98	278.9	0.3	<0.5	<0.5	<1.9
CACMW-008-110-103.25-081724-FM-R	98.25-103.25	201.1	0.2	<0.5	<0.5	<1.9
CACMW-008-110-108.5-081724-FM-R	103.5-108.5	123.2	<0.5	<0.5	<0.5	<1.9
CACMW-008-160-116.5-090624-FM-R	111.5-116.5	41.5	<0.5	<0.5	<0.5	<2.1
CACMW-008-160-121.75-090624-FM-R	116.75-121.75	49.2	<0.5	<0.5	<0.5	<2.1
CACMW-008-160-127-090624-FM-R	122-127	63.0	<0.5	<0.5	<0.5	<2.1
CACMW-008-160-132.25-090624-FM-R	127.25-132.25	39.5	<0.5	<0.5	<0.5	<2.1
CACMW-008-160-137.5-081724-FM-R	132.5-137.5	53.9	<0.5	<0.5	<0.5	<1.9
CACMW-008-160-142.75-081724-FM-R	137.75-142.75	55.2	<0.5	<0.5	<0.5	<1.9
CACMW-008-160-148-081724-FM-R	143-148	39.6	<0.5	<0.5	<0.5	<1.9
CACMW-008-160-153.25-081724-FM-R	148.25-153.25	30.5	<0.5	<0.5	<0.5	<1.9
CACMW-008-160-158.5-081724-FM-R	153.5-158.5	10.4	<0.5	<0.5	<0.5	<1.9
FD-1-081624-FM-R		402.85	0.25	<0.50	<0.51	<1.95
FD-2-081724-FM-R		29.86	<0.45	<0.50	<0.51	<1.95
FD-3-081724-FM-R		265.91	0.20	<0.50	<0.51	<1.95
FD-4-090424-FM-R		166.57	0.19	<0.53	<0.54	<2.08
FD-5-090424-FM-R		29.78	<0.53	<0.53	<0.54	<2.08
FD-6-090524-FM-R		139.47	<0.54	<0.54	<0.54	<2.09
FD-7-090524-FM-R		347.70	0.33	<0.54	<0.54	<2.09
FD-8-090524-FM-R		47.81	<0.53	<0.53	<0.54	<2.08
FD-09-090624-FM-R		97.54	<0.54	<0.54	<0.54	<2.09
FD-10-090624-FM-R		180.54	<0.53	<0.53	<0.54	<2.08

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ug/m^2/day)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ug/m^2/day)
CACMW-007-060-16.5-090624-FM-R	11.5-16.5	178.0	2.3	<0.6	1.0	<5.6
CACMW-007-060-21.75-090624-FM-R	16.75-21.75	6.5	1.9	<0.6	0.5	<5.6
CACMW-007-060-27-090624-FM-R	22-27	12.7	3.6	<0.6	1.3	<5.6
CACMW-007-060-32.25-090624-FM-R	27.25-32.25	5.1	1.4	<0.6	0.6	<5.6
CACMW-007-060-37.5-081724-FM-R	32.5-37.5	19.0	4.2	<0.5	2.0	<5.2
CACMW-007-060-42.75-081724-FM-R	37.75-42.75	35.9	11.1	<0.5	4.8	<5.2
CACMW-007-060-48-081724-FM-R	43-48	62.0	15.6	<0.5	6.1	<5.2
CACMW-007-060-53.25-081724-FM-R	48.25-53.25	17.1	4.4	<0.5	2.1	<5.2
CACMW-007-060-58.5-081724-FM-R	53.5-58.5	8.6	3.4	<0.5	1.6	<5.2
CACMW-007-110-66.5-090624-FM-R	61.5-66.5	18.2	3.3	<0.6	1.7	<5.6
CACMW-007-110-71.75-090624-FM-R	66.75-71.75	20.3	5.6	<0.6	2.0	<5.6
CACMW-007-110-77-090624-FM-R	72-77	36.3	6.9	<0.5	3.6	<5.3
CACMW-007-110-82.25-090624-FM-R	77.25-82.25	14.1	4.9	<0.6	2.2	<5.6
CACMW-007-110-87.5-081724-FM-R	82.5-87.5	25.7	8.5	<0.5	4.7	<5.2
CACMW-007-110-92.75-081724-FM-R	87.75-92.75	28.3	8.5	<0.5	3.5	<5.2
CACMW-007-110-98-081724-FM-R	93-98	18.5	5.0	<0.5	2.6	<5.2
CACMW-007-110-103.25-081724-FM-R	98.25-103.25	17.2	3.6	<0.5	2.4	<5.2
CACMW-007-110-108.5-081724-FM-R	103.5-108.5	10.0	2.5	<0.5	1.5	<5.2
CACMW-007-160-116.5-090624-FM-R	111.5-116.5	7.1	0.7	<0.6	0.3	<5.6
CACMW-007-160-121.75-090624-FM-R	116.75-121.75	4.3	0.8	<0.6	<1.1	<5.6
CACMW-007-160-127-090624-FM-R	122-127	2.3	0.8	<0.6	0.3	<5.6
CACMW-007-160-132.25-090624-FM-R	127.25-132.25	3.6	0.8	<0.6	0.4	<5.6
CACMW-007-160-137.5-081724-FM-R	132.5-137.5	9.3	<2.0	<0.5	<1.0	<5.2
CACMW-007-160-142.75-081724-FM-R	137.75-142.75	6.0	2.0	<0.5	<1.0	<5.2
CACMW-007-160-148-081724-FM-R	143-148	6.7	2.0	<0.5	<1.0	<5.2
CACMW-007-160-153.25-081724-FM-R	148.25-153.25	6.0	<5.2	<0.5	<1.0	<5.2
CACMW-007-160-158.5-081724-FM-R	153.5-158.5	4.1	<5.2	<0.5	<1.0	<5.2
CACMW-008-060-16.5-090624-FM-R	11.5-16.5	0.9	0.6	<0.6	<1.1	<5.5
CACMW-008-060-21.75-090624-FM-R	16.75-21.75	4.3	1.1	<0.5	0.6	<5.3
CACMW-008-060-27-090624-FM-R	22-27	9.2	2.5	<0.5	0.8	<5.3
CACMW-008-060-32.25-090624-FM-R	27.25-32.25	11.3	4.9	<0.5	1.5	<5.3
CACMW-008-060-37.5-081724-FM-R	32.5-37.5	27.4	6.5	<0.5	3.2	<5.2
CACMW-008-060-42.75-081724-FM-R	37.75-42.75	48.9	15.6	<0.5	6.4	<5.2
CACMW-008-060-48-081724-FM-R	43-48	81.4	24.7	<0.5	10.4	<5.2
CACMW-008-060-53.25-081724-FM-R	48.25-53.25	81.4	20.8	<0.5	8.4	<5.2
CACMW-008-060-58.5-081724-FM-R	53.5-58.5	23.6	3.7	<0.5	1.1	<5.2
CACMW-008-110-66.5-090624-FM-R	61.5-66.5	7.8	2.4	<0.6	1.9	<5.5
CACMW-008-110-71.75-090624-FM-R	66.75-71.75	25.7	5.6	<0.6	3.0	<5.5
CACMW-008-110-77-090624-FM-R	72-77	29.2	8.3	<0.6	3.8	<5.5
CACMW-008-110-82.25-090624-FM-R	77.25-82.25	8.5	3.8	<0.6	1.7	<5.5
CACMW-008-110-87.5-081724-FM-R	82.5-87.5	17.7	6.1	<0.5	3.3	<5.2
CACMW-008-110-92.75-081724-FM-R	87.75-92.75	24.2	7.8	<0.5	3.1	<5.2
CACMW-008-110-98-081724-FM-R	93-98	28.1	6.4	<0.5	3.2	<5.2
CACMW-008-110-103.25-081724-FM-R	98.25-103.25	24.2	4.9	<0.5	2.3	<5.2
CACMW-008-110-108.5-081724-FM-R	103.5-108.5	7.9	3.8	<0.5	1.1	<5.2
CACMW-008-160-116.5-090624-FM-R	111.5-116.5	5.7	0.6	<0.6	0.3	<5.5
CACMW-008-160-121.75-090624-FM-R	116.75-121.75	<0.17	<2.1	<0.6	0.3	<5.5
CACMW-008-160-127-090624-FM-R	122-127	13.3	<2.1	<0.6	0.5	<5.5
CACMW-008-160-132.25-090624-FM-R	127.25-132.25	6.4	<2.1	<0.6	<1.1	<5.5
CACMW-008-160-137.5-081724-FM-R	132.5-137.5	11.8	1.2	<0.5	0.4	<5.2
CACMW-008-160-142.75-081724-FM-R	137.75-142.75	17.7	1.6	<0.5	0.4	<5.2
CACMW-008-160-148-081724-FM-R	143-148	8.6	0.9	<0.5	0.3	<5.2
CACMW-008-160-153.25-081724-FM-R	148.25-153.25	12.5	0.8	<0.5	<1.0	<5.2
CACMW-008-160-158.5-081724-FM-R	153.5-158.5	2.8	<2.0	<0.5	<1.0	<5.2
FD-1-081624-FM-R		55.39	15.59	<0.52	5.39	<5.20
FD-2-081724-FM-R		9.90	0.58	<0.52	<1.04	<5.19
FD-3-081724-FM-R		25.46	6.49	<0.52	2.92	<5.19
FD-4-090424-FM-R		9.20	3.61	<0.56	1.53	<5.55
FD-5-090424-FM-R		6.41	1.04	<0.55	0.50	<5.54
FD-6-090524-FM-R		12.03	3.91	<0.56	1.53	<5.58
FD-7-090524-FM-R		26.60	7.65	<0.56	3.62	<5.56
FD-8-090524-FM-R		<0.17	1.39	<0.55	0.62	<5.54
FD-09-090624-FM-R		16.90	2.30	<0.56	1.11	<5.57
FD-10-090624-FM-R		16.84	3.75	<0.56	1.74	<5.55

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

MPLE_ID for PFAS	Depth intervals for PFAS (ft)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ug/m^2/day)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ug/m^2/day)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ug/m^2/day)	Perfluorooctane sulfonamide (PFOSA) (ug/m^2/day)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ug/m^2/day)
CACMW-007-060-16.5-090624-FM-R	11.5-16.5	<0.3	0.8	<5.6	0.7	<5.2
CACMW-007-060-21.75-090624-FM-R	16.75-21.75	<0.3	0.4	<5.6	0.5	<5.2
CACMW-007-060-27-090624-FM-R	22-27	<0.3	1.1	<5.6	0.8	<5.2
CACMW-007-060-32.25-090624-FM-R	27.25-32.25	<0.3	0.4	<5.6	0.4	<5.2
CACMW-007-060-37.5-081724-FM-R	32.5-37.5	<0.3	2.1	<5.2	1.3	<4.9
CACMW-007-060-42.75-081724-FM-R	37.75-42.75	<0.3	5.2	<5.2	3.3	<4.9
CACMW-007-060-48-081724-FM-R	43-48	<0.3	7.8	<5.2	4.7	<4.9
CACMW-007-060-53.25-081724-FM-R	48.25-53.25	<0.3	2.5	<5.2	1.4	<4.9
CACMW-007-060-58.5-081724-FM-R	53.5-58.5	<0.3	1.8	<5.2	1.0	<4.9
CACMW-007-110-66.5-090624-FM-R	61.5-66.5	<0.3	2.2	<5.6	1.2	<5.2
CACMW-007-110-71.75-090624-FM-R	66.75-71.75	<0.3	2.8	<5.6	1.4	<5.3
CACMW-007-110-77-090624-FM-R	72-77	<0.3	3.1	<5.3	2.3	<5.1
CACMW-007-110-82.25-090624-FM-R	77.25-82.25	<0.3	2.6	<5.6	1.2	<5.3
CACMW-007-110-87.5-081724-FM-R	82.5-87.5	<0.3	4.1	<5.2	2.5	<5.0
CACMW-007-110-92.75-081724-FM-R	87.75-92.75	<0.3	3.8	<5.2	2.3	<5.0
CACMW-007-110-98-081724-FM-R	93-98	<0.3	2.5	<5.2	1.6	<5.0
CACMW-007-110-103.25-081724-FM-R	98.25-103.25	<0.3	2.3	<5.2	1.2	<5.0
CACMW-007-110-108.5-081724-FM-R	103.5-108.5	<0.3	1.8	<5.2	0.9	<5.0
CACMW-007-160-116.5-090624-FM-R	111.5-116.5	<0.3	0.4	<5.6	0.2	<5.2
CACMW-007-160-121.75-090624-FM-R	116.75-121.75	<0.3	<0.6	<5.6	0.3	<5.2
CACMW-007-160-127-090624-FM-R	122-127	<0.3	0.3	<5.6	<0.3	<5.3
CACMW-007-160-132.25-090624-FM-R	127.25-132.25	<0.3	0.3	<5.6	0.2	<5.3
CACMW-007-160-137.5-081724-FM-R	132.5-137.5	<0.3	<0.5	<5.2	0.3	<4.9
CACMW-007-160-142.75-081724-FM-R	137.75-142.75	<0.3	<0.5	<5.2	0.3	<4.9
CACMW-007-160-148-081724-FM-R	143-148	<0.3	<0.5	<5.2	<1.3	<4.9
CACMW-007-160-153.25-081724-FM-R	148.25-153.25	<0.3	<0.5	<5.2	<1.3	<4.9
CACMW-007-160-158.5-081724-FM-R	153.5-158.5	<0.3	<0.5	<5.2	<1.3	<4.9
CACMW-008-060-16.5-090624-FM-R	11.5-16.5	<0.3	0.3	<5.5	<0.3	<5.3
CACMW-008-060-21.75-090624-FM-R	16.75-21.75	<0.3	<0.5	<5.3	0.4	<5.1
CACMW-008-060-27-090624-FM-R	22-27	<0.3	0.7	<5.3	0.7	<5.1
CACMW-008-060-32.25-090624-FM-R	27.25-32.25	<0.3	1.6	<5.3	1.2	<5.1
CACMW-008-060-37.5-081724-FM-R	32.5-37.5	<0.3	3.8	<5.2	2.3	<4.9
CACMW-008-060-42.75-081724-FM-R	37.75-42.75	<0.3	6.4	<5.2	4.5	<4.9
CACMW-008-060-48-081724-FM-R	43-48	0.2	11.0	1.5	7.1	<4.9
CACMW-008-060-53.25-081724-FM-R	48.25-53.25	0.3	9.7	1.6	6.3	<4.9
CACMW-008-060-58.5-081724-FM-R	53.5-58.5	<0.3	1.2	<5.2	1.0	<4.9
CACMW-008-110-66.5-090624-FM-R	61.5-66.5	<0.3	1.1	<5.5	1.0	<5.3
CACMW-008-110-71.75-090624-FM-R	66.75-71.75	<0.3	3.0	<5.5	2.0	<5.3
CACMW-008-110-77-090624-FM-R	72-77	<0.3	4.1	<5.5	2.7	<5.3
CACMW-008-110-82.25-090624-FM-R	77.25-82.25	<0.3	1.6	<5.5	1.1	<5.3
CACMW-008-110-87.5-081724-FM-R	82.5-87.5	<0.3	3.0	<5.2	2.1	<4.9
CACMW-008-110-92.75-081724-FM-R	87.75-92.75	<0.3	3.2	<5.2	1.9	<4.9
CACMW-008-110-98-081724-FM-R	93-98	<0.3	3.2	<5.2	1.8	<4.9
CACMW-008-110-103.25-081724-FM-R	98.25-103.25	<0.3	2.6	<5.2	1.4	<4.9
CACMW-008-110-108.5-081724-FM-R	103.5-108.5	<0.3	1.4	<5.2	0.8	<4.9
CACMW-008-160-116.5-090624-FM-R	111.5-116.5	<0.3	<0.6	<5.5	0.2	<5.3
CACMW-008-160-121.75-090624-FM-R	116.75-121.75	<0.3	<0.6	<5.5	<0.3	<5.3
CACMW-008-160-127-090624-FM-R	122-127	<0.3	<0.6	<5.5	0.4	<5.3
CACMW-008-160-132.25-090624-FM-R	127.25-132.25	<0.3	<0.6	<5.5	<0.3	<5.3
CACMW-008-160-137.5-081724-FM-R	132.5-137.5	<0.3	0.3	<5.2	0.4	<4.9
CACMW-008-160-142.75-081724-FM-R	137.75-142.75	<0.3	<0.5	<5.2	0.4	<4.9
CACMW-008-160-148-081724-FM-R	143-148	<0.3	0.3	<5.2	0.3	<4.9
CACMW-008-160-153.25-081724-FM-R	148.25-153.25	<0.3	<0.5	<5.2	0.2	<4.9
CACMW-008-160-158.5-081724-FM-R	153.5-158.5	<0.3	<0.5	<5.2	<0.3	<4.9
FD-1-081624-FM-R		<0.26	5.98	<5.20	4.09	<4.94
FD-2-081724-FM-R		<0.26	<0.52	<5.19	<0.26	<4.87
FD-3-081724-FM-R		<0.26	2.98	<5.19	1.75	<4.93
FD-4-090424-FM-R		<0.28	2.15	<5.55	0.97	<5.27
FD-5-090424-FM-R		<0.28	<0.55	<5.54	0.28	<5.26
FD-6-090524-FM-R		<0.28	1.60	<5.58	0.98	<5.30
FD-7-090524-FM-R		<0.28	3.89	<5.56	2.50	<5.29
FD-8-090524-FM-R		<0.28	0.58	<5.54	0.35	<5.27
FD-09-090624-FM-R		<0.28	0.77	<5.57	0.54	<5.29
FD-10-090624-FM-R		0.10	1.87	<5.55	1.11	<5.28

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

MPLE_ID for PFAS	Depth intervals for PFAS (ft)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (ug/m^2/day)	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA) (ug/m^2/day)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ug/m^2/day)	Perfluoro-3-methoxypropanoic acid (PFMPA) (ug/m^2/day)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ug/m^2/day)
CACMW-007-060-16.5-090624-FM-R	11.5-16.5	<5.5	<5.5	<2.2	<2.2	<5.2
CACMW-007-060-21.75-090624-FM-R	16.75-21.75	<5.5	<5.5	<2.2	<2.2	<5.2
CACMW-007-060-27-090624-FM-R	22-27	<5.4	<5.4	<2.2	<2.2	<5.2
CACMW-007-060-32.25-090624-FM-R	27.25-32.25	<5.5	<5.5	<2.2	<2.2	<5.2
CACMW-007-060-37.5-081724-FM-R	32.5-37.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-007-060-42.75-081724-FM-R	37.75-42.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-007-060-48-081724-FM-R	43-48	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-007-060-53.25-081724-FM-R	48.25-53.25	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-007-060-58.5-081724-FM-R	53.5-58.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-007-110-66.5-090624-FM-R	61.5-66.5	<5.5	<5.5	<2.2	<2.2	<5.2
CACMW-007-110-71.75-090624-FM-R	66.75-71.75	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-007-110-77-090624-FM-R	72-77	<5.3	<5.3	<2.2	<2.2	<5.1
CACMW-007-110-82.25-090624-FM-R	77.25-82.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-007-110-87.5-081724-FM-R	82.5-87.5	<5.2	<5.2	<2.1	<2.1	<5.0
CACMW-007-110-92.75-081724-FM-R	87.75-92.75	<5.2	<5.2	<2.1	<2.1	<5.0
CACMW-007-110-98-081724-FM-R	93-98	<5.2	<5.2	<2.1	<2.1	<5.0
CACMW-007-110-103.25-081724-FM-R	98.25-103.25	<5.2	<5.2	<2.1	<2.1	<5.0
CACMW-007-110-108.5-081724-FM-R	103.5-108.5	<5.2	<5.2	<2.1	<2.1	<5.0
CACMW-007-160-116.5-090624-FM-R	111.5-116.5	<5.5	<5.5	<2.2	<2.2	<5.2
CACMW-007-160-121.75-090624-FM-R	116.75-121.75	<5.5	<5.5	<2.2	<2.2	<5.2
CACMW-007-160-127-090624-FM-R	122-127	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-007-160-132.25-090624-FM-R	127.25-132.25	<5.6	<5.6	<2.2	<2.2	<5.3
CACMW-007-160-137.5-081724-FM-R	132.5-137.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-007-160-142.75-081724-FM-R	137.75-142.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-007-160-148-081724-FM-R	143-148	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-007-160-153.25-081724-FM-R	148.25-153.25	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-007-160-158.5-081724-FM-R	153.5-158.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-008-060-16.5-090624-FM-R	11.5-16.5	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-008-060-21.75-090624-FM-R	16.75-21.75	<5.3	<5.3	<2.1	<2.1	<5.1
CACMW-008-060-27-090624-FM-R	22-27	<5.4	<5.4	<2.1	<2.1	<5.1
CACMW-008-060-32.25-090624-FM-R	27.25-32.25	<5.4	<5.4	<2.1	<2.1	<5.1
CACMW-008-060-37.5-081724-FM-R	32.5-37.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-008-060-42.75-081724-FM-R	37.75-42.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-008-060-48-081724-FM-R	43-48	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-008-060-53.25-081724-FM-R	48.25-53.25	<5.1	<5.1	<2.0	<2.0	<4.9
CACMW-008-060-58.5-081724-FM-R	53.5-58.5	<5.1	<5.1	<2.0	<2.0	<4.9
CACMW-008-110-66.5-090624-FM-R	61.5-66.5	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-008-110-71.75-090624-FM-R	66.75-71.75	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-008-110-77-090624-FM-R	72-77	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-008-110-82.25-090624-FM-R	77.25-82.25	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-008-110-87.5-081724-FM-R	82.5-87.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-008-110-92.75-081724-FM-R	87.75-92.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-008-110-98-081724-FM-R	93-98	<5.1	<5.1	<2.1	<2.1	<4.9
CACMW-008-110-103.25-081724-FM-R	98.25-103.25	<5.1	<5.1	<2.1	<2.1	<4.9
CACMW-008-110-108.5-081724-FM-R	103.5-108.5	<5.1	<5.1	<2.1	<2.1	<4.9
CACMW-008-160-116.5-090624-FM-R	111.5-116.5	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-008-160-121.75-090624-FM-R	116.75-121.75	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-008-160-127-090624-FM-R	122-127	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-008-160-132.25-090624-FM-R	127.25-132.25	<5.5	<5.5	<2.2	<2.2	<5.3
CACMW-008-160-137.5-081724-FM-R	132.5-137.5	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-008-160-142.75-081724-FM-R	137.75-142.75	<5.2	<5.2	<2.1	<2.1	<4.9
CACMW-008-160-148-081724-FM-R	143-148	<5.1	<5.1	<2.1	<2.1	<4.9
CACMW-008-160-153.25-081724-FM-R	148.25-153.25	<5.1	<5.1	<2.1	<2.1	<4.9
CACMW-008-160-158.5-081724-FM-R	153.5-158.5	<5.2	<5.2	<2.1	<2.1	<4.9
FD-1-081624-FM-R		<5.13	<5.13	<2.08	<2.08	<4.94
FD-2-081724-FM-R		<5.13	<5.13	<2.08	<2.08	<4.87
FD-3-081724-FM-R		<5.19	<5.19	<2.08	<2.08	<4.93
FD-4-090424-FM-R		<5.55	<5.55	<2.22	<2.22	<5.27
FD-5-090424-FM-R		<5.54	<5.54	<2.22	<2.22	<5.26
FD-6-090524-FM-R		<5.58	<5.58	<2.23	<2.23	<5.30
FD-7-090524-FM-R		<5.56	<5.56	<2.23	<2.23	<5.29
FD-8-090524-FM-R		<5.54	<5.54	<2.22	<2.22	<5.27
FD-09-090624-FM-R		<5.57	<5.57	<2.23	<2.23	<5.29
FD-10-090624-FM-R		<5.55	<5.55	<2.22	<2.22	<5.28

Table1. Summary of Darcy velocity and PFAS flux values at each depth interval for each well (continued)

SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ug/m^2/day)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ug/m^2/day)
CACMW-007-060-16.5-090624-FM-R	11.5-16.5	<5.2	<2.0	<5.5	<27.2	<27.2
CACMW-007-060-21.75-090624-FM-R	16.75-21.75	<5.2	<2.0	<5.5	<27.9	<27.9
CACMW-007-060-27-090624-FM-R	22-27	<5.1	<2.0	<5.4	<27.2	<27.2
CACMW-007-060-32.25-090624-FM-R	27.25-32.25	<5.2	<2.0	<5.5	<27.2	<27.2
CACMW-007-060-37.5-081724-FM-R	32.5-37.5	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-007-060-42.75-081724-FM-R	37.75-42.75	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-007-060-48-081724-FM-R	43-48	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-007-060-53.25-081724-FM-R	48.25-53.25	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-007-060-58.5-081724-FM-R	53.5-58.5	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-007-110-66.5-090624-FM-R	61.5-66.5	<5.1	<1.9	<5.5	<27.1	<27.1
CACMW-007-110-71.75-090624-FM-R	66.75-71.75	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-007-110-77-090624-FM-R	72-77	<5.0	<1.9	<5.3	<26.4	<26.4
CACMW-007-110-82.25-090624-FM-R	77.25-82.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-007-110-87.5-081724-FM-R	82.5-87.5	<4.9	<1.8	<5.2	<26.2	<26.2
CACMW-007-110-92.75-081724-FM-R	87.75-92.75	<4.9	<1.8	<5.2	<26.2	<26.2
CACMW-007-110-98-081724-FM-R	93-98	<4.9	<1.8	<5.2	<26.2	<26.2
CACMW-007-110-103.25-081724-FM-R	98.25-103.25	<4.9	<1.8	<5.2	<26.2	<26.2
CACMW-007-110-108.5-081724-FM-R	103.5-108.5	<4.9	<1.8	<5.2	<26.2	<26.2
CACMW-007-160-116.5-090624-FM-R	111.5-116.5	<5.1	<1.9	<5.5	<27.1	<27.1
CACMW-007-160-121.75-090624-FM-R	116.75-121.75	<5.1	<1.9	<5.5	<27.8	<27.8
CACMW-007-160-127-090624-FM-R	122-127	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-007-160-132.25-090624-FM-R	127.25-132.25	<5.2	<1.9	<5.6	<27.8	<27.8
CACMW-007-160-137.5-081724-FM-R	132.5-137.5	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-007-160-142.75-081724-FM-R	137.75-142.75	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-007-160-148-081724-FM-R	143-148	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-007-160-153.25-081724-FM-R	148.25-153.25	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-007-160-158.5-081724-FM-R	153.5-158.5	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-008-060-16.5-090624-FM-R	11.5-16.5	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-008-060-21.75-090624-FM-R	16.75-21.75	<5.0	<1.9	<5.3	<26.3	<26.3
CACMW-008-060-27-090624-FM-R	22-27	<5.1	<1.9	<5.4	<27.0	<27.0
CACMW-008-060-32.25-090624-FM-R	27.25-32.25	<5.1	<1.9	<5.4	<26.3	<26.3
CACMW-008-060-37.5-081724-FM-R	32.5-37.5	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-008-060-42.75-081724-FM-R	37.75-42.75	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-008-060-48-081724-FM-R	43-48	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-008-060-53.25-081724-FM-R	48.25-53.25	<4.7	<1.8	<5.1	<25.3	<25.3
CACMW-008-060-58.5-081724-FM-R	53.5-58.5	<4.7	<1.8	<5.1	<25.3	<25.3
CACMW-008-110-66.5-090624-FM-R	61.5-66.5	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-008-110-71.75-090624-FM-R	66.75-71.75	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-008-110-77-090624-FM-R	72-77	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-008-110-82.25-090624-FM-R	77.25-82.25	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-008-110-87.5-081724-FM-R	82.5-87.5	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-008-110-92.75-081724-FM-R	87.75-92.75	<4.9	<1.8	<5.2	<25.9	<25.9
CACMW-008-110-98-081724-FM-R	93-98	<4.8	<1.8	<5.1	<25.9	<25.9
CACMW-008-110-103.25-081724-FM-R	98.25-103.25	<4.8	<1.8	<5.1	<25.9	<25.9
CACMW-008-110-108.5-081724-FM-R	103.5-108.5	<4.8	<1.8	<5.1	<25.3	<25.3
CACMW-008-160-116.5-090624-FM-R	111.5-116.5	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-008-160-121.75-090624-FM-R	116.75-121.75	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-008-160-127-090624-FM-R	122-127	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-008-160-132.25-090624-FM-R	127.25-132.25	<5.2	<1.9	<5.5	<27.7	<27.7
CACMW-008-160-137.5-081724-FM-R	132.5-137.5	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-008-160-142.75-081724-FM-R	137.75-142.75	<4.9	<1.8	<5.2	<26.0	<26.0
CACMW-008-160-148-081724-FM-R	143-148	<4.8	<1.8	<5.1	<26.0	<26.0
CACMW-008-160-153.25-081724-FM-R	148.25-153.25	<4.8	<1.8	<5.1	<26.0	<26.0
CACMW-008-160-158.5-081724-FM-R	153.5-158.5	<4.9	<1.8	<5.2	<26.0	<26.0
FD-1-081624-FM-R		<4.81	<1.82	<5.13	<25.99	<25.99
FD-2-081724-FM-R		<4.80	<1.82	<5.13	<25.96	<25.96
FD-3-081724-FM-R		<4.86	<1.82	<5.19	<25.94	<25.94
FD-4-090424-FM-R		<5.21	<1.94	<5.55	<27.76	<27.76
FD-5-090424-FM-R		<5.19	<1.94	<5.54	<27.70	<27.70
FD-6-090524-FM-R		<5.23	<1.95	<5.58	<27.89	<27.89
FD-7-090524-FM-R		<5.22	<1.95	<5.56	<27.82	<27.82
FD-8-090524-FM-R		<5.20	<1.94	<5.54	<27.71	<27.71
FD-09-090624-FM-R		<5.23	<1.95	<5.57	<27.87	<27.87
FD-10-090624-FM-R		<5.21	<1.94	<5.55	<27.77	<27.77

Table2. Summary of flux average contaminant concentration

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorobutanoic acid (PFBA) (ng/L)	Perfluoropentanoic acid (PFPeA) (ng/L)	Perfluorohexanoic acid (PFHxA) (ng/L)	Perfluoroheptanoic acid (PFHpA) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MW-001-060	CACMW-001-060-16.5-090424-FM-R	11.5-16.5	-	-	6.8	3.4	4.1
	CACMW-001-060-21.75-090424-FM-R	16.75-21.75	-	19.9	20.7	15.6	20.5
	CACMW-001-060-27-090424-FM-R	22-27	22.1	121.8	285.5	112.9	324.9
	CACMW-001-060-32.25-090424-FM-R	27.25-32.25	-	61.9	139.7	61.9	165.8
	CACMW-001-060-37.5-081424-FM-R	32.5-37.5	-	69.6	166.8	68.4	188.2
	CACMW-001-060-42.75-081424-FM-R	37.75-42.75	-	136.3	334.4	148.7	365.9
	CACMW-001-060-48-081424-FM-R	43-48	16.0	119.4	304.2	125.2	344.8
	CACMW-001-060-53.25-081524-FM-R	48.25-53.25	-	105.8	242.3	99.3	271.3
	CACMW-001-060-58.5-081524-FM-R	53.5-58.5	-	86.3	214.0	84.6	243.6
MW-001-110	CACMW-001-110-66.5-090424-FM-R	61.5-66.5	-	40.7	78.7	30.5	79.8
	CACMW-001-110-71.75-090424-FM-R	66.75-71.75	-	64.4	145.2	62.5	178.0
	CACMW-001-110-77-090424-FM-R	72-77	-	101.8	302.7	127.0	352.8
	CACMW-001-110-82.25-090424-FM-R	77.25-82.25	10.2	86.7	235.6	94.6	289.0
	CACMW-001-110-87.5-081424-FM-R	82.5-87.5	7.9	59.1	150.2	62.3	188.2
	CACMW-001-110-92.75-081424-FM-R	87.75-92.75	8.3	78.7	189.7	82.0	221.0
	CACMW-001-110-98-081424-FM-R	93-98	14.3	81.9	203.7	86.0	232.2
	CACMW-001-110-103.25-081424-FM-R	98.25-103.25	13.5	97.0	224.3	89.1	266.9
	CACMW-001-110-108.5-081424-FM-R	103.5-108.5	-	194.4	475.3	182.4	588.5
MW-001-160	CACMW-001-160-117-090424-FM-R	112-117	-	-	29.2	11.5	28.8
	CACMW-001-160-122.25-090424-FM-R	117.25-122.25	-	-	19.1	9.1	22.6
	CACMW-001-160-127.5-090424-FM-R	122.5-127.5	-	18.0	32.6	16.3	39.0
	CACMW-001-160-132.75-090424-FM-R	127.75-132.75	-	25.3	61.1	30.8	92.9
	CACMW-001-160-138-081524-FM-R	133-138	5.2	30.0	63.7	30.4	94.8
	CACMW-001-160-143.25-081524-FM-R	138.25-143.25	5.8	54.1	112.0	50.0	169.4
	CACMW-001-160-148.5-081524-FM-R	143.5-148.5	-	41.6	96.7	45.1	158.4
	CACMW-001-160-153.75-081524-FM-R	148.75-153.75	4.7	35.6	75.8	39.4	108.8
	CACMW-001-160-159-081524-FM-R	154-159	-	-	69.2	28.1	57.3
MW-002-060	CACMW-002-060-16.5-090424-FM-R	11.5-16.5	-	21.1	35.1	20.3	33.4
	CACMW-002-060-21.75-090424-FM-R	16.75-21.75	-	20.7	33.3	15.0	37.7
	CACMW-002-060-27-090424-FM-R	22-27	-	29.4	71.0	32.2	91.7
	CACMW-002-060-32.25-090424-FM-R	27.25-32.25	-	29.3	66.4	26.9	84.4
	CACMW-002-060-37.5-081524-FM-R	32.5-37.5	-	32.9	81.8	34.6	86.1
	CACMW-002-060-42.75-081524-FM-R	37.75-42.75	-	47.3	119.4	47.3	140.3
	CACMW-002-060-48-081524-FM-R	43-48	5.8	40.8	101.2	39.4	86.1
	CACMW-002-060-53.25-081524-FM-R	48.25-53.25	11.0	51.2	113.7	43.3	144.4
	CACMW-002-060-58.5-081524-FM-R	53.5-58.5	8.5	65.0	175.8	77.7	266.1
MW-002-110	CACMW-002-110-66.5-090424-FM-R	61.5-66.5	-	64.4	148.6	53.3	181.5
	CACMW-002-110-71.75-090424-FM-R	66.75-71.75	-	142.6	390.7	158.9	434.8
	CACMW-002-110-77-090424-FM-R	72-77	-	72.2	174.2	75.7	223.2
	CACMW-002-110-82.25-090424-FM-R	77.25-82.25	-	66.5	164.5	72.5	206.5
	CACMW-002-110-87.5-081524-FM-R	82.5-87.5	2.9	21.7	49.8	18.8	50.9
	CACMW-002-110-92.75-081524-FM-R	87.75-92.75	5.2	41.1	104.1	42.9	119.7
	CACMW-002-110-98-081524-FM-R	93-98	120.5	64.8	139.9	54.2	160.8
	CACMW-002-110-103.25-081524-FM-R	98.25-103.25	4.9	34.7	81.4	31.6	136.8
	CACMW-002-110-108.5-081524-FM-R	103.5-108.5	5.9	37.0	91.6	36.2	123.4
MW-002-160	CACMW-002-160-116.5-090424-FM-R	111.5-116.5	-	45.2	101.2	42.1	102.5
	CACMW-002-160-121.75-090424-FM-R	116.75-121.75	-	33.1	77.0	28.7	77.7
	CACMW-002-160-127-090424-FM-R	122-127	-	55.5	122.3	48.0	122.1
	CACMW-002-160-132.25-090424-FM-R	127.25-132.25	-	41.1	89.6	38.6	101.8
	CACMW-002-160-137.5-081524-FM-R	132.5-137.5	2.8	21.7	52.8	21.7	70.4
	CACMW-002-160-142.75-081524-FM-R	137.75-142.75	3.4	33.4	82.8	35.3	120.0
	CACMW-002-160-148-081524-FM-R	143-148	4.6	37.1	76.4	32.4	105.6
	CACMW-002-160-153.25-081524-FM-R	148.25-153.25	4.2	27.5	57.9	22.6	58.7
	CACMW-002-160-158.5-081524-FM-R	153.5-158.5	0.8	6.0	12.7	4.9	13.3

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorodecanoic acid (PFDA) (ng/L)	Perfluoroundecanoic acid (PFUdA) (ng/L)	Perfluorododecanoic acid (PFDoA) (ng/L)	Perfluorotridecanoic acid (PFTrDA) (ng/L)
MW-001-060	CACMW-001-060-16.5-090424-FM-R	11.5-16.5	4.9	-	-	-	-
	CACMW-001-060-21.75-090424-FM-R	16.75-21.75	2.2	-	-	-	-
	CACMW-001-060-27-090424-FM-R	22-27	38.7	-	-	-	-
	CACMW-001-060-32.25-090424-FM-R	27.25-32.25	16.4	6.7	-	-	-
	CACMW-001-060-37.5-081424-FM-R	32.5-37.5	19.8	7.8	-	-	-
	CACMW-001-060-42.75-081424-FM-R	37.75-42.75	59.3	10.1	-	-	-
	CACMW-001-060-48-081424-FM-R	43-48	44.4	11.7	-	-	-
	CACMW-001-060-53.25-081524-FM-R	48.25-53.25	26.8	-	-	-	-
	CACMW-001-060-58.5-081524-FM-R	53.5-58.5	30.7	11.0	-	-	-
MW-001-110	CACMW-001-110-66.5-090424-FM-R	61.5-66.5	8.3	-	-	-	-
	CACMW-001-110-71.75-090424-FM-R	66.75-71.75	19.3	-	-	-	-
	CACMW-001-110-77-090424-FM-R	72-77	37.7	14.5	-	-	-
	CACMW-001-110-82.25-090424-FM-R	77.25-82.25	38.2	8.7	-	-	-
	CACMW-001-110-87.5-081424-FM-R	82.5-87.5	26.6	6.3	-	-	-
	CACMW-001-110-92.75-081424-FM-R	87.75-92.75	31.9	7.5	-	-	-
	CACMW-001-110-98-081424-FM-R	93-98	22.0	9.7	-	-	-
	CACMW-001-110-103.25-081424-FM-R	98.25-103.25	32.1	9.9	-	-	-
	CACMW-001-110-108.5-081424-FM-R	103.5-108.5	85.2	18.2	-	-	-
MW-001-160	CACMW-001-160-117-090424-FM-R	112-117	-	-	-	-	-
	CACMW-001-160-122.25-090424-FM-R	117.25-122.25	6.8	-	-	-	-
	CACMW-001-160-127.5-090424-FM-R	122.5-127.5	4.5	-	-	-	-
	CACMW-001-160-132.75-090424-FM-R	127.75-132.75	7.4	2.4	-	-	-
	CACMW-001-160-138-081524-FM-R	133-138	5.4	1.6	-	-	-
	CACMW-001-160-143.25-081524-FM-R	138.25-143.25	14.8	3.0	-	-	-
	CACMW-001-160-148.5-081524-FM-R	143.5-148.5	9.5	2.5	-	-	-
	CACMW-001-160-153.75-081524-FM-R	148.75-153.75	5.7	2.8	-	-	-
	CACMW-001-160-159-081524-FM-R	154-159	2.5	5.1	-	-	-
MW-002-060	CACMW-002-060-16.5-090424-FM-R	11.5-16.5	5.9	-	-	-	-
	CACMW-002-060-21.75-090424-FM-R	16.75-21.75	9.8	3.3	-	-	-
	CACMW-002-060-27-090424-FM-R	22-27	12.8	2.7	-	-	-
	CACMW-002-060-32.25-090424-FM-R	27.25-32.25	5.9	-	-	-	-
	CACMW-002-060-37.5-081524-FM-R	32.5-37.5	11.3	3.0	-	-	-
	CACMW-002-060-42.75-081524-FM-R	37.75-42.75	17.7	4.2	-	-	-
	CACMW-002-060-48-081524-FM-R	43-48	11.2	3.9	-	-	-
	CACMW-002-060-53.25-081524-FM-R	48.25-53.25	16.3	3.2	-	-	-
	CACMW-002-060-58.5-081524-FM-R	53.5-58.5	23.7	9.2	-	-	-
MW-002-110	CACMW-002-110-66.5-090424-FM-R	61.5-66.5	27.8	-	-	-	-
	CACMW-002-110-71.75-090424-FM-R	66.75-71.75	55.0	-	-	-	-
	CACMW-002-110-77-090424-FM-R	72-77	18.5	6.7	-	-	-
	CACMW-002-110-82.25-090424-FM-R	77.25-82.25	24.9	4.4	-	-	-
	CACMW-002-110-87.5-081524-FM-R	82.5-87.5	3.2	2.2	-	-	-
	CACMW-002-110-92.75-081524-FM-R	87.75-92.75	10.1	4.5	-	-	-
	CACMW-002-110-98-081524-FM-R	93-98	11.3	7.7	-	-	-
	CACMW-002-110-103.25-081524-FM-R	98.25-103.25	9.2	3.3	-	0.9	-
	CACMW-002-110-108.5-081524-FM-R	103.5-108.5	8.0	3.8	-	-	-
MW-002-160	CACMW-002-160-116.5-090424-FM-R	111.5-116.5	13.2	-	-	-	-
	CACMW-002-160-121.75-090424-FM-R	116.75-121.75	9.4	-	-	-	-
	CACMW-002-160-127-090424-FM-R	122-127	14.5	-	-	-	-
	CACMW-002-160-132.25-090424-FM-R	127.25-132.25	5.6	-	-	-	-
	CACMW-002-160-137.5-081524-FM-R	132.5-137.5	1.9	1.6	-	0.4	-
	CACMW-002-160-142.75-081524-FM-R	137.75-142.75	6.1	1.9	-	0.6	-
	CACMW-002-160-148-081524-FM-R	143-148	6.6	2.2	-	0.7	-
	CACMW-002-160-153.25-081524-FM-R	148.25-153.25	3.4	1.9	-	0.9	-
	CACMW-002-160-158.5-081524-FM-R	153.5-158.5	0.5	0.5	-	0.3	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorotetradecanoic acid (PFTeDA) (ng/L)	Perfluorobutane sulfonic acid (PFBS) (ng/L)	Perfluoropentane sulfonate (PFPeS) (ng/L)	Perfluorohexane sulfonic acid (PFHxS) (ng/L)	Perfluoroheptane sulfonic acid (PFHpS) (ng/L)
MW-001-060	CACMW-001-060-16.5-090424-FM-R	11.5-16.5	-	-	-	24.2	-
	CACMW-001-060-21.75-090424-FM-R	16.75-21.75	-	4.8	6.4	86.5	3.0
	CACMW-001-060-27-090424-FM-R	22-27	-	50.9	70.9	1040.7	50.9
	CACMW-001-060-32.25-090424-FM-R	27.25-32.25	-	23.5	33.8	469.1	31.0
	CACMW-001-060-37.5-081424-FM-R	32.5-37.5	-	26.4	40.8	552.4	33.6
	CACMW-001-060-42.75-081424-FM-R	37.75-42.75	-	60.2	81.4	1114.9	67.3
	CACMW-001-060-48-081424-FM-R	43-48	-	45.1	75.7	1019.4	56.8
	CACMW-001-060-53.25-081524-FM-R	48.25-53.25	-	45.6	60.2	862.4	57.0
	CACMW-001-060-58.5-081524-FM-R	53.5-58.5	-	39.8	54.8	763.5	51.5
MW-001-110	CACMW-001-110-66.5-090424-FM-R	61.5-66.5	-	16.5	26.7	254.3	15.3
	CACMW-001-110-71.75-090424-FM-R	66.75-71.75	-	27.6	46.0	496.6	27.6
	CACMW-001-110-77-090424-FM-R	72-77	-	56.9	95.2	1203.4	79.3
	CACMW-001-110-82.25-090424-FM-R	77.25-82.25	-	46.5	72.5	945.6	60.7
	CACMW-001-110-87.5-081424-FM-R	82.5-87.5	-	28.2	44.6	610.3	37.4
	CACMW-001-110-92.75-081424-FM-R	87.75-92.75	-	34.0	59.7	712.6	45.6
	CACMW-001-110-98-081424-FM-R	93-98	-	35.8	54.3	696.5	50.2
	CACMW-001-110-103.25-081424-FM-R	98.25-103.25	-	45.1	65.4	778.0	58.6
	CACMW-001-110-108.5-081424-FM-R	103.5-108.5	-	89.7	125.6	1794.6	128.6
MW-001-160	CACMW-001-160-117-090424-FM-R	112-117	-	8.0	8.8	111.4	-
	CACMW-001-160-122.25-090424-FM-R	117.25-122.25	-	5.5	6.1	83.8	5.2
	CACMW-001-160-127.5-090424-FM-R	122.5-127.5	-	13.1	18.8	171.7	9.8
	CACMW-001-160-132.75-090424-FM-R	127.75-132.75	-	20.3	35.1	361.9	26.1
	CACMW-001-160-138-081524-FM-R	133-138	-	21.6	38.0	352.5	28.0
	CACMW-001-160-143.25-081524-FM-R	138.25-143.25	-	37.1	58.3	624.6	45.8
	CACMW-001-160-148.5-081524-FM-R	143.5-148.5	-	38.1	59.0	589.6	45.1
	CACMW-001-160-153.75-081524-FM-R	148.75-153.75	-	28.4	42.4	398.3	27.5
	CACMW-001-160-159-081524-FM-R	154-159	-	21.5	29.7	264.1	13.7
MW-002-060	CACMW-002-060-16.5-090424-FM-R	11.5-16.5	-	7.6	11.7	109.4	6.1
	CACMW-002-060-21.75-090424-FM-R	16.75-21.75	-	7.1	9.3	126.7	6.3
	CACMW-002-060-27-090424-FM-R	22-27	-	13.3	21.8	265.4	15.2
	CACMW-002-060-32.25-090424-FM-R	27.25-32.25	-	11.9	15.8	221.4	17.4
	CACMW-002-060-37.5-081524-FM-R	32.5-37.5	-	11.5	19.2	252.6	14.8
	CACMW-002-060-42.75-081524-FM-R	37.75-42.75	-	18.0	27.8	375.7	22.5
	CACMW-002-060-48-081524-FM-R	43-48	-	15.6	27.2	366.8	22.4
	CACMW-002-060-53.25-081524-FM-R	48.25-53.25	-	18.5	32.3	385.8	26.0
	CACMW-002-060-58.5-081524-FM-R	53.5-58.5	-	29.7	47.3	642.8	48.0
MW-002-110	CACMW-002-110-66.5-090424-FM-R	61.5-66.5	-	26.6	31.1	488.5	28.9
	CACMW-002-110-71.75-090424-FM-R	66.75-71.75	-	69.2	85.5	1384.9	93.7
	CACMW-002-110-77-090424-FM-R	72-77	-	33.5	51.1	739.5	47.5
	CACMW-002-110-82.25-090424-FM-R	77.25-82.25	-	33.2	51.4	649.5	45.3
	CACMW-002-110-87.5-081524-FM-R	82.5-87.5	-	10.0	14.1	170.0	12.3
	CACMW-002-110-92.75-081524-FM-R	87.75-92.75	-	21.9	31.5	420.2	32.4
	CACMW-002-110-98-081524-FM-R	93-98	-	34.6	45.2	512.1	30.1
	CACMW-002-110-103.25-081524-FM-R	98.25-103.25	-	18.9	29.7	347.2	25.3
	CACMW-002-110-108.5-081524-FM-R	103.5-108.5	-	21.9	34.5	386.9	28.6
MW-002-160	CACMW-002-160-116.5-090424-FM-R	111.5-116.5	-	35.9	51.4	498.8	35.9
	CACMW-002-160-121.75-090424-FM-R	116.75-121.75	-	27.8	35.8	331.4	24.2
	CACMW-002-160-127-090424-FM-R	122-127	-	41.7	64.4	542.8	36.6
	CACMW-002-160-132.25-090424-FM-R	127.25-132.25	-	32.4	47.3	435.8	31.1
	CACMW-002-160-137.5-081524-FM-R	132.5-137.5	-	19.5	30.0	272.3	20.0
	CACMW-002-160-142.75-081524-FM-R	137.75-142.75	-	29.6	45.6	520.4	32.1
	CACMW-002-160-148-081524-FM-R	143-148	0.3	28.6	45.6	401.7	27.8
	CACMW-002-160-153.25-081524-FM-R	148.25-153.25	0.4	20.6	27.5	255.4	19.6
	CACMW-002-160-158.5-081524-FM-R	153.5-158.5	0.1	4.6	6.0	52.9	3.9

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorooctane sulfonic acid (PFOS) (ng/L)	Perfluorononane sulfonic acid (PFNS) (ng/L)	Perfluorodecane sulfonic acid (PFDS) (ng/L)	Perfluorododecane sulfonic acid (PFDOS) (ng/L)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ng/L)
MW-001-060	CACMW-001-060-16.5-090424-FM-R	11.5-16.5	120.8	-	-	-	-
	CACMW-001-060-21.75-090424-FM-R	16.75-21.75	268.1	-	-	-	-
	CACMW-001-060-27-090424-FM-R	22-27	5092.8	-	-	-	-
	CACMW-001-060-32.25-090424-FM-R	27.25-32.25	2533.2	2.3	-	-	-
	CACMW-001-060-37.5-081424-FM-R	32.5-37.5	2761.9	-	-	-	-
	CACMW-001-060-42.75-081424-FM-R	37.75-42.75	5486.2	-	-	-	-
	CACMW-001-060-48-081424-FM-R	43-48	4514.4	-	-	-	-
	CACMW-001-060-53.25-081524-FM-R	48.25-53.25	4230.7	5.7	-	-	-
	CACMW-001-060-58.5-081524-FM-R	53.5-58.5	3817.5	-	-	-	-
MW-001-110	CACMW-001-110-66.5-090424-FM-R	61.5-66.5	1398.5	-	-	-	-
	CACMW-001-110-71.75-090424-FM-R	66.75-71.75	2575.1	-	-	-	-
	CACMW-001-110-77-090424-FM-R	72-77	6215.5	5.7	-	-	-
	CACMW-001-110-82.25-090424-FM-R	77.25-82.25	5043.4	5.0	-	-	-
	CACMW-001-110-87.5-081424-FM-R	82.5-87.5	3084.1	3.5	-	-	-
	CACMW-001-110-92.75-081424-FM-R	87.75-92.75	3645.7	3.9	-	-	-
	CACMW-001-110-98-081424-FM-R	93-98	3892.0	3.8	4.0	-	-
	CACMW-001-110-103.25-081424-FM-R	98.25-103.25	4397.4	3.5	4.3	-	-
	CACMW-001-110-108.5-081424-FM-R	103.5-108.5	9571.1	9.6	-	-	-
MW-001-160	CACMW-001-160-117-090424-FM-R	112-117	293.2	-	-	-	-
	CACMW-001-160-122.25-090424-FM-R	117.25-122.25	255.2	-	-	-	-
	CACMW-001-160-127.5-090424-FM-R	122.5-127.5	506.8	-	-	-	-
	CACMW-001-160-132.75-090424-FM-R	127.75-132.75	1230.5	-	-	-	-
	CACMW-001-160-138-081524-FM-R	133-138	1201.6	-	-	-	-
	CACMW-001-160-143.25-081524-FM-R	138.25-143.25	2331.8	-	-	-	4.6
	CACMW-001-160-148.5-081524-FM-R	143.5-148.5	2254.3	-	-	-	4.2
	CACMW-001-160-153.75-081524-FM-R	148.75-153.75	1440.7	-	-	-	-
	CACMW-001-160-159-081524-FM-R	154-159	825.2	-	-	-	-
MW-002-060	CACMW-002-060-16.5-090424-FM-R	11.5-16.5	382.8	-	-	-	-
	CACMW-002-060-21.75-090424-FM-R	16.75-21.75	598.9	-	-	-	-
	CACMW-002-060-27-090424-FM-R	22-27	1232.0	-	-	-	-
	CACMW-002-060-32.25-090424-FM-R	27.25-32.25	1186.1	-	-	-	-
	CACMW-002-060-37.5-081524-FM-R	32.5-37.5	1208.1	-	-	-	-
	CACMW-002-060-42.75-081524-FM-R	37.75-42.75	2028.7	2.0	2.8	-	-
	CACMW-002-060-48-081524-FM-R	43-48	1630.3	1.8	-	-	1.3
	CACMW-002-060-53.25-081524-FM-R	48.25-53.25	2204.4	1.9	-	-	1.3
	CACMW-002-060-58.5-081524-FM-R	53.5-58.5	4309.0	3.3	-	-	2.1
MW-002-110	CACMW-002-110-66.5-090424-FM-R	61.5-66.5	2664.8	-	-	-	-
	CACMW-002-110-71.75-090424-FM-R	66.75-71.75	7738.9	-	-	-	-
	CACMW-002-110-77-090424-FM-R	72-77	4049.7	-	-	-	-
	CACMW-002-110-82.25-090424-FM-R	77.25-82.25	3473.9	3.9	-	-	-
	CACMW-002-110-87.5-081524-FM-R	82.5-87.5	1055.4	0.6	-	-	0.7
	CACMW-002-110-92.75-081524-FM-R	87.75-92.75	2101.2	1.7	-	-	1.4
	CACMW-002-110-98-081524-FM-R	93-98	2861.5	-	-	-	-
	CACMW-002-110-103.25-081524-FM-R	98.25-103.25	2462.0	1.1	-	-	1.3
	CACMW-002-110-108.5-081524-FM-R	103.5-108.5	2102.8	-	-	-	1.5
MW-002-160	CACMW-002-160-116.5-090424-FM-R	111.5-116.5	1870.5	-	-	-	-
	CACMW-002-160-121.75-090424-FM-R	116.75-121.75	1164.3	-	-	-	-
	CACMW-002-160-127-090424-FM-R	122-127	1767.1	-	-	-	-
	CACMW-002-160-132.25-090424-FM-R	127.25-132.25	1618.6	-	-	-	-
	CACMW-002-160-137.5-081524-FM-R	132.5-137.5	1055.9	0.2	-	-	2.1
	CACMW-002-160-142.75-081524-FM-R	137.75-142.75	1541.9	0.5	-	-	3.3
	CACMW-002-160-148-081524-FM-R	143-148	1390.4	0.4	-	-	3.2
	CACMW-002-160-153.25-081524-FM-R	148.25-153.25	982.2	0.3	-	-	2.3
	CACMW-002-160-158.5-081524-FM-R	153.5-158.5	183.2	-	-	-	0.5

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ng/L)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ng/L)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (ng/L)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ng/L)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ng/L)
MW-001-060	CACMW-001-060-16.5-090424-FM-R	11.5-16.5	79.6	-	-	-	-
	CACMW-001-060-21.75-090424-FM-R	16.75-21.75	-	-	-	17.3	-
	CACMW-001-060-27-090424-FM-R	22-27	470.5	75.3	-	73.1	-
	CACMW-001-060-32.25-090424-FM-R	27.25-32.25	152.5	68.5	-	25.3	-
	CACMW-001-060-37.5-081424-FM-R	32.5-37.5	255.2	88.9	-	31.2	-
	CACMW-001-060-42.75-081424-FM-R	37.75-42.75	836.2	164.6	-	72.6	-
	CACMW-001-060-48-081424-FM-R	43-48	644.4	174.8	-	64.1	-
	CACMW-001-060-53.25-081524-FM-R	48.25-53.25	541.0	112.3	-	48.8	-
	CACMW-001-060-58.5-081524-FM-R	53.5-58.5	468.9	121.2	-	39.8	-
MW-001-110	CACMW-001-110-66.5-090424-FM-R	61.5-66.5	155.7	101.7	-	12.7	-
	CACMW-001-110-71.75-090424-FM-R	66.75-71.75	262.1	38.6	-	20.2	-
	CACMW-001-110-77-090424-FM-R	72-77	466.2	158.7	-	63.5	-
	CACMW-001-110-82.25-090424-FM-R	77.25-82.25	427.5	110.3	-	56.7	-
	CACMW-001-110-87.5-081424-FM-R	82.5-87.5	290.4	78.7	-	34.1	-
	CACMW-001-110-92.75-081424-FM-R	87.75-92.75	391.5	99.4	-	44.7	-
	CACMW-001-110-98-081424-FM-R	93-98	443.0	112.7	-	43.0	-
	CACMW-001-110-103.25-081424-FM-R	98.25-103.25	408.7	111.6	-	60.9	-
	CACMW-001-110-108.5-081424-FM-R	103.5-108.5	994.5	227.3	-	92.7	-
MW-001-160	CACMW-001-160-117-090424-FM-R	112-117	4.9	156.4	-	39.1	-
	CACMW-001-160-122.25-090424-FM-R	117.25-122.25	29.6	12.8	-	18.2	-
	CACMW-001-160-127.5-090424-FM-R	122.5-127.5	75.6	11.4	-	16.3	-
	CACMW-001-160-132.75-090424-FM-R	127.75-132.75	236.1	35.8	-	11.9	-
	CACMW-001-160-138-081524-FM-R	133-138	205.3	30.8	-	12.4	-
	CACMW-001-160-143.25-081524-FM-R	138.25-143.25	396.6	54.1	-	21.7	-
	CACMW-001-160-148.5-081524-FM-R	143.5-148.5	399.7	55.5	-	21.8	-
	CACMW-001-160-153.75-081524-FM-R	148.75-153.75	276.5	42.4	-	12.7	-
	CACMW-001-160-159-081524-FM-R	154-159	235.2	31.4	-	33.0	-
MW-002-060	CACMW-002-060-16.5-090424-FM-R	11.5-16.5	33.2	18.8	-	15.6	-
	CACMW-002-060-21.75-090424-FM-R	16.75-21.75	14.4	92.1	-	8.6	-
	CACMW-002-060-27-090424-FM-R	22-27	97.1	41.7	-	14.2	-
	CACMW-002-060-32.25-090424-FM-R	27.25-32.25	104.8	32.4	-	11.9	-
	CACMW-002-060-37.5-081524-FM-R	32.5-37.5	166.1	39.5	-	12.6	-
	CACMW-002-060-42.75-081524-FM-R	37.75-42.75	189.7	54.1	-	24.0	-
	CACMW-002-060-48-081524-FM-R	43-48	212.3	30.6	-	17.7	-
	CACMW-002-060-53.25-081524-FM-R	48.25-53.25	174.2	55.1	-	24.8	-
	CACMW-002-060-58.5-081524-FM-R	53.5-58.5	241.9	91.8	-	41.7	-
MW-002-110	CACMW-002-110-66.5-090424-FM-R	61.5-66.5	316.4	64.4	-	24.4	-
	CACMW-002-110-71.75-090424-FM-R	66.75-71.75	865.5	244.4	-	93.7	-
	CACMW-002-110-77-090424-FM-R	72-77	198.1	86.3	-	42.3	-
	CACMW-002-110-82.25-090424-FM-R	77.25-82.25	185.0	72.5	-	30.2	-
	CACMW-002-110-87.5-081524-FM-R	82.5-87.5	36.6	25.2	-	9.4	-
	CACMW-002-110-92.75-081524-FM-R	87.75-92.75	116.0	53.4	-	23.6	-
	CACMW-002-110-98-081524-FM-R	93-98	289.9	61.7	-	24.1	-
	CACMW-002-110-103.25-081524-FM-R	98.25-103.25	140.5	42.3	-	16.4	-
	CACMW-002-110-108.5-081524-FM-R	103.5-108.5	103.0	46.3	-	20.2	-
MW-002-160	CACMW-002-160-116.5-090424-FM-R	111.5-116.5	144.2	48.3	-	17.1	-
	CACMW-002-160-121.75-090424-FM-R	116.75-121.75	172.4	29.6	-	8.5	-
	CACMW-002-160-127-090424-FM-R	122-127	179.9	51.8	-	13.9	-
	CACMW-002-160-132.25-090424-FM-R	127.25-132.25	202.3	37.4	-	13.7	-
	CACMW-002-160-137.5-081524-FM-R	132.5-137.5	95.9	26.7	-	8.9	-
	CACMW-002-160-142.75-081524-FM-R	137.75-142.75	207.2	39.2	-	14.1	-
	CACMW-002-160-148-081524-FM-R	143-148	148.7	36.3	-	13.1	-
	CACMW-002-160-153.25-081524-FM-R	148.25-153.25	159.6	20.6	-	7.9	-
	CACMW-002-160-158.5-081524-FM-R	153.5-158.5	-	4.9	-	1.7	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ng/L)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ng/L)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ng/L)	Perfluorooctane sulfonamide (PFOSA) (ng/L)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ng/L)
MW-001-060	CACMW-001-060-16.5-090424-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-001-060-21.75-090424-FM-R	16.75-21.75	-	-	-	1.8	-
	CACMW-001-060-27-090424-FM-R	22-27	-	39.9	-	39.9	-
	CACMW-001-060-32.25-090424-FM-R	27.25-32.25	-	28.1	-	21.6	-
	CACMW-001-060-37.5-081424-FM-R	32.5-37.5	-	27.6	-	28.8	-
	CACMW-001-060-42.75-081424-FM-R	37.75-42.75	-	76.1	-	49.6	-
	CACMW-001-060-48-081424-FM-R	43-48	-	58.3	-	42.2	-
	CACMW-001-060-53.25-081524-FM-R	48.25-53.25	-	50.4	-	34.2	-
	CACMW-001-060-58.5-081524-FM-R	53.5-58.5	-	34.9	-	31.5	-
MW-001-110	CACMW-001-110-66.5-090424-FM-R	61.5-66.5	-	7.6	-	10.8	-
	CACMW-001-110-71.75-090424-FM-R	66.75-71.75	-	25.8	-	23.9	-
	CACMW-001-110-77-090424-FM-R	72-77	-	59.5	-	46.3	-
	CACMW-001-110-82.25-090424-FM-R	77.25-82.25	-	48.1	-	37.0	-
	CACMW-001-110-87.5-081424-FM-R	82.5-87.5	-	34.1	-	26.9	-
	CACMW-001-110-92.75-081424-FM-R	87.75-92.75	-	38.1	-	27.3	-
	CACMW-001-110-98-081424-FM-R	93-98	-	45.1	-	32.8	-
	CACMW-001-110-103.25-081424-FM-R	98.25-103.25	-	48.5	-	33.8	-
	CACMW-001-110-108.5-081424-FM-R	103.5-108.5	-	80.8	-	71.8	-
MW-001-160	CACMW-001-160-117-090424-FM-R	112-117	-	-	-	4.5	-
	CACMW-001-160-122.25-090424-FM-R	117.25-122.25	-	-	-	-	-
	CACMW-001-160-127.5-090424-FM-R	122.5-127.5	-	-	-	4.8	-
	CACMW-001-160-132.75-090424-FM-R	127.75-132.75	-	9.0	-	11.6	-
	CACMW-001-160-138-081524-FM-R	133-138	-	8.4	-	10.8	-
	CACMW-001-160-143.25-081524-FM-R	138.25-143.25	-	12.5	-	23.7	-
	CACMW-001-160-148.5-081524-FM-R	143.5-148.5	-	14.6	-	18.4	-
	CACMW-001-160-153.75-081524-FM-R	148.75-153.75	-	8.9	-	14.8	-
	CACMW-001-160-159-081524-FM-R	154-159	-	-	-	12.2	-
MW-002-060	CACMW-002-060-16.5-090424-FM-R	11.5-16.5	-	3.8	-	4.9	-
	CACMW-002-060-21.75-090424-FM-R	16.75-21.75	-	5.3	-	7.1	-
	CACMW-002-060-27-090424-FM-R	22-27	-	10.4	-	10.4	-
	CACMW-002-060-32.25-090424-FM-R	27.25-32.25	-	12.7	-	11.1	-
	CACMW-002-060-37.5-081524-FM-R	32.5-37.5	-	14.3	-	11.0	-
	CACMW-002-060-42.75-081524-FM-R	37.75-42.75	-	26.3	-	18.0	-
	CACMW-002-060-48-081524-FM-R	43-48	-	19.0	-	11.5	-
	CACMW-002-060-53.25-081524-FM-R	48.25-53.25	-	26.4	-	17.3	-
	CACMW-002-060-58.5-081524-FM-R	53.5-58.5	0.5	48.7	-	27.5	-
MW-002-110	CACMW-002-110-66.5-090424-FM-R	61.5-66.5	-	22.2	-	18.4	-
	CACMW-002-110-71.75-090424-FM-R	66.75-71.75	-	73.3	-	53.0	-
	CACMW-002-110-77-090424-FM-R	72-77	-	37.0	-	26.4	-
	CACMW-002-110-82.25-090424-FM-R	77.25-82.25	-	31.7	-	30.2	-
	CACMW-002-110-87.5-081524-FM-R	82.5-87.5	-	8.8	-	5.9	-
	CACMW-002-110-92.75-081524-FM-R	87.75-92.75	-	23.6	-	14.0	-
	CACMW-002-110-98-081524-FM-R	93-98	-	18.1	-	16.6	-
	CACMW-002-110-103.25-081524-FM-R	98.25-103.25	-	17.7	-	10.1	-
	CACMW-002-110-108.5-081524-FM-R	103.5-108.5	-	17.7	-	11.8	-
MW-002-160	CACMW-002-160-116.5-090424-FM-R	111.5-116.5	-	11.1	-	-	-
	CACMW-002-160-121.75-090424-FM-R	116.75-121.75	-	-	-	8.3	-
	CACMW-002-160-127-090424-FM-R	122-127	-	8.7	-	8.1	-
	CACMW-002-160-132.25-090424-FM-R	127.25-132.25	-	11.6	-	-	-
	CACMW-002-160-137.5-081524-FM-R	132.5-137.5	-	5.3	-	6.7	-
	CACMW-002-160-142.75-081524-FM-R	137.75-142.75	-	8.4	-	11.6	-
	CACMW-002-160-148-081524-FM-R	143-148	-	6.7	-	10.0	-
	CACMW-002-160-153.25-081524-FM-R	148.25-153.25	-	5.8	-	6.7	-
	CACMW-002-160-158.5-081524-FM-R	153.5-158.5	-	0.9	-	1.3	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (ng/L)	Nonafluoro-3,6-Dioxaheptonic acid (NFDHA) (ng/L)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ng/L)	Perfluoro-3-methoxypropanoic acid (PFMPA) (ng/L)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ng/L)
MW-001-060	CACMW-001-060-16.5-090424-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-001-060-21.75-090424-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-001-060-27-090424-FM-R	22-27	-	-	-	-	-
	CACMW-001-060-32.25-090424-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-001-060-37.5-081424-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-001-060-42.75-081424-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-001-060-48-081424-FM-R	43-48	-	-	-	-	-
	CACMW-001-060-53.25-081524-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-001-060-58.5-081524-FM-R	53.5-58.5	-	-	-	-	-
MW-001-110	CACMW-001-110-66.5-090424-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-001-110-71.75-090424-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-001-110-77-090424-FM-R	72-77	-	-	-	-	-
	CACMW-001-110-82.25-090424-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-001-110-87.5-081424-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-001-110-92.75-081424-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-001-110-98-081424-FM-R	93-98	-	-	-	-	-
	CACMW-001-110-103.25-081424-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-001-110-108.5-081424-FM-R	103.5-108.5	-	-	-	-	-
MW-001-160	CACMW-001-160-117-090424-FM-R	112-117	-	-	-	-	-
	CACMW-001-160-122.25-090424-FM-R	117.25-122.25	-	-	-	-	-
	CACMW-001-160-127.5-090424-FM-R	122.5-127.5	-	-	-	-	-
	CACMW-001-160-132.75-090424-FM-R	127.75-132.75	-	-	-	-	-
	CACMW-001-160-138-081524-FM-R	133-138	-	-	-	-	-
	CACMW-001-160-143.25-081524-FM-R	138.25-143.25	-	-	-	-	-
	CACMW-001-160-148.5-081524-FM-R	143.5-148.5	-	-	-	-	-
	CACMW-001-160-153.75-081524-FM-R	148.75-153.75	-	-	-	-	-
	CACMW-001-160-159-081524-FM-R	154-159	-	-	-	-	-
MW-002-060	CACMW-002-060-16.5-090424-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-002-060-21.75-090424-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-002-060-27-090424-FM-R	22-27	-	-	-	-	-
	CACMW-002-060-32.25-090424-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-002-060-37.5-081524-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-002-060-42.75-081524-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-002-060-48-081524-FM-R	43-48	-	-	-	-	-
	CACMW-002-060-53.25-081524-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-002-060-58.5-081524-FM-R	53.5-58.5	-	-	-	-	-
MW-002-110	CACMW-002-110-66.5-090424-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-002-110-71.75-090424-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-002-110-77-090424-FM-R	72-77	-	-	-	-	-
	CACMW-002-110-82.25-090424-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-002-110-87.5-081524-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-002-110-92.75-081524-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-002-110-98-081524-FM-R	93-98	-	-	-	-	-
	CACMW-002-110-103.25-081524-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-002-110-108.5-081524-FM-R	103.5-108.5	-	-	-	-	-
MW-002-160	CACMW-002-160-116.5-090424-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-002-160-121.75-090424-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-002-160-127-090424-FM-R	122-127	-	-	-	-	-
	CACMW-002-160-132.25-090424-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-002-160-137.5-081524-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-002-160-142.75-081524-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-002-160-148-081524-FM-R	143-148	-	-	-	-	-
	CACMW-002-160-153.25-081524-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-002-160-158.5-081524-FM-R	153.5-158.5	-	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ng/L)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ng/L)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ng/L)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ng/L)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ng/L)
MW-001-060	CACMW-001-060-16.5-090424-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-001-060-21.75-090424-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-001-060-27-090424-FM-R	22-27	-	-	-	-	-
	CACMW-001-060-32.25-090424-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-001-060-37.5-081424-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-001-060-42.75-081424-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-001-060-48-081424-FM-R	43-48	-	-	-	-	-
	CACMW-001-060-53.25-081524-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-001-060-58.5-081524-FM-R	53.5-58.5	-	-	-	-	-
MW-001-110	CACMW-001-110-66.5-090424-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-001-110-71.75-090424-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-001-110-77-090424-FM-R	72-77	-	-	-	-	-
	CACMW-001-110-82.25-090424-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-001-110-87.5-081424-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-001-110-92.75-081424-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-001-110-98-081424-FM-R	93-98	-	-	-	-	-
	CACMW-001-110-103.25-081424-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-001-110-108.5-081424-FM-R	103.5-108.5	-	-	-	-	-
MW-001-160	CACMW-001-160-117-090424-FM-R	112-117	-	-	-	-	-
	CACMW-001-160-122.25-090424-FM-R	117.25-122.25	-	-	-	-	-
	CACMW-001-160-127.5-090424-FM-R	122.5-127.5	-	-	-	-	-
	CACMW-001-160-132.75-090424-FM-R	127.75-132.75	-	-	-	-	-
	CACMW-001-160-138-081524-FM-R	133-138	-	-	-	-	-
	CACMW-001-160-143.25-081524-FM-R	138.25-143.25	-	-	-	-	-
	CACMW-001-160-148.5-081524-FM-R	143.5-148.5	-	-	-	-	-
	CACMW-001-160-153.75-081524-FM-R	148.75-153.75	-	-	-	-	-
	CACMW-001-160-159-081524-FM-R	154-159	-	-	-	-	-
MW-002-060	CACMW-002-060-16.5-090424-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-002-060-21.75-090424-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-002-060-27-090424-FM-R	22-27	-	-	-	-	-
	CACMW-002-060-32.25-090424-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-002-060-37.5-081524-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-002-060-42.75-081524-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-002-060-48-081524-FM-R	43-48	-	-	-	10.9	-
	CACMW-002-060-53.25-081524-FM-R	48.25-53.25	-	-	-	11.0	-
	CACMW-002-060-58.5-081524-FM-R	53.5-58.5	-	-	-	19.1	-
MW-002-110	CACMW-002-110-66.5-090424-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-002-110-71.75-090424-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-002-110-77-090424-FM-R	72-77	-	-	-	-	-
	CACMW-002-110-82.25-090424-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-002-110-87.5-081524-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-002-110-92.75-081524-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-002-110-98-081524-FM-R	93-98	-	-	-	-	-
	CACMW-002-110-103.25-081524-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-002-110-108.5-081524-FM-R	103.5-108.5	-	-	-	-	-
MW-002-160	CACMW-002-160-116.5-090424-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-002-160-121.75-090424-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-002-160-127-090424-FM-R	122-127	-	-	-	-	-
	CACMW-002-160-132.25-090424-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-002-160-137.5-081524-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-002-160-142.75-081524-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-002-160-148-081524-FM-R	143-148	-	-	-	-	-
	CACMW-002-160-153.25-081524-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-002-160-158.5-081524-FM-R	153.5-158.5	-	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorobutanoic acid (PFBA) (ng/L)	Perfluoropentanoic acid (PFPeA) (ng/L)	Perfluorohexanoic acid (PFHxA) (ng/L)	Perfluoroheptanoic acid (PFHpA) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MW-003-060	CACMW-003-060-16.5-090424-FM-R	11.5-16.5	-	36.5	79.9	33.6	77.7
	CACMW-003-060-21.75-090424-FM-R	16.75-21.75	-	34.7	61.4	28.5	66.6
	CACMW-003-060-27-090424-FM-R	22-27	17.4	119.1	284.0	136.5	306.1
	CACMW-003-060-32.25-090424-FM-R	27.25-32.25	-	131.5	261.1	139.1	332.1
	CACMW-003-060-37.5-081624-FM-R	32.5-37.5	9.1	67.4	132.2	66.5	155.3
	CACMW-003-060-42.75-081624-FM-R	37.75-42.75	9.0	53.8	112.6	51.7	110.3
	CACMW-003-060-48-081624-FM-R	43-48	6.9	46.1	125.5	47.6	168.5
	CACMW-003-060-53.25-081624-FM-R	48.25-53.25	7.3	61.8	139.8	55.0	177.9
	CACMW-003-060-58.5-081624-FM-R	53.5-58.5	5.4	35.8	92.0	42.6	127.7
MW-003-110	CACMW-003-110-66.5-090524-FM-R	61.5-66.5	-	-	18.7	7.4	20.0
	CACMW-003-110-71.75-090524-FM-R	66.75-71.75	-	28.5	51.1	18.5	52.3
	CACMW-003-110-77-090524-FM-R	72-77	-	82.7	180.5	78.3	254.1
	CACMW-003-110-82.25-090524-FM-R	77.25-82.25	-	107.2	234.7	107.2	341.6
	CACMW-003-110-87.5-081624-FM-R	82.5-87.5	7.1	48.3	123.0	48.3	151.2
	CACMW-003-110-92.75-081624-FM-R	87.75-92.75	6.3	51.1	125.5	51.7	149.3
	CACMW-003-110-98-081624-FM-R	93-98	5.1	39.9	111.9	52.3	144.5
	CACMW-003-110-103.25-081624-FM-R	98.25-103.25	9.9	70.8	162.1	61.6	203.1
	CACMW-003-110-108.5-081624-FM-R	103.5-108.5	8.1	52.5	147.0	58.2	178.8
MW-003-160	CACMW-003-160-116.5-090424-FM-R	111.5-116.5	-	12.7	21.0	8.3	7.7
	CACMW-003-160-121.75-090424-FM-R	116.75-121.75	-	37.2	61.9	29.8	56.5
	CACMW-003-160-127-090424-FM-R	122-127	-	38.7	69.1	40.7	87.0
	CACMW-003-160-132.25-090424-FM-R	127.25-132.25	-	32.6	67.5	33.8	91.1
	CACMW-003-160-137.5-081524-FM-R	132.5-137.5	1.8	12.9	24.2	10.3	31.8
	CACMW-003-160-142.75-081524-FM-R	137.75-142.75	3.5	28.3	57.5	27.4	73.4
	CACMW-003-160-148-081524-FM-R	143-148	2.3	19.0	38.7	16.8	42.9
	CACMW-003-160-153.25-081524-FM-R	148.25-153.25	3.0	21.5	39.4	17.0	43.7
	CACMW-003-160-158.5-081524-FM-R	153.5-158.5	-	13.2	24.6	10.7	31.9
MW-004-060	CACMW-004-060-16.5-090524-FM-R	11.5-16.5	-	107.0	174.1	84.5	167.5
	CACMW-004-060-21.75-090524-FM-R	16.75-21.75	-	64.8	132.8	47.8	122.0
	CACMW-004-060-27-090524-FM-R	22-27	-	43.8	105.6	47.0	124.7
	CACMW-004-060-32.25-090524-FM-R	27.25-32.25	8.0	67.3	158.4	79.5	224.4
	CACMW-004-060-37.5-081624-FM-R	32.5-37.5	14.6	95.1	204.0	95.1	253.6
	CACMW-004-060-42.75-081624-FM-R	37.75-42.75	7.7	76.1	168.3	76.9	212.7
	CACMW-004-060-48-081624-FM-R	43-48	-	39.7	89.1	38.2	102.5
	CACMW-004-060-53.25-081624-FM-R	48.25-53.25	-	29.2	80.8	32.6	99.7
	CACMW-004-060-58.5-081624-FM-R	53.5-58.5	-	48.5	111.7	50.6	152.3
MW-004-110	CACMW-004-110-66.5-090524-FM-R	61.5-66.5	-	32.2	83.5	29.9	97.1
	CACMW-004-110-71.75-090524-FM-R	66.75-71.75	20.7	144.8	317.6	126.0	313.5
	CACMW-004-110-77-090524-FM-R	72-77	-	84.4	209.8	92.6	265.9
	CACMW-004-110-82.25-090524-FM-R	77.25-82.25	12.7	67.7	168.3	63.4	174.9
	CACMW-004-110-87.5-081624-FM-R	82.5-87.5	8.0	53.3	121.9	49.5	147.4
	CACMW-004-110-92.75-081624-FM-R	87.75-92.75	11.7	73.2	211.5	80.5	268.4
	CACMW-004-110-98-081624-FM-R	93-98	12.8	63.9	158.8	67.8	197.0
	CACMW-004-110-103.25-081624-FM-R	98.25-103.25	-	58.5	154.6	59.9	182.6
	CACMW-004-110-108.5-081624-FM-R	103.5-108.5	-	85.1	197.1	90.8	279.1
MW-004-160	CACMW-004-160-116.5-090524-FM-R	111.5-116.5	-	42.8	88.6	36.4	110.5
	CACMW-004-160-121.75-090524-FM-R	116.75-121.75	-	39.5	77.7	29.6	93.5
	CACMW-004-160-127-090524-FM-R	122-127	-	33.1	72.7	32.1	82.0
	CACMW-004-160-132.25-090524-FM-R	127.25-132.25	-	60.6	124.3	46.6	134.9
	CACMW-004-160-137.5-081624-FM-R	132.5-137.5	-	28.1	66.4	26.4	73.9
	CACMW-004-160-142.75-081624-FM-R	137.75-142.75	-	25.1	57.6	22.2	64.2
	CACMW-004-160-148-081624-FM-R	143-148	-	27.5	65.0	23.4	69.9
	CACMW-004-160-153.25-081624-FM-R	148.25-153.25	-	24.0	53.1	19.7	56.4
	CACMW-004-160-158.5-081624-FM-R	153.5-158.5	-	10.0	20.7	7.4	23.3

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorodecanoic acid (PFDA) (ng/L)	Perfluoroundecanoic acid (PFUdA) (ng/L)	Perfluorododecanoic acid (PFDoA) (ng/L)	Perfluorotridecanoic acid (PFTrDA) (ng/L)
MW-003-060	CACMW-003-060-16.5-090424-FM-R	11.5-16.5	15.3	-	-	-	-
	CACMW-003-060-21.75-090424-FM-R	16.75-21.75	7.6	-	-	-	-
	CACMW-003-060-27-090424-FM-R	22-27	42.8	13.6	-	-	-
	CACMW-003-060-32.25-090424-FM-R	27.25-32.25	53.6	16.0	-	-	-
	CACMW-003-060-37.5-081624-FM-R	32.5-37.5	17.9	4.9	-	0.6	-
	CACMW-003-060-42.75-081624-FM-R	37.75-42.75	16.0	3.6	-	0.9	-
	CACMW-003-060-48-081624-FM-R	43-48	16.0	5.4	-	0.7	-
	CACMW-003-060-53.25-081624-FM-R	48.25-53.25	22.2	5.6	-	0.5	-
	CACMW-003-060-58.5-081624-FM-R	53.5-58.5	14.5	4.3	-	0.7	-
MW-003-110	CACMW-003-110-66.5-090524-FM-R	61.5-66.5	2.3	-	-	-	-
	CACMW-003-110-71.75-090524-FM-R	66.75-71.75	7.8	-	-	-	-
	CACMW-003-110-77-090524-FM-R	72-77	29.4	11.8	-	-	-
	CACMW-003-110-82.25-090524-FM-R	77.25-82.25	35.5	11.2	-	-	-
	CACMW-003-110-87.5-081624-FM-R	82.5-87.5	19.1	4.7	-	0.5	-
	CACMW-003-110-92.75-081624-FM-R	87.75-92.75	19.9	4.4	-	0.6	-
	CACMW-003-110-98-081624-FM-R	93-98	19.4	4.8	-	0.6	-
	CACMW-003-110-103.25-081624-FM-R	98.25-103.25	21.6	5.7	-	0.7	-
	CACMW-003-110-108.5-081624-FM-R	103.5-108.5	18.8	5.9	-	1.1	-
MW-003-160	CACMW-003-160-116.5-090424-FM-R	111.5-116.5	2.4	-	-	-	-
	CACMW-003-160-121.75-090424-FM-R	116.75-121.75	3.7	-	-	-	-
	CACMW-003-160-127-090424-FM-R	122-127	9.2	-	-	-	-
	CACMW-003-160-132.25-090424-FM-R	127.25-132.25	6.9	-	-	-	-
	CACMW-003-160-137.5-081524-FM-R	132.5-137.5	1.3	1.0	-	0.5	-
	CACMW-003-160-142.75-081524-FM-R	137.75-142.75	3.3	1.9	-	0.6	-
	CACMW-003-160-148-081524-FM-R	143-148	1.1	1.4	-	0.7	-
	CACMW-003-160-153.25-081524-FM-R	148.25-153.25	1.3	1.4	-	0.8	-
	CACMW-003-160-158.5-081524-FM-R	153.5-158.5	1.2	-	-	-	-
MW-004-060	CACMW-004-060-16.5-090524-FM-R	11.5-16.5	25.3	-	-	-	-
	CACMW-004-060-21.75-090524-FM-R	16.75-21.75	25.6	-	-	-	-
	CACMW-004-060-27-090524-FM-R	22-27	13.3	4.5	-	-	-
	CACMW-004-060-32.25-090524-FM-R	27.25-32.25	31.5	8.6	-	-	-
	CACMW-004-060-37.5-081624-FM-R	32.5-37.5	34.0	8.0	-	-	-
	CACMW-004-060-42.75-081624-FM-R	37.75-42.75	26.5	7.2	-	-	-
	CACMW-004-060-48-081624-FM-R	43-48	11.6	5.3	-	-	-
	CACMW-004-060-53.25-081624-FM-R	48.25-53.25	10.5	-	-	-	-
	CACMW-004-060-58.5-081624-FM-R	53.5-58.5	17.9	-	-	-	-
MW-004-110	CACMW-004-110-66.5-090524-FM-R	61.5-66.5	9.6	6.2	-	-	-
	CACMW-004-110-71.75-090524-FM-R	66.75-71.75	47.9	14.1	-	-	-
	CACMW-004-110-77-090524-FM-R	72-77	36.9	9.0	-	-	-
	CACMW-004-110-82.25-090524-FM-R	77.25-82.25	22.4	7.7	-	-	-
	CACMW-004-110-87.5-081624-FM-R	82.5-87.5	14.6	5.3	-	-	-
	CACMW-004-110-92.75-081624-FM-R	87.75-92.75	32.6	8.1	-	-	-
	CACMW-004-110-98-081624-FM-R	93-98	22.7	5.7	-	-	-
	CACMW-004-110-103.25-081624-FM-R	98.25-103.25	24.1	5.9	-	-	-
	CACMW-004-110-108.5-081624-FM-R	103.5-108.5	39.0	-	-	-	-
MW-004-160	CACMW-004-160-116.5-090524-FM-R	111.5-116.5	16.6	5.7	-	-	-
	CACMW-004-160-121.75-090524-FM-R	116.75-121.75	9.3	-	-	-	-
	CACMW-004-160-127-090524-FM-R	122-127	3.3	-	-	-	-
	CACMW-004-160-132.25-090524-FM-R	127.25-132.25	5.4	5.1	-	-	-
	CACMW-004-160-137.5-081624-FM-R	132.5-137.5	6.4	-	-	-	-
	CACMW-004-160-142.75-081624-FM-R	137.75-142.75	4.8	-	-	-	-
	CACMW-004-160-148-081624-FM-R	143-148	5.6	-	-	-	-
	CACMW-004-160-153.25-081624-FM-R	148.25-153.25	3.0	-	-	-	-
	CACMW-004-160-158.5-081624-FM-R	153.5-158.5	3.0	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorotetradecanoic acid (PFTeDA) (ng/L)	Perfluorobutane sulfonic acid (PFBS) (ng/L)	Perfluoropentane sulfonate (PFPeS) (ng/L)	Perfluorohexane sulfonic acid (PFHxS) (ng/L)	Perfluoroheptane sulfonic acid (PFHpS) (ng/L)
MW-003-060	CACMW-003-060-16.5-090424-FM-R	11.5-16.5	-	14.8	17.8	246.7	13.8
	CACMW-003-060-21.75-090424-FM-R	16.75-21.75	-	11.6	15.1	204.8	11.6
	CACMW-003-060-27-090424-FM-R	22-27	-	45.9	59.5	880.8	59.5
	CACMW-003-060-32.25-090424-FM-R	27.25-32.25	-	45.1	60.1	977.1	65.8
	CACMW-003-060-37.5-081624-FM-R	32.5-37.5	0.3	22.5	38.3	440.7	29.1
	CACMW-003-060-42.75-081624-FM-R	37.75-42.75	0.3	18.6	25.8	392.8	21.7
	CACMW-003-060-48-081624-FM-R	43-48	-	21.5	34.2	520.2	35.7
	CACMW-003-060-53.25-081624-FM-R	48.25-53.25	0.2	23.0	36.5	617.7	42.7
	CACMW-003-060-58.5-081624-FM-R	53.5-58.5	0.3	14.2	25.9	382.8	25.9
MW-003-110	CACMW-003-110-66.5-090524-FM-R	61.5-66.5	-	3.6	4.2	43.8	-
	CACMW-003-110-71.75-090524-FM-R	66.75-71.75	-	10.4	10.8	156.6	11.7
	CACMW-003-110-77-090524-FM-R	72-77	-	37.0	54.4	696.4	37.0
	CACMW-003-110-82.25-090524-FM-R	77.25-82.25	-	42.6	72.5	1008.7	72.5
	CACMW-003-110-87.5-081624-FM-R	82.5-87.5	-	21.2	32.4	441.6	38.9
	CACMW-003-110-92.75-081624-FM-R	87.75-92.75	0.2	22.1	37.2	466.8	37.2
	CACMW-003-110-98-081624-FM-R	93-98	0.2	21.4	34.9	472.6	40.5
	CACMW-003-110-103.25-081624-FM-R	98.25-103.25	-	31.2	49.6	623.3	55.2
	CACMW-003-110-108.5-081624-FM-R	103.5-108.5	-	29.7	46.8	638.7	50.2
MW-003-160	CACMW-003-160-116.5-090424-FM-R	111.5-116.5	-	6.3	9.1	61.6	-
	CACMW-003-160-121.75-090424-FM-R	116.75-121.75	-	23.6	32.3	273.1	17.9
	CACMW-003-160-127-090424-FM-R	122-127	-	22.4	42.8	346.1	18.1
	CACMW-003-160-132.25-090424-FM-R	127.25-132.25	-	25.1	36.3	375.8	17.5
	CACMW-003-160-137.5-081524-FM-R	132.5-137.5	-	8.2	13.4	113.4	6.7
	CACMW-003-160-142.75-081524-FM-R	137.75-142.75	0.4	21.7	30.2	292.5	17.0
	CACMW-003-160-148-081524-FM-R	143-148	0.3	12.4	21.2	182.8	13.2
	CACMW-003-160-153.25-081524-FM-R	148.25-153.25	0.5	14.4	19.7	170.4	11.7
	CACMW-003-160-158.5-081524-FM-R	153.5-158.5	-	9.0	13.2	115.2	3.8
MW-004-060	CACMW-004-060-16.5-090524-FM-R	11.5-16.5	-	31.5	48.4	546.2	24.8
	CACMW-004-060-21.75-090524-FM-R	16.75-21.75	-	24.6	33.1	443.6	17.7
	CACMW-004-060-27-090524-FM-R	22-27	-	19.2	27.8	416.4	23.5
	CACMW-004-060-32.25-090524-FM-R	27.25-32.25	-	29.4	43.4	673.0	48.3
	CACMW-004-060-37.5-081624-FM-R	32.5-37.5	-	33.6	51.2	731.4	45.3
	CACMW-004-060-42.75-081624-FM-R	37.75-42.75	-	28.4	50.7	684.1	36.9
	CACMW-004-060-48-081624-FM-R	43-48	-	16.5	21.0	329.7	20.2
	CACMW-004-060-53.25-081624-FM-R	48.25-53.25	-	15.6	23.8	312.4	17.7
	CACMW-004-060-58.5-081624-FM-R	53.5-58.5	-	19.7	31.6	421.7	26.7
MW-004-110	CACMW-004-110-66.5-090524-FM-R	61.5-66.5	-	13.8	19.9	291.2	18.4
	CACMW-004-110-71.75-090524-FM-R	66.75-71.75	-	60.2	79.0	1146.8	71.4
	CACMW-004-110-77-090524-FM-R	72-77	-	42.2	65.7	914.7	56.3
	CACMW-004-110-82.25-090524-FM-R	77.25-82.25	-	30.5	47.4	668.3	44.8
	CACMW-004-110-87.5-081624-FM-R	82.5-87.5	-	23.4	35.2	468.7	33.0
	CACMW-004-110-92.75-081624-FM-R	87.75-92.75	-	41.7	50.5	805.1	50.5
	CACMW-004-110-98-081624-FM-R	93-98	-	30.3	48.7	622.6	45.5
	CACMW-004-110-103.25-081624-FM-R	98.25-103.25	-	30.3	45.9	577.3	37.0
	CACMW-004-110-108.5-081624-FM-R	103.5-108.5	-	36.9	63.8	794.3	48.2
MW-004-160	CACMW-004-160-116.5-090524-FM-R	111.5-116.5	-	26.9	42.8	427.7	31.7
	CACMW-004-160-121.75-090524-FM-R	116.75-121.75	-	27.2	29.6	321.0	22.2
	CACMW-004-160-127-090524-FM-R	122-127	-	24.6	35.9	368.7	27.4
	CACMW-004-160-132.25-090524-FM-R	127.25-132.25	-	40.4	60.6	544.2	42.0
	CACMW-004-160-137.5-081624-FM-R	132.5-137.5	-	22.2	33.2	315.2	24.7
	CACMW-004-160-142.75-081624-FM-R	137.75-142.75	-	20.7	34.0	325.4	19.2
	CACMW-004-160-148-081624-FM-R	143-148	-	22.4	32.5	335.6	18.3
	CACMW-004-160-153.25-081624-FM-R	148.25-153.25	-	18.9	26.6	240.0	14.6
	CACMW-004-160-158.5-081624-FM-R	153.5-158.5	-	7.4	10.0	80.4	5.0

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorooctane sulfonic acid (PFOS) (ng/L)	Perfluorononane sulfonic acid (PFNS) (ng/L)	Perfluorodecane sulfonic acid (PFDS) (ng/L)	Perfluorododecane sulfonic acid (PFDOS) (ng/L)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ng/L)
MW-003-060	CACMW-003-060-16.5-090424-FM-R	11.5-16.5	1184.2	-	-	-	-
	CACMW-003-060-21.75-090424-FM-R	16.75-21.75	890.3	-	-	-	-
	CACMW-003-060-27-090424-FM-R	22-27	4466.0	5.0	-	-	-
	CACMW-003-060-32.25-090424-FM-R	27.25-32.25	4509.8	-	-	-	-
	CACMW-003-060-37.5-081624-FM-R	32.5-37.5	2162.0	1.8	-	-	1.0
	CACMW-003-060-42.75-081624-FM-R	37.75-42.75	1653.9	1.1	-	-	1.2
	CACMW-003-060-48-081624-FM-R	43-48	2452.2	3.0	0.3	-	1.3
	CACMW-003-060-53.25-081624-FM-R	48.25-53.25	2639.1	3.5	0.4	-	1.5
	CACMW-003-060-58.5-081624-FM-R	53.5-58.5	1914.2	2.2	0.3	-	1.0
MW-003-110	CACMW-003-110-66.5-090524-FM-R	61.5-66.5	250.5	-	-	-	-
	CACMW-003-110-71.75-090524-FM-R	66.75-71.75	882.5	-	-	-	-
	CACMW-003-110-77-090524-FM-R	72-77	3264.3	-	-	-	-
	CACMW-003-110-82.25-090524-FM-R	77.25-82.25	5201.0	6.6	-	-	-
	CACMW-003-110-87.5-081624-FM-R	82.5-87.5	2649.8	2.7	0.3	-	1.4
	CACMW-003-110-92.75-081624-FM-R	87.75-92.75	1892.3	3.2	0.3	-	1.8
	CACMW-003-110-98-081624-FM-R	93-98	2475.6	3.2	0.3	-	1.7
	CACMW-003-110-103.25-081624-FM-R	98.25-103.25	3753.9	3.7	0.4	-	2.6
	CACMW-003-110-108.5-081624-FM-R	103.5-108.5	3307.5	2.9	-	-	2.4
MW-003-160	CACMW-003-160-116.5-090424-FM-R	111.5-116.5	194.6	-	-	-	-
	CACMW-003-160-121.75-090424-FM-R	116.75-121.75	819.3	-	-	-	-
	CACMW-003-160-127-090424-FM-R	122-127	936.5	-	-	-	-
	CACMW-003-160-132.25-090424-FM-R	127.25-132.25	851.8	-	-	-	-
	CACMW-003-160-137.5-081524-FM-R	132.5-137.5	355.7	0.2	-	-	1.1
	CACMW-003-160-142.75-081524-FM-R	137.75-142.75	915.2	0.3	-	-	2.6
	CACMW-003-160-148-081524-FM-R	143-148	650.6	0.2	-	-	1.6
	CACMW-003-160-153.25-081524-FM-R	148.25-153.25	556.2	-	-	-	1.7
	CACMW-003-160-158.5-081524-FM-R	153.5-158.5	329.0	-	-	-	-
MW-004-060	CACMW-004-060-16.5-090524-FM-R	11.5-16.5	2646.4	-	-	-	-
	CACMW-004-060-21.75-090524-FM-R	16.75-21.75	1706.3	-	-	-	-
	CACMW-004-060-27-090524-FM-R	22-27	2135.5	-	-	-	-
	CACMW-004-060-32.25-090524-FM-R	27.25-32.25	3793.4	3.3	-	-	-
	CACMW-004-060-37.5-081624-FM-R	32.5-37.5	3437.6	3.4	-	-	-
	CACMW-004-060-42.75-081624-FM-R	37.75-42.75	2920.9	2.8	-	-	-
	CACMW-004-060-48-081624-FM-R	43-48	1573.7	-	-	-	-
	CACMW-004-060-53.25-081624-FM-R	48.25-53.25	1494.3	-	-	-	-
	CACMW-004-060-58.5-081624-FM-R	53.5-58.5	2319.5	-	-	-	-
MW-004-110	CACMW-004-110-66.5-090524-FM-R	61.5-66.5	1532.5	-	-	-	-
	CACMW-004-110-71.75-090524-FM-R	66.75-71.75	5827.8	4.7	-	-	-
	CACMW-004-110-77-090524-FM-R	72-77	4808.1	3.9	-	-	-
	CACMW-004-110-82.25-090524-FM-R	77.25-82.25	3468.4	-	-	-	-
	CACMW-004-110-87.5-081624-FM-R	82.5-87.5	2610.0	2.6	2.2	-	-
	CACMW-004-110-92.75-081624-FM-R	87.75-92.75	4245.1	4.8	2.9	-	-
	CACMW-004-110-98-081624-FM-R	93-98	3591.8	3.8	-	-	-
	CACMW-004-110-103.25-081624-FM-R	98.25-103.25	3108.3	4.4	-	-	-
	CACMW-004-110-108.5-081624-FM-R	103.5-108.5	4255.3	28.4	-	-	-
MW-004-160	CACMW-004-160-116.5-090524-FM-R	111.5-116.5	1742.5	-	-	-	-
	CACMW-004-160-121.75-090524-FM-R	116.75-121.75	1234.4	-	-	-	-
	CACMW-004-160-127-090524-FM-R	122-127	1228.9	-	-	-	-
	CACMW-004-160-132.25-090524-FM-R	127.25-132.25	2021.2	-	-	-	-
	CACMW-004-160-137.5-081624-FM-R	132.5-137.5	1278.0	-	-	-	-
	CACMW-004-160-142.75-081624-FM-R	137.75-142.75	961.5	-	-	-	-
	CACMW-004-160-148-081624-FM-R	143-148	1017.1	-	-	-	-
	CACMW-004-160-153.25-081624-FM-R	148.25-153.25	711.4	-	-	-	-
	CACMW-004-160-158.5-081624-FM-R	153.5-158.5	247.8	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ng/L)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ng/L)	N-Ethyl perfluoroctane sulfonamide (N-EtFOSA) (ng/L)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ng/L)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ng/L)
MW-003-060	CACMW-003-060-16.5-090424-FM-R	11.5-16.5	249.2	45.4	-	9.9	-
	CACMW-003-060-21.75-090424-FM-R	16.75-21.75	144.7	43.6	-	8.9	-
	CACMW-003-060-27-090424-FM-R	22-27	437.3	136.5	-	48.4	-
	CACMW-003-060-32.25-090424-FM-R	27.25-32.25	549.6	156.0	-	43.2	-
	CACMW-003-060-37.5-081624-FM-R	32.5-37.5	160.1	91.5	-	24.9	-
	CACMW-003-060-42.75-081624-FM-R	37.75-42.75	116.3	52.7	-	20.7	-
	CACMW-003-060-48-081624-FM-R	43-48	120.8	55.7	-	27.5	-
	CACMW-003-060-53.25-081624-FM-R	48.25-53.25	158.6	67.4	-	35.9	-
	CACMW-003-060-58.5-081624-FM-R	53.5-58.5	106.5	45.7	-	21.0	-
MW-003-110	CACMW-003-110-66.5-090524-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-003-110-71.75-090524-FM-R	66.75-71.75	117.4	14.2	-	7.1	-
	CACMW-003-110-77-090524-FM-R	72-77	397.2	91.4	-	41.3	-
	CACMW-003-110-82.25-090524-FM-R	77.25-82.25	445.2	122.9	-	59.9	-
	CACMW-003-110-87.5-081624-FM-R	82.5-87.5	131.0	58.9	-	29.4	-
	CACMW-003-110-92.75-081624-FM-R	87.75-92.75	197.1	62.4	-	30.9	-
	CACMW-003-110-98-081624-FM-R	93-98	130.8	61.9	-	29.3	-
	CACMW-003-110-103.25-081624-FM-R	98.25-103.25	207.2	77.9	-	35.4	-
	CACMW-003-110-108.5-081624-FM-R	103.5-108.5	322.2	99.2	-	37.6	-
MW-003-160	CACMW-003-160-116.5-090424-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-003-160-121.75-090424-FM-R	116.75-121.75	229.7	-	-	-	-
	CACMW-003-160-127-090424-FM-R	122-127	208.7	18.9	-	13.4	-
	CACMW-003-160-132.25-090424-FM-R	127.25-132.25	391.4	23.8	-	13.8	-
	CACMW-003-160-137.5-081524-FM-R	132.5-137.5	42.5	10.3	-	4.0	-
	CACMW-003-160-142.75-081524-FM-R	137.75-142.75	125.0	28.3	-	12.3	-
	CACMW-003-160-148-081524-FM-R	143-148	96.9	19.0	-	6.9	-
	CACMW-003-160-153.25-081524-FM-R	148.25-153.25	109.9	17.9	-	6.1	-
	CACMW-003-160-158.5-081524-FM-R	153.5-158.5	51.4	12.3	-	-	-
MW-004-060	CACMW-004-060-16.5-090524-FM-R	11.5-16.5	-	55.2	-	38.3	-
	CACMW-004-060-21.75-090524-FM-R	16.75-21.75	8.5	44.4	-	28.0	-
	CACMW-004-060-27-090524-FM-R	22-27	141.5	59.8	-	21.4	-
	CACMW-004-060-32.25-090524-FM-R	27.25-32.25	252.4	97.9	-	44.7	-
	CACMW-004-060-37.5-081624-FM-R	32.5-37.5	345.6	102.4	-	37.3	-
	CACMW-004-060-42.75-081624-FM-R	37.75-42.75	401.6	92.2	-	33.1	-
	CACMW-004-060-48-081624-FM-R	43-48	211.7	42.0	-	18.7	-
	CACMW-004-060-53.25-081624-FM-R	48.25-53.25	191.9	38.0	-	18.3	-
	CACMW-004-060-58.5-081624-FM-R	53.5-58.5	254.8	61.2	-	26.7	-
MW-004-110	CACMW-004-110-66.5-090524-FM-R	61.5-66.5	93.9	31.4	-	17.6	-
	CACMW-004-110-71.75-090524-FM-R	66.75-71.75	361.9	148.5	-	58.3	-
	CACMW-004-110-77-090524-FM-R	72-77	296.1	107.9	-	50.4	-
	CACMW-004-110-82.25-090524-FM-R	77.25-82.25	315.1	80.4	-	38.9	-
	CACMW-004-110-87.5-081624-FM-R	82.5-87.5	246.4	58.6	-	30.4	-
	CACMW-004-110-92.75-081624-FM-R	87.75-92.75	477.6	95.1	-	46.1	-
	CACMW-004-110-98-081624-FM-R	93-98	337.2	79.8	-	35.9	-
	CACMW-004-110-103.25-081624-FM-R	98.25-103.25	246.1	68.1	-	33.3	-
	CACMW-004-110-108.5-081624-FM-R	103.5-108.5	358.2	116.3	-	46.8	-
MW-004-160	CACMW-004-160-116.5-090524-FM-R	111.5-116.5	352.5	36.4	-	10.9	-
	CACMW-004-160-121.75-090524-FM-R	116.75-121.75	250.0	18.5	-	9.3	-
	CACMW-004-160-127-090524-FM-R	122-127	153.6	34.0	-	9.3	-
	CACMW-004-160-132.25-090524-FM-R	127.25-132.25	268.2	52.9	-	12.3	-
	CACMW-004-160-137.5-081624-FM-R	132.5-137.5	240.7	29.8	-	11.1	-
	CACMW-004-160-142.75-081624-FM-R	137.75-142.75	216.3	28.8	-	9.6	-
	CACMW-004-160-148-081624-FM-R	143-148	226.3	29.5	-	8.1	-
	CACMW-004-160-153.25-081624-FM-R	148.25-153.25	190.7	28.3	-	4.9	-
	CACMW-004-160-158.5-081624-FM-R	153.5-158.5	55.2	6.1	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ng/L)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ng/L)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ng/L)	Perfluorooctane sulfonamide (PFOSA) (ng/L)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ng/L)
MW-003-060	CACMW-003-060-16.5-090424-FM-R	11.5-16.5	-	11.8	-	16.8	-
	CACMW-003-060-21.75-090424-FM-R	16.75-21.75	-	10.7	-	8.5	-
	CACMW-003-060-27-090424-FM-R	22-27	-	45.9	-	40.9	-
	CACMW-003-060-32.25-090424-FM-R	27.25-32.25	-	43.2	-	33.8	-
	CACMW-003-060-37.5-081624-FM-R	32.5-37.5	0.5	22.5	-	19.1	-
	CACMW-003-060-42.75-081624-FM-R	37.75-42.75	-	15.5	-	14.5	-
	CACMW-003-060-48-081624-FM-R	43-48	0.3	28.2	-	17.1	-
	CACMW-003-060-53.25-081624-FM-R	48.25-53.25	-	32.6	-	19.7	-
	CACMW-003-060-58.5-081624-FM-R	53.5-58.5	-	21.0	-	13.6	-
MW-003-110	CACMW-003-110-66.5-090524-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-003-110-71.75-090524-FM-R	66.75-71.75	-	6.1	-	6.5	-
	CACMW-003-110-77-090524-FM-R	72-77	-	37.0	-	32.6	-
	CACMW-003-110-82.25-090524-FM-R	77.25-82.25	-	55.2	-	31.5	-
	CACMW-003-110-87.5-081624-FM-R	82.5-87.5	-	25.3	-	16.5	-
	CACMW-003-110-92.75-081624-FM-R	87.75-92.75	-	25.9	-	17.0	-
	CACMW-003-110-98-081624-FM-R	93-98	0.2	25.3	-	16.9	-
	CACMW-003-110-103.25-081624-FM-R	98.25-103.25	0.2	33.3	-	22.0	-
	CACMW-003-110-108.5-081624-FM-R	103.5-108.5	-	25.1	-	20.5	-
MW-003-160	CACMW-003-160-116.5-090424-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-003-160-121.75-090424-FM-R	116.75-121.75	-	10.2	-	9.2	-
	CACMW-003-160-127-090424-FM-R	122-127	-	-	-	12.2	-
	CACMW-003-160-132.25-090424-FM-R	127.25-132.25	-	7.6	-	11.0	-
	CACMW-003-160-137.5-081524-FM-R	132.5-137.5	-	2.5	-	3.6	-
	CACMW-003-160-142.75-081524-FM-R	137.75-142.75	-	6.5	-	9.2	-
	CACMW-003-160-148-081524-FM-R	143-148	-	4.3	-	6.1	-
	CACMW-003-160-153.25-081524-FM-R	148.25-153.25	-	3.5	-	5.2	-
	CACMW-003-160-158.5-081524-FM-R	153.5-158.5	-	-	-	-	-
MW-004-060	CACMW-004-060-16.5-090524-FM-R	11.5-16.5	-	32.7	-	23.1	-
	CACMW-004-060-21.75-090524-FM-R	16.75-21.75	-	19.1	-	14.0	-
	CACMW-004-060-27-090524-FM-R	22-27	-	22.4	-	16.0	-
	CACMW-004-060-32.25-090524-FM-R	27.25-32.25	1.0	39.8	-	28.8	-
	CACMW-004-060-37.5-081624-FM-R	32.5-37.5	-	39.5	-	31.5	-
	CACMW-004-060-42.75-081624-FM-R	37.75-42.75	-	41.5	-	26.1	-
	CACMW-004-060-48-081624-FM-R	43-48	-	18.7	-	14.2	-
	CACMW-004-060-53.25-081624-FM-R	48.25-53.25	-	19.0	-	12.2	-
	CACMW-004-060-58.5-081624-FM-R	53.5-58.5	-	26.7	-	18.3	-
MW-004-110	CACMW-004-110-66.5-090524-FM-R	61.5-66.5	-	15.3	-	11.5	-
	CACMW-004-110-71.75-090524-FM-R	66.75-71.75	-	67.7	-	39.5	-
	CACMW-004-110-77-090524-FM-R	72-77	-	46.9	-	31.7	-
	CACMW-004-110-82.25-090524-FM-R	77.25-82.25	-	39.8	-	24.5	-
	CACMW-004-110-87.5-081624-FM-R	82.5-87.5	-	26.1	-	16.5	-
	CACMW-004-110-92.75-081624-FM-R	87.75-92.75	-	49.0	-	27.1	-
	CACMW-004-110-98-081624-FM-R	93-98	-	41.5	-	23.9	-
	CACMW-004-110-103.25-081624-FM-R	98.25-103.25	-	32.6	-	20.7	-
	CACMW-004-110-108.5-081624-FM-R	103.5-108.5	-	45.4	-	28.4	-
MW-004-160	CACMW-004-160-116.5-090524-FM-R	111.5-116.5	-	12.5	-	7.9	-
	CACMW-004-160-121.75-090524-FM-R	116.75-121.75	-	9.1	-	6.5	-
	CACMW-004-160-127-090524-FM-R	122-127	-	8.6	-	7.2	-
	CACMW-004-160-132.25-090524-FM-R	127.25-132.25	-	14.1	-	12.0	-
	CACMW-004-160-137.5-081624-FM-R	132.5-137.5	-	8.5	-	11.9	-
	CACMW-004-160-142.75-081624-FM-R	137.75-142.75	-	8.1	-	8.1	-
	CACMW-004-160-148-081624-FM-R	143-148	-	5.6	-	8.3	-
	CACMW-004-160-153.25-081624-FM-R	148.25-153.25	-	4.5	-	5.8	-
	CACMW-004-160-158.5-081624-FM-R	153.5-158.5	-	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (ng/L)	Nonafluoro-3,6-Dioxaheptonic acid (NFDHA) (ng/L)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ng/L)	Perfluoro-3-methoxypropanoic acid (PFMPA) (ng/L)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ng/L)
MW-003-060	CACMW-003-060-16.5-090424-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-003-060-21.75-090424-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-003-060-27-090424-FM-R	22-27	-	-	-	-	-
	CACMW-003-060-32.25-090424-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-003-060-37.5-081624-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-003-060-42.75-081624-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-003-060-48-081624-FM-R	43-48	-	-	-	-	-
	CACMW-003-060-53.25-081624-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-003-060-58.5-081624-FM-R	53.5-58.5	-	-	-	-	-
MW-003-110	CACMW-003-110-66.5-090524-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-003-110-71.75-090524-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-003-110-77-090524-FM-R	72-77	-	-	-	-	-
	CACMW-003-110-82.25-090524-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-003-110-87.5-081624-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-003-110-92.75-081624-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-003-110-98-081624-FM-R	93-98	-	-	-	-	-
	CACMW-003-110-103.25-081624-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-003-110-108.5-081624-FM-R	103.5-108.5	-	-	-	-	-
MW-003-160	CACMW-003-160-116.5-090424-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-003-160-121.75-090424-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-003-160-127-090424-FM-R	122-127	-	-	-	-	-
	CACMW-003-160-132.25-090424-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-003-160-137.5-081524-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-003-160-142.75-081524-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-003-160-148-081524-FM-R	143-148	-	-	-	-	-
	CACMW-003-160-153.25-081524-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-003-160-158.5-081524-FM-R	153.5-158.5	-	-	-	-	-
MW-004-060	CACMW-004-060-16.5-090524-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-004-060-21.75-090524-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-004-060-27-090524-FM-R	22-27	-	-	-	-	-
	CACMW-004-060-32.25-090524-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-004-060-37.5-081624-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-004-060-42.75-081624-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-004-060-48-081624-FM-R	43-48	-	-	-	-	-
	CACMW-004-060-53.25-081624-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-004-060-58.5-081624-FM-R	53.5-58.5	-	-	-	-	-
MW-004-110	CACMW-004-110-66.5-090524-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-004-110-71.75-090524-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-004-110-77-090524-FM-R	72-77	-	-	-	-	-
	CACMW-004-110-82.25-090524-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-004-110-87.5-081624-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-004-110-92.75-081624-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-004-110-98-081624-FM-R	93-98	-	-	-	-	-
	CACMW-004-110-103.25-081624-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-004-110-108.5-081624-FM-R	103.5-108.5	-	-	-	-	-
MW-004-160	CACMW-004-160-116.5-090524-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-004-160-121.75-090524-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-004-160-127-090524-FM-R	122-127	-	-	-	-	-
	CACMW-004-160-132.25-090524-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-004-160-137.5-081624-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-004-160-142.75-081624-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-004-160-148-081624-FM-R	143-148	-	-	-	-	-
	CACMW-004-160-153.25-081624-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-004-160-158.5-081624-FM-R	153.5-158.5	-	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ng/L)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ng/L)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ng/L)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ng/L)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ng/L)
MW-003-060	CACMW-003-060-16.5-090424-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-003-060-21.75-090424-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-003-060-27-090424-FM-R	22-27	-	-	-	-	-
	CACMW-003-060-32.25-090424-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-003-060-37.5-081624-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-003-060-42.75-081624-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-003-060-48-081624-FM-R	43-48	-	-	-	11.9	-
	CACMW-003-060-53.25-081624-FM-R	48.25-53.25	-	-	-	14.0	-
	CACMW-003-060-58.5-081624-FM-R	53.5-58.5	-	-	-	9.3	-
MW-003-110	CACMW-003-110-66.5-090524-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-003-110-71.75-090524-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-003-110-77-090524-FM-R	72-77	-	-	-	-	-
	CACMW-003-110-82.25-090524-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-003-110-87.5-081624-FM-R	82.5-87.5	-	-	-	11.8	-
	CACMW-003-110-92.75-081624-FM-R	87.75-92.75	-	-	-	12.0	-
	CACMW-003-110-98-081624-FM-R	93-98	-	-	-	11.3	-
	CACMW-003-110-103.25-081624-FM-R	98.25-103.25	-	-	-	14.9	-
	CACMW-003-110-108.5-081624-FM-R	103.5-108.5	-	-	-	-	-
MW-003-160	CACMW-003-160-116.5-090424-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-003-160-121.75-090424-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-003-160-127-090424-FM-R	122-127	-	-	-	-	-
	CACMW-003-160-132.25-090424-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-003-160-137.5-081524-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-003-160-142.75-081524-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-003-160-148-081524-FM-R	143-148	-	-	-	-	-
	CACMW-003-160-153.25-081524-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-003-160-158.5-081524-FM-R	153.5-158.5	-	-	-	-	-
MW-004-060	CACMW-004-060-16.5-090524-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-004-060-21.75-090524-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-004-060-27-090524-FM-R	22-27	-	-	-	-	-
	CACMW-004-060-32.25-090524-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-004-060-37.5-081624-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-004-060-42.75-081624-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-004-060-48-081624-FM-R	43-48	-	-	-	-	-
	CACMW-004-060-53.25-081624-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-004-060-58.5-081624-FM-R	53.5-58.5	-	-	-	-	-
MW-004-110	CACMW-004-110-66.5-090524-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-004-110-71.75-090524-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-004-110-77-090524-FM-R	72-77	-	-	-	-	-
	CACMW-004-110-82.25-090524-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-004-110-87.5-081624-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-004-110-92.75-081624-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-004-110-98-081624-FM-R	93-98	-	-	-	-	-
	CACMW-004-110-103.25-081624-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-004-110-108.5-081624-FM-R	103.5-108.5	-	-	-	-	-
MW-004-160	CACMW-004-160-116.5-090524-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-004-160-121.75-090524-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-004-160-127-090524-FM-R	122-127	-	-	-	-	-
	CACMW-004-160-132.25-090524-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-004-160-137.5-081624-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-004-160-142.75-081624-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-004-160-148-081624-FM-R	143-148	-	-	-	-	-
	CACMW-004-160-153.25-081624-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-004-160-158.5-081624-FM-R	153.5-158.5	-	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorobutanoic acid (PFBA) (ng/L)	Perfluoropentanoic acid (PFPeA) (ng/L)	Perfluorohexanoic acid (PFHxA) (ng/L)	Perfluoroheptanoic acid (PFHpA) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MW-005-060	CACMW-005-060-16.5-090524-FM-R	11.5-16.5	-	38.6	74.4	33.1	101.7
	CACMW-005-060-21.75-090524-FM-R	16.75-21.75	-	58.4	111.1	49.0	116.4
	CACMW-005-060-27-090524-FM-R	22-27	-	78.2	197.6	79.6	251.3
	CACMW-005-060-32.25-090524-FM-R	27.25-32.25	-	86.5	205.1	80.0	279.8
	CACMW-005-060-37.5-081624-FM-R	32.5-37.5	-	25.5	59.0	24.6	66.6
	CACMW-005-060-42.75-081624-FM-R	37.75-42.75	5.8	42.7	101.8	43.1	123.1
	CACMW-005-060-48-081624-FM-R	43-48	4.1	28.9	72.9	31.0	88.3
	CACMW-005-060-53.25-081624-FM-R	48.25-53.25	5.1	39.3	97.9	41.0	131.1
	CACMW-005-060-58.5-081624-FM-R	53.5-58.5	5.7	40.9	114.0	49.1	141.7
MW-005-110	CACMW-005-110-66.5-090524-FM-R	61.5-66.5	-	22.5	48.8	16.6	53.5
	CACMW-005-110-71.75-090524-FM-R	66.75-71.75	-	43.5	97.3	39.2	126.5
	CACMW-005-110-77-090524-FM-R	72-77	7.1	70.7	203.2	87.3	339.5
	CACMW-005-110-82.25-090524-FM-R	77.25-82.25	5.0	44.1	113.1	54.5	198.5
	CACMW-005-110-87.5-081624-FM-R	82.5-87.5	6.1	43.4	122.6	47.0	158.0
	CACMW-005-110-92.75-081624-FM-R	87.75-92.75	8.1	85.2	221.1	85.2	271.3
	CACMW-005-110-98-081624-FM-R	93-98	7.6	45.0	143.5	58.5	178.5
	CACMW-005-110-103.25-081624-FM-R	98.25-103.25	5.7	41.6	114.3	45.5	137.2
	CACMW-005-110-108.5-081624-FM-R	103.5-108.5	-	25.8	59.4	27.6	70.2
MW-005-160	CACMW-005-160-116.5-090524-FM-R	111.5-116.5	-	14.1	30.2	10.8	31.1
	CACMW-005-160-121.75-090524-FM-R	116.75-121.75	-	20.1	40.1	14.2	39.9
	CACMW-005-160-127-090524-FM-R	122-127	-	18.6	37.2	14.2	40.3
	CACMW-005-160-132.25-090524-FM-R	127.25-132.25	-	13.6	27.1	11.0	29.2
	CACMW-005-160-137.5-081624-FM-R	132.5-137.5	-	11.1	22.2	9.5	26.9
	CACMW-005-160-142.75-081624-FM-R	137.75-142.75	-	11.5	21.3	9.2	26.4
	CACMW-005-160-148-081624-FM-R	143-148	-	-	22.5	9.7	26.4
	CACMW-005-160-153.25-081624-FM-R	148.25-153.25	-	10.0	17.8	6.8	12.7
	CACMW-005-160-158.5-081624-FM-R	153.5-158.5	-	9.0	13.9	6.2	12.1
MW-006-060	CACMW-006-060-16.5-090524-FM-R	11.5-16.5	-	-	23.6	12.6	20.5
	CACMW-006-060-21.75-090524-FM-R	16.75-21.75	-	27.9	35.0	22.1	37.0
	CACMW-006-060-27-090524-FM-R	22-27	-	30.6	58.4	31.5	70.3
	CACMW-006-060-32.25-090524-FM-R	27.25-32.25	13.7	82.3	170.8	75.5	217.3
	CACMW-006-060-37.5-081724-FM-R	32.5-37.5	6.3	49.3	115.8	52.8	157.2
	CACMW-006-060-42.75-081724-FM-R	37.75-42.75	7.3	54.8	127.4	62.1	166.8
	CACMW-006-060-48-081724-FM-R	43-48	11.0	80.3	181.4	88.8	243.9
	CACMW-006-060-53.25-081724-FM-R	48.25-53.25	9.6	116.4	333.5	151.8	393.1
	CACMW-006-060-58.5-081724-FM-R	53.5-58.5	-	29.4	64.0	31.4	82.9
MW-006-110	CACMW-006-110-66.5-090624-FM-R	61.5-66.5	-	24.3	51.2	22.5	70.9
	CACMW-006-110-71.75-090624-FM-R	66.75-71.75	10.9	50.6	108.1	45.6	145.6
	CACMW-006-110-77-090624-FM-R	72-77	-	65.7	167.5	74.5	221.8
	CACMW-006-110-82.25-090624-FM-R	77.25-82.25	8.5	60.4	127.5	47.6	144.5
	CACMW-006-110-87.5-081724-FM-R	82.5-87.5	5.8	30.7	82.8	31.1	89.3
	CACMW-006-110-92.75-081724-FM-R	87.75-92.75	-	31.9	86.7	32.7	100.4
	CACMW-006-110-98-081724-FM-R	93-98	-	31.4	75.0	31.8	95.0
	CACMW-006-110-103.25-081724-FM-R	98.25-103.25	5.6	36.8	86.0	37.6	107.8
	CACMW-006-110-108.5-081724-FM-R	103.5-108.5	-	24.8	65.1	27.7	73.5
MW-006-160	CACMW-006-160-116.5-090624-FM-R	111.5-116.5	-	10.9	21.0	8.6	16.2
	CACMW-006-160-121.75-090624-FM-R	116.75-121.75	-	-	27.2	10.1	21.6
	CACMW-006-160-127-090624-FM-R	122-127	-	22.2	40.8	17.5	44.1
	CACMW-006-160-132.25-090624-FM-R	127.25-132.25	-	-	69.3	30.6	66.1
	CACMW-006-160-137.5-081724-FM-R	132.5-137.5	-	7.2	13.1	5.6	15.0
	CACMW-006-160-142.75-081724-FM-R	137.75-142.75	-	16.4	31.5	12.7	36.2
	CACMW-006-160-148-081724-FM-R	143-148	-	11.9	23.3	9.5	28.0
	CACMW-006-160-153.25-081724-FM-R	148.25-153.25	-	15.7	27.6	14.4	32.5
	CACMW-006-160-158.5-081724-FM-R	153.5-158.5	-	6.1	11.2	4.7	11.1

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorodecanoic acid (PFDA) (ng/L)	Perfluoroundecanoic acid (PFUdA) (ng/L)	Perfluorododecanoic acid (PFDoA) (ng/L)	Perfluorotridecanoic acid (PFTrDA) (ng/L)
MW-005-060	CACMW-005-060-16.5-090524-FM-R	11.5-16.5	13.1	-	-	-	-
	CACMW-005-060-21.75-090524-FM-R	16.75-21.75	14.1	7.0	-	-	-
	CACMW-005-060-27-090524-FM-R	22-27	24.9	9.5	-	-	-
	CACMW-005-060-32.25-090524-FM-R	27.25-32.25	31.6	10.8	-	-	-
	CACMW-005-060-37.5-081624-FM-R	32.5-37.5	9.1	-	-	-	-
	CACMW-005-060-42.75-081624-FM-R	37.75-42.75	14.9	4.4	-	-	-
	CACMW-005-060-48-081624-FM-R	43-48	9.6	3.2	-	-	-
	CACMW-005-060-53.25-081624-FM-R	48.25-53.25	16.9	5.1	-	-	-
	CACMW-005-060-58.5-081624-FM-R	53.5-58.5	19.8	4.5	-	-	-
MW-005-110	CACMW-005-110-66.5-090524-FM-R	61.5-66.5	2.4	-	-	-	-
	CACMW-005-110-71.75-090524-FM-R	66.75-71.75	13.8	4.1	-	-	-
	CACMW-005-110-77-090524-FM-R	72-77	38.9	10.0	-	-	-
	CACMW-005-110-82.25-090524-FM-R	77.25-82.25	20.7	6.4	-	-	-
	CACMW-005-110-87.5-081624-FM-R	82.5-87.5	18.3	5.8	-	-	-
	CACMW-005-110-92.75-081624-FM-R	87.75-92.75	35.6	8.1	-	-	-
	CACMW-005-110-98-081624-FM-R	93-98	20.5	6.7	-	-	-
	CACMW-005-110-103.25-081624-FM-R	98.25-103.25	17.0	4.3	-	-	-
	CACMW-005-110-108.5-081624-FM-R	103.5-108.5	9.3	3.2	-	-	-
MW-005-160	CACMW-005-160-116.5-090524-FM-R	111.5-116.5	1.6	-	-	-	-
	CACMW-005-160-121.75-090524-FM-R	116.75-121.75	3.0	-	-	-	-
	CACMW-005-160-127-090524-FM-R	122-127	2.7	-	-	-	-
	CACMW-005-160-132.25-090524-FM-R	127.25-132.25	1.7	-	-	-	-
	CACMW-005-160-137.5-081624-FM-R	132.5-137.5	0.8	-	-	-	-
	CACMW-005-160-142.75-081624-FM-R	137.75-142.75	4.3	-	-	-	-
	CACMW-005-160-148-081624-FM-R	143-148	1.2	-	-	-	-
	CACMW-005-160-153.25-081624-FM-R	148.25-153.25	0.4	-	-	-	-
	CACMW-005-160-158.5-081624-FM-R	153.5-158.5	1.2	-	-	-	-
MW-006-060	CACMW-006-060-16.5-090524-FM-R	11.5-16.5	2.6	-	-	-	-
	CACMW-006-060-21.75-090524-FM-R	16.75-21.75	3.9	2.3	-	-	-
	CACMW-006-060-27-090524-FM-R	22-27	8.8	-	-	-	-
	CACMW-006-060-32.25-090524-FM-R	27.25-32.25	25.7	6.9	-	-	-
	CACMW-006-060-37.5-081724-FM-R	32.5-37.5	18.5	4.6	-	-	-
	CACMW-006-060-42.75-081724-FM-R	37.75-42.75	21.4	4.0	-	-	-
	CACMW-006-060-48-081724-FM-R	43-48	29.0	8.5	-	-	-
	CACMW-006-060-53.25-081724-FM-R	48.25-53.25	41.8	11.6	-	-	-
	CACMW-006-060-58.5-081724-FM-R	53.5-58.5	8.2	2.6	-	-	-
MW-006-110	CACMW-006-110-66.5-090624-FM-R	61.5-66.5	6.8	3.6	-	-	-
	CACMW-006-110-71.75-090624-FM-R	66.75-71.75	11.4	4.8	-	-	-
	CACMW-006-110-77-090624-FM-R	72-77	25.2	8.0	-	-	-
	CACMW-006-110-82.25-090624-FM-R	77.25-82.25	17.4	5.0	-	-	-
	CACMW-006-110-87.5-081724-FM-R	82.5-87.5	9.2	3.3	-	-	-
	CACMW-006-110-92.75-081724-FM-R	87.75-92.75	9.3	3.6	-	-	-
	CACMW-006-110-98-081724-FM-R	93-98	9.8	3.9	-	-	-
	CACMW-006-110-103.25-081724-FM-R	98.25-103.25	13.3	3.5	-	-	-
	CACMW-006-110-108.5-081724-FM-R	103.5-108.5	8.7	2.0	-	-	-
MW-006-160	CACMW-006-160-116.5-090624-FM-R	111.5-116.5	2.0	-	-	-	-
	CACMW-006-160-121.75-090624-FM-R	116.75-121.75	0.4	3.1	-	-	-
	CACMW-006-160-127-090624-FM-R	122-127	1.8	-	-	-	-
	CACMW-006-160-132.25-090624-FM-R	127.25-132.25	1.4	-	-	-	-
	CACMW-006-160-137.5-081724-FM-R	132.5-137.5	1.0	-	-	-	-
	CACMW-006-160-142.75-081724-FM-R	137.75-142.75	2.7	-	-	-	-
	CACMW-006-160-148-081724-FM-R	143-148	2.6	-	-	-	-
	CACMW-006-160-153.25-081724-FM-R	148.25-153.25	1.6	-	-	-	-
	CACMW-006-160-158.5-081724-FM-R	153.5-158.5	0.8	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorotetradecanoic acid (PFTeDA) (ng/L)	Perfluorobutane sulfonic acid (PFBS) (ng/L)	Perfluoropentane sulfonate (PFPeS) (ng/L)	Perfluorohexane sulfonic acid (PFHxS) (ng/L)	Perfluoroheptane sulfonic acid (PFHpS) (ng/L)
MW-005-060	CACMW-005-060-16.5-090524-FM-R	11.5-16.5	-	12.4	17.9	275.9	19.3
	CACMW-005-060-21.75-090524-FM-R	16.75-21.75	-	18.8	33.9	414.7	22.6
	CACMW-005-060-27-090524-FM-R	22-27	-	35.6	54.0	810.5	55.5
	CACMW-005-060-32.25-090524-FM-R	27.25-32.25	-	41.3	62.0	877.7	55.5
	CACMW-005-060-37.5-081624-FM-R	32.5-37.5	-	10.2	14.4	220.9	13.6
	CACMW-005-060-42.75-081624-FM-R	37.75-42.75	-	16.9	28.9	395.8	23.1
	CACMW-005-060-48-081624-FM-R	43-48	-	13.0	20.4	293.3	16.3
	CACMW-005-060-53.25-081624-FM-R	48.25-53.25	-	16.7	30.4	410.4	25.2
	CACMW-005-060-58.5-081624-FM-R	53.5-58.5	-	19.2	29.8	408.8	29.4
MW-005-110	CACMW-005-110-66.5-090524-FM-R	61.5-66.5	-	8.2	10.7	156.3	8.7
	CACMW-005-110-71.75-090524-FM-R	66.75-71.75	-	15.3	27.5	391.7	20.8
	CACMW-005-110-77-090524-FM-R	72-77	-	35.3	62.3	914.4	66.5
	CACMW-005-110-82.25-090524-FM-R	77.25-82.25	-	19.1	36.4	500.0	34.1
	CACMW-005-110-87.5-081624-FM-R	82.5-87.5	-	18.4	31.8	470.3	29.3
	CACMW-005-110-92.75-081624-FM-R	87.75-92.75	-	35.4	59.6	894.6	63.9
	CACMW-005-110-98-081624-FM-R	93-98	-	27.4	34.6	539.8	31.0
	CACMW-005-110-103.25-081624-FM-R	98.25-103.25	-	16.7	31.6	435.5	26.8
	CACMW-005-110-108.5-081624-FM-R	103.5-108.5	-	11.4	16.8	228.4	15.6
MW-005-160	CACMW-005-160-116.5-090524-FM-R	111.5-116.5	-	9.6	13.0	119.0	8.3
	CACMW-005-160-121.75-090524-FM-R	116.75-121.75	-	13.0	16.6	153.8	14.2
	CACMW-005-160-127-090524-FM-R	122-127	-	12.1	18.6	164.4	15.3
	CACMW-005-160-132.25-090524-FM-R	127.25-132.25	-	10.7	14.7	113.4	7.8
	CACMW-005-160-137.5-081624-FM-R	132.5-137.5	-	8.0	12.7	111.4	5.1
	CACMW-005-160-142.75-081624-FM-R	137.75-142.75	-	9.2	10.9	109.5	5.6
	CACMW-005-160-148-081624-FM-R	143-148	-	8.9	10.5	104.6	5.3
	CACMW-005-160-153.25-081624-FM-R	148.25-153.25	-	6.5	7.1	71.4	-
	CACMW-005-160-158.5-081624-FM-R	153.5-158.5	-	5.7	6.6	65.6	-
MW-006-060	CACMW-006-060-16.5-090524-FM-R	11.5-16.5	-	4.6	5.7	81.2	4.5
	CACMW-006-060-21.75-090524-FM-R	16.75-21.75	-	7.9	10.0	121.4	5.1
	CACMW-006-060-27-090524-FM-R	22-27	-	10.2	17.6	231.9	12.1
	CACMW-006-060-32.25-090524-FM-R	27.25-32.25	-	26.1	43.2	603.8	32.2
	CACMW-006-060-37.5-081724-FM-R	32.5-37.5	-	20.4	28.5	457.5	26.4
	CACMW-006-060-42.75-081724-FM-R	37.75-42.75	-	22.3	32.1	511.2	27.4
	CACMW-006-060-48-081724-FM-R	43-48	-	32.1	46.5	676.6	39.7
	CACMW-006-060-53.25-081724-FM-R	48.25-53.25	-	50.6	70.9	1164.1	70.9
	CACMW-006-060-58.5-081724-FM-R	53.5-58.5	-	13.1	16.3	228.9	11.1
MW-006-110	CACMW-006-110-66.5-090624-FM-R	61.5-66.5	-	9.9	17.1	207.1	10.8
	CACMW-006-110-71.75-090624-FM-R	66.75-71.75	-	20.8	29.8	466.4	27.8
	CACMW-006-110-77-090624-FM-R	72-77	-	34.5	48.1	705.3	48.1
	CACMW-006-110-82.25-090624-FM-R	77.25-82.25	-	24.4	33.0	421.2	30.5
	CACMW-006-110-87.5-081724-FM-R	82.5-87.5	-	14.8	21.7	311.1	19.5
	CACMW-006-110-92.75-081724-FM-R	87.75-92.75	-	16.7	23.2	319.3	19.2
	CACMW-006-110-98-081724-FM-R	93-98	-	17.2	21.4	305.8	17.6
	CACMW-006-110-103.25-081724-FM-R	98.25-103.25	-	17.7	25.9	349.5	21.0
	CACMW-006-110-108.5-081724-FM-R	103.5-108.5	-	13.1	14.1	220.4	14.1
MW-006-160	CACMW-006-160-116.5-090624-FM-R	111.5-116.5	-	7.7	10.2	85.9	4.9
	CACMW-006-160-121.75-090624-FM-R	116.75-121.75	-	9.3	11.7	101.1	6.9
	CACMW-006-160-127-090624-FM-R	122-127	-	16.4	15.2	152.0	12.9
	CACMW-006-160-132.25-090624-FM-R	127.25-132.25	-	27.5	33.4	264.3	18.1
	CACMW-006-160-137.5-081724-FM-R	132.5-137.5	-	6.0	6.8	59.7	3.5
	CACMW-006-160-142.75-081724-FM-R	137.75-142.75	-	12.1	14.5	145.4	8.5
	CACMW-006-160-148-081724-FM-R	143-148	-	10.5	12.4	104.7	4.6
	CACMW-006-160-153.25-081724-FM-R	148.25-153.25	-	11.3	16.3	138.0	5.2
	CACMW-006-160-158.5-081724-FM-R	153.5-158.5	-	4.7	6.1	51.1	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorooctane sulfonic acid (PFOS) (ng/L)	Perfluorononane sulfonic acid (PFNS) (ng/L)	Perfluorodecane sulfonic acid (PFDS) (ng/L)	Perfluorododecane sulfonic acid (PFDOS) (ng/L)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ng/L)
MW-005-060	CACMW-005-060-16.5-090524-FM-R	11.5-16.5	1379.3	-	-	-	-
	CACMW-005-060-21.75-090524-FM-R	16.75-21.75	2073.4	-	-	-	-
	CACMW-005-060-27-090524-FM-R	22-27	4123.8	-	-	-	-
	CACMW-005-060-32.25-090524-FM-R	27.25-32.25	4646.8	3.2	-	-	-
	CACMW-005-060-37.5-081624-FM-R	32.5-37.5	1062.0	1.2	-	-	-
	CACMW-005-060-42.75-081624-FM-R	37.75-42.75	2001.1	2.7	-	-	-
	CACMW-005-060-48-081624-FM-R	43-48	1466.3	-	-	-	-
	CACMW-005-060-53.25-081624-FM-R	48.25-53.25	2052.0	1.9	-	-	-
	CACMW-005-060-58.5-081624-FM-R	53.5-58.5	2330.0	2.9	-	-	-
MW-005-110	CACMW-005-110-66.5-090524-FM-R	61.5-66.5	732.9	-	-	-	-
	CACMW-005-110-71.75-090524-FM-R	66.75-71.75	1958.4	2.1	-	-	-
	CACMW-005-110-77-090524-FM-R	72-77	4987.8	5.8	-	-	-
	CACMW-005-110-82.25-090524-FM-R	77.25-82.25	2863.7	2.5	-	-	-
	CACMW-005-110-87.5-081624-FM-R	82.5-87.5	2387.5	2.2	-	-	-
	CACMW-005-110-92.75-081624-FM-R	87.75-92.75	4686.1	3.8	-	-	-
	CACMW-005-110-98-081624-FM-R	93-98	3013.6	-	-	-	-
	CACMW-005-110-103.25-081624-FM-R	98.25-103.25	2249.3	3.5	-	-	-
	CACMW-005-110-108.5-081624-FM-R	103.5-108.5	1141.8	2.1	-	-	-
MW-005-160	CACMW-005-160-116.5-090524-FM-R	111.5-116.5	454.5	-	-	-	-
	CACMW-005-160-121.75-090524-FM-R	116.75-121.75	615.3	-	-	-	-
	CACMW-005-160-127-090524-FM-R	122-127	624.7	-	-	-	-
	CACMW-005-160-132.25-090524-FM-R	127.25-132.25	397.1	-	-	-	-
	CACMW-005-160-137.5-081624-FM-R	132.5-137.5	339.5	-	-	-	-
	CACMW-005-160-142.75-081624-FM-R	137.75-142.75	357.2	-	-	-	-
	CACMW-005-160-148-081624-FM-R	143-148	362.1	-	-	-	-
	CACMW-005-160-153.25-081624-FM-R	148.25-153.25	242.6	-	-	-	-
	CACMW-005-160-158.5-081624-FM-R	153.5-158.5	180.5	-	-	-	-
MW-006-060	CACMW-006-060-16.5-090524-FM-R	11.5-16.5	450.5	-	-	-	-
	CACMW-006-060-21.75-090524-FM-R	16.75-21.75	464.4	-	-	-	-
	CACMW-006-060-27-090524-FM-R	22-27	862.6	-	-	-	-
	CACMW-006-060-32.25-090524-FM-R	27.25-32.25	2813.2	2.7	-	-	-
	CACMW-006-060-37.5-081724-FM-R	32.5-37.5	2357.9	2.1	-	-	-
	CACMW-006-060-42.75-081724-FM-R	37.75-42.75	2263.8	2.1	-	-	-
	CACMW-006-060-48-081724-FM-R	43-48	3594.4	3.0	-	-	-
	CACMW-006-060-53.25-081724-FM-R	48.25-53.25	5567.6	6.1	-	-	-
	CACMW-006-060-58.5-081724-FM-R	53.5-58.5	1046.2	-	-	-	-
MW-006-110	CACMW-006-110-66.5-090624-FM-R	61.5-66.5	1080.3	-	-	-	-
	CACMW-006-110-71.75-090624-FM-R	66.75-71.75	2381.4	2.6	-	-	-
	CACMW-006-110-77-090624-FM-R	72-77	4007.4	3.8	-	-	-
	CACMW-006-110-82.25-090624-FM-R	77.25-82.25	2380.9	1.9	-	-	-
	CACMW-006-110-87.5-081724-FM-R	82.5-87.5	1627.9	1.6	-	-	-
	CACMW-006-110-92.75-081724-FM-R	87.75-92.75	1814.0	1.7	-	-	-
	CACMW-006-110-98-081724-FM-R	93-98	1591.9	1.5	-	-	-
	CACMW-006-110-103.25-081724-FM-R	98.25-103.25	1804.0	2.0	-	-	-
	CACMW-006-110-108.5-081724-FM-R	103.5-108.5	1172.1	-	-	-	-
MW-006-160	CACMW-006-160-116.5-090624-FM-R	111.5-116.5	257.8	-	-	-	-
	CACMW-006-160-121.75-090624-FM-R	116.75-121.75	342.2	-	-	-	-
	CACMW-006-160-127-090624-FM-R	122-127	596.2	-	-	-	-
	CACMW-006-160-132.25-090624-FM-R	127.25-132.25	917.9	-	-	-	-
	CACMW-006-160-137.5-081724-FM-R	132.5-137.5	207.1	-	-	-	-
	CACMW-006-160-142.75-081724-FM-R	137.75-142.75	472.5	-	-	-	-
	CACMW-006-160-148-081724-FM-R	143-148	333.3	-	-	-	-
	CACMW-006-160-153.25-081724-FM-R	148.25-153.25	401.5	-	-	-	-
	CACMW-006-160-158.5-081724-FM-R	153.5-158.5	158.3	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ng/L)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ng/L)	N-Ethyl perfluoroctane sulfonamide (N-EtFOSA) (ng/L)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ng/L)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ng/L)
MW-005-060	CACMW-005-060-16.5-090524-FM-R	11.5-16.5	127.6	30.3	-	16.6	-
	CACMW-005-060-21.75-090524-FM-R	16.75-21.75	249.7	41.5	-	24.5	-
	CACMW-005-060-27-090524-FM-R	22-27	444.4	92.4	-	45.5	-
	CACMW-005-060-32.25-090524-FM-R	27.25-32.25	506.6	102.0	-	51.6	-
	CACMW-005-060-37.5-081624-FM-R	32.5-37.5	124.3	32.7	-	14.4	-
	CACMW-005-060-42.75-081624-FM-R	37.75-42.75	192.3	48.9	-	22.2	-
	CACMW-005-060-48-081624-FM-R	43-48	111.0	37.5	-	14.7	-
	CACMW-005-060-53.25-081624-FM-R	48.25-53.25	193.4	59.9	-	22.7	-
	CACMW-005-060-58.5-081624-FM-R	53.5-58.5	189.1	53.1	-	25.8	-
MW-005-110	CACMW-005-110-66.5-090524-FM-R	61.5-66.5	90.4	12.7	-	9.5	-
	CACMW-005-110-71.75-090524-FM-R	66.75-71.75	179.0	45.9	-	22.0	-
	CACMW-005-110-77-090524-FM-R	72-77	395.9	120.5	-	66.5	-
	CACMW-005-110-82.25-090524-FM-R	77.25-82.25	205.7	63.6	-	32.7	-
	CACMW-005-110-87.5-081624-FM-R	82.5-87.5	236.0	50.6	-	26.8	-
	CACMW-005-110-92.75-081624-FM-R	87.75-92.75	405.8	115.0	-	51.1	-
	CACMW-005-110-98-081624-FM-R	93-98	248.5	67.5	-	37.8	-
	CACMW-005-110-103.25-081624-FM-R	98.25-103.25	192.6	57.4	-	34.0	-
	CACMW-005-110-108.5-081624-FM-R	103.5-108.5	121.7	31.2	-	13.8	-
MW-005-160	CACMW-005-160-116.5-090524-FM-R	111.5-116.5	35.2	-	-	-	-
	CACMW-005-160-121.75-090524-FM-R	116.75-121.75	62.1	17.7	-	5.3	-
	CACMW-005-160-127-090524-FM-R	122-127	79.5	9.6	-	-	-
	CACMW-005-160-132.25-090524-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-005-160-137.5-081624-FM-R	132.5-137.5	38.5	9.0	-	-	-
	CACMW-005-160-142.75-081624-FM-R	137.75-142.75	47.5	9.8	-	2.7	-
	CACMW-005-160-148-081624-FM-R	143-148	58.3	15.3	-	-	-
	CACMW-005-160-153.25-081624-FM-R	148.25-153.25	44.6	9.3	-	-	-
	CACMW-005-160-158.5-081624-FM-R	153.5-158.5	75.9	-	-	-	-
MW-006-060	CACMW-006-060-16.5-090524-FM-R	11.5-16.5	16.6	10.3	-	-	-
	CACMW-006-060-21.75-090524-FM-R	16.75-21.75	80.4	16.4	-	4.5	-
	CACMW-006-060-27-090524-FM-R	22-27	104.3	29.7	-	10.2	-
	CACMW-006-060-32.25-090524-FM-R	27.25-32.25	303.6	82.3	-	35.0	-
	CACMW-006-060-37.5-081724-FM-R	32.5-37.5	264.8	63.3	-	26.7	-
	CACMW-006-060-42.75-081724-FM-R	37.75-42.75	274.8	54.8	-	27.0	-
	CACMW-006-060-48-081724-FM-R	43-48	318.2	88.8	-	41.0	-
	CACMW-006-060-53.25-081724-FM-R	48.25-53.25	532.7	141.7	-	70.9	-
	CACMW-006-060-58.5-081724-FM-R	53.5-58.5	86.6	26.8	-	12.4	-
MW-006-110	CACMW-006-110-66.5-090624-FM-R	61.5-66.5	2.3	15.3	-	10.8	-
	CACMW-006-110-71.75-090624-FM-R	66.75-71.75	161.2	49.6	-	23.8	-
	CACMW-006-110-77-090624-FM-R	72-77	258.5	88.2	-	37.7	-
	CACMW-006-110-82.25-090624-FM-R	77.25-82.25	196.9	54.9	-	26.9	-
	CACMW-006-110-87.5-081724-FM-R	82.5-87.5	113.0	29.3	-	15.6	-
	CACMW-006-110-92.75-081724-FM-R	87.75-92.75	182.3	39.9	-	18.5	-
	CACMW-006-110-98-081724-FM-R	93-98	105.8	40.6	-	22.2	-
	CACMW-006-110-103.25-081724-FM-R	98.25-103.25	207.6	45.1	-	18.4	-
	CACMW-006-110-108.5-081724-FM-R	103.5-108.5	76.2	25.8	-	14.5	-
MW-006-160	CACMW-006-160-116.5-090624-FM-R	111.5-116.5	41.0	-	-	-	-
	CACMW-006-160-121.75-090624-FM-R	116.75-121.75	48.6	-	-	-	-
	CACMW-006-160-127-090624-FM-R	122-127	143.2	-	-	-	-
	CACMW-006-160-132.25-090624-FM-R	127.25-132.25	118.2	-	-	-	-
	CACMW-006-160-137.5-081724-FM-R	132.5-137.5	56.7	8.0	-	1.8	-
	CACMW-006-160-142.75-081724-FM-R	137.75-142.75	74.2	11.5	-	-	-
	CACMW-006-160-148-081724-FM-R	143-148	101.2	11.4	-	3.8	-
	CACMW-006-160-153.25-081724-FM-R	148.25-153.25	58.0	14.4	-	-	-
	CACMW-006-160-158.5-081724-FM-R	153.5-158.5	11.5	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ng/L)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ng/L)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ng/L)	Perfluorooctane sulfonamide (PFOSA) (ng/L)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ng/L)
MW-005-060	CACMW-005-060-16.5-090524-FM-R	11.5-16.5	-	13.7	-	8.0	-
	CACMW-005-060-21.75-090524-FM-R	16.75-21.75	-	22.6	-	13.2	-
	CACMW-005-060-27-090524-FM-R	22-27	-	49.8	-	28.4	-
	CACMW-005-060-32.25-090524-FM-R	27.25-32.25	-	47.8	-	32.3	-
	CACMW-005-060-37.5-081624-FM-R	32.5-37.5	-	12.7	-	8.9	-
	CACMW-005-060-42.75-081624-FM-R	37.75-42.75	-	20.5	-	14.2	-
	CACMW-005-060-48-081624-FM-R	43-48	-	19.1	-	10.2	-
	CACMW-005-060-53.25-081624-FM-R	48.25-53.25	-	26.1	-	14.5	-
	CACMW-005-060-58.5-081624-FM-R	53.5-58.5	-	24.5	-	16.8	-
MW-005-110	CACMW-005-110-66.5-090524-FM-R	61.5-66.5	-	8.8	-	4.8	-
	CACMW-005-110-71.75-090524-FM-R	66.75-71.75	-	24.5	-	13.5	-
	CACMW-005-110-77-090524-FM-R	72-77	-	66.5	-	39.1	-
	CACMW-005-110-82.25-090524-FM-R	77.25-82.25	-	32.7	-	20.9	-
	CACMW-005-110-87.5-081624-FM-R	82.5-87.5	-	28.9	-	17.7	-
	CACMW-005-110-92.75-081624-FM-R	87.75-92.75	-	51.1	-	35.4	-
	CACMW-005-110-98-081624-FM-R	93-98	-	36.9	-	22.0	-
	CACMW-005-110-103.25-081624-FM-R	98.25-103.25	-	28.2	-	15.3	-
	CACMW-005-110-108.5-081624-FM-R	103.5-108.5	-	12.6	-	8.4	-
MW-005-160	CACMW-005-160-116.5-090524-FM-R	111.5-116.5	-	-	-	1.6	-
	CACMW-005-160-121.75-090524-FM-R	116.75-121.75	-	-	-	2.4	-
	CACMW-005-160-127-090524-FM-R	122-127	-	4.4	-	3.9	-
	CACMW-005-160-132.25-090524-FM-R	127.25-132.25	-	-	-	3.1	-
	CACMW-005-160-137.5-081624-FM-R	132.5-137.5	-	-	-	3.5	-
	CACMW-005-160-142.75-081624-FM-R	137.75-142.75	-	-	-	3.6	-
	CACMW-005-160-148-081624-FM-R	143-148	-	-	-	-	-
	CACMW-005-160-153.25-081624-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-005-160-158.5-081624-FM-R	153.5-158.5	-	-	-	-	-
MW-006-060	CACMW-006-060-16.5-090524-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-006-060-21.75-090524-FM-R	16.75-21.75	-	-	-	3.8	-
	CACMW-006-060-27-090524-FM-R	22-27	-	7.5	-	8.0	-
	CACMW-006-060-32.25-090524-FM-R	27.25-32.25	-	35.7	-	25.4	-
	CACMW-006-060-37.5-081724-FM-R	32.5-37.5	-	32.0	-	20.1	-
	CACMW-006-060-42.75-081724-FM-R	37.75-42.75	-	31.8	-	19.7	-
	CACMW-006-060-48-081724-FM-R	43-48	-	42.3	-	30.9	-
	CACMW-006-060-53.25-081724-FM-R	48.25-53.25	1.0	81.0	11.1	55.7	-
	CACMW-006-060-58.5-081724-FM-R	53.5-58.5	-	13.7	-	9.8	-
MW-006-110	CACMW-006-110-66.5-090624-FM-R	61.5-66.5	-	9.9	-	7.5	-
	CACMW-006-110-71.75-090624-FM-R	66.75-71.75	-	22.8	-	15.9	-
	CACMW-006-110-77-090624-FM-R	72-77	-	42.5	-	24.8	-
	CACMW-006-110-82.25-090624-FM-R	77.25-82.25	-	21.4	-	15.3	-
	CACMW-006-110-87.5-081724-FM-R	82.5-87.5	-	19.5	-	10.9	-
	CACMW-006-110-92.75-081724-FM-R	87.75-92.75	-	17.1	-	12.7	-
	CACMW-006-110-98-081724-FM-R	93-98	-	16.3	-	11.7	-
	CACMW-006-110-103.25-081724-FM-R	98.25-103.25	-	19.9	-	12.8	-
	CACMW-006-110-108.5-081724-FM-R	103.5-108.5	-	14.5	-	8.9	-
MW-006-160	CACMW-006-160-116.5-090624-FM-R	111.5-116.5	-	-	-	2.1	-
	CACMW-006-160-121.75-090624-FM-R	116.75-121.75	-	-	-	2.6	-
	CACMW-006-160-127-090624-FM-R	122-127	-	-	-	4.6	-
	CACMW-006-160-132.25-090624-FM-R	127.25-132.25	-	-	-	7.2	-
	CACMW-006-160-137.5-081724-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-006-160-142.75-081724-FM-R	137.75-142.75	-	-	-	4.4	-
	CACMW-006-160-148-081724-FM-R	143-148	-	-	-	-	-
	CACMW-006-160-153.25-081724-FM-R	148.25-153.25	-	-	-	4.4	-
	CACMW-006-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (ng/L)	Nonafluoro-3,6-Dioxaheptonic acid (NFDHA) (ng/L)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ng/L)	Perfluoro-3-methoxypropanoic acid (PFMPA) (ng/L)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ng/L)
MW-005-060	CACMW-005-060-16.5-090524-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-005-060-21.75-090524-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-005-060-27-090524-FM-R	22-27	-	-	-	-	-
	CACMW-005-060-32.25-090524-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-005-060-37.5-081624-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-005-060-42.75-081624-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-005-060-48-081624-FM-R	43-48	-	-	-	-	-
	CACMW-005-060-53.25-081624-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-005-060-58.5-081624-FM-R	53.5-58.5	-	-	-	-	-
MW-005-110	CACMW-005-110-66.5-090524-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-005-110-71.75-090524-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-005-110-77-090524-FM-R	72-77	-	-	-	-	-
	CACMW-005-110-82.25-090524-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-005-110-87.5-081624-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-005-110-92.75-081624-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-005-110-98-081624-FM-R	93-98	-	-	-	-	-
	CACMW-005-110-103.25-081624-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-005-110-108.5-081624-FM-R	103.5-108.5	-	-	-	-	-
MW-005-160	CACMW-005-160-116.5-090524-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-005-160-121.75-090524-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-005-160-127-090524-FM-R	122-127	-	-	-	-	-
	CACMW-005-160-132.25-090524-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-005-160-137.5-081624-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-005-160-142.75-081624-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-005-160-148-081624-FM-R	143-148	-	-	-	-	-
	CACMW-005-160-153.25-081624-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-005-160-158.5-081624-FM-R	153.5-158.5	-	-	-	-	-
MW-006-060	CACMW-006-060-16.5-090524-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-006-060-21.75-090524-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-006-060-27-090524-FM-R	22-27	-	-	-	-	-
	CACMW-006-060-32.25-090524-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-006-060-37.5-081724-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-006-060-42.75-081724-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-006-060-48-081724-FM-R	43-48	-	-	-	-	-
	CACMW-006-060-53.25-081724-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-006-060-58.5-081724-FM-R	53.5-58.5	-	-	-	-	-
MW-006-110	CACMW-006-110-66.5-090624-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-006-110-71.75-090624-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-006-110-77-090624-FM-R	72-77	-	-	-	-	-
	CACMW-006-110-82.25-090624-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-006-110-87.5-081724-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-006-110-92.75-081724-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-006-110-98-081724-FM-R	93-98	-	-	-	-	-
	CACMW-006-110-103.25-081724-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-006-110-108.5-081724-FM-R	103.5-108.5	-	-	-	-	-
MW-006-160	CACMW-006-160-116.5-090624-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-006-160-121.75-090624-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-006-160-127-090624-FM-R	122-127	-	-	-	-	-
	CACMW-006-160-132.25-090624-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-006-160-137.5-081724-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-006-160-142.75-081724-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-006-160-148-081724-FM-R	143-148	-	-	-	-	-
	CACMW-006-160-153.25-081724-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-006-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ng/L)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ng/L)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ng/L)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ng/L)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ng/L)
MW-005-060	CACMW-005-060-16.5-090524-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-005-060-21.75-090524-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-005-060-27-090524-FM-R	22-27	-	-	-	-	-
	CACMW-005-060-32.25-090524-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-005-060-37.5-081624-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-005-060-42.75-081624-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-005-060-48-081624-FM-R	43-48	-	-	-	-	-
	CACMW-005-060-53.25-081624-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-005-060-58.5-081624-FM-R	53.5-58.5	-	-	-	-	-
MW-005-110	CACMW-005-110-66.5-090524-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-005-110-71.75-090524-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-005-110-77-090524-FM-R	72-77	-	-	-	-	-
	CACMW-005-110-82.25-090524-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-005-110-87.5-081624-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-005-110-92.75-081624-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-005-110-98-081624-FM-R	93-98	-	-	-	-	-
	CACMW-005-110-103.25-081624-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-005-110-108.5-081624-FM-R	103.5-108.5	-	-	-	-	-
MW-005-160	CACMW-005-160-116.5-090524-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-005-160-121.75-090524-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-005-160-127-090524-FM-R	122-127	-	-	-	-	-
	CACMW-005-160-132.25-090524-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-005-160-137.5-081624-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-005-160-142.75-081624-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-005-160-148-081624-FM-R	143-148	-	-	-	-	-
	CACMW-005-160-153.25-081624-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-005-160-158.5-081624-FM-R	153.5-158.5	-	-	-	-	-
MW-006-060	CACMW-006-060-16.5-090524-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-006-060-21.75-090524-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-006-060-27-090524-FM-R	22-27	-	-	-	-	-
	CACMW-006-060-32.25-090524-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-006-060-37.5-081724-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-006-060-42.75-081724-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-006-060-48-081724-FM-R	43-48	-	-	-	-	-
	CACMW-006-060-53.25-081724-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-006-060-58.5-081724-FM-R	53.5-58.5	-	-	-	-	-
MW-006-110	CACMW-006-110-66.5-090624-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-006-110-71.75-090624-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-006-110-77-090624-FM-R	72-77	-	-	-	-	-
	CACMW-006-110-82.25-090624-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-006-110-87.5-081724-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-006-110-92.75-081724-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-006-110-98-081724-FM-R	93-98	-	-	-	-	-
	CACMW-006-110-103.25-081724-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-006-110-108.5-081724-FM-R	103.5-108.5	-	-	-	-	-
MW-006-160	CACMW-006-160-116.5-090624-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-006-160-121.75-090624-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-006-160-127-090624-FM-R	122-127	-	-	-	-	-
	CACMW-006-160-132.25-090624-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-006-160-137.5-081724-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-006-160-142.75-081724-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-006-160-148-081724-FM-R	143-148	-	-	-	-	-
	CACMW-006-160-153.25-081724-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-006-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorobutanoic acid (PFBA) (ng/L)	Perfluoropentanoic acid (PFPeA) (ng/L)	Perfluorohexanoic acid (PFHxA) (ng/L)	Perfluoroheptanoic acid (PFHpA) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MW-007-060	CACMW-007-060-16.5-090624-FM-R	11.5-16.5	44.4	57.5	111.0	51.0	139.5
	CACMW-007-060-21.75-090624-FM-R	16.75-21.75	-	99.1	160.3	75.1	166.5
	CACMW-007-060-27-090624-FM-R	22-27	-	156.0	337.7	148.6	545.1
	CACMW-007-060-32.25-090624-FM-R	27.25-32.25	-	87.6	149.4	65.7	189.0
	CACMW-007-060-37.5-081724-FM-R	32.5-37.5	-	29.7	63.8	32.7	77.6
	CACMW-007-060-42.75-081724-FM-R	37.75-42.75	6.1	56.7	145.9	66.1	173.2
	CACMW-007-060-48-081724-FM-R	43-48	7.9	62.2	169.5	78.7	226.6
	CACMW-007-060-53.25-081724-FM-R	48.25-53.25	4.5	25.7	55.2	23.6	64.9
	CACMW-007-060-58.5-081724-FM-R	53.5-58.5	-	19.7	48.0	18.6	54.7
MW-007-110	CACMW-007-110-66.5-090624-FM-R	61.5-66.5	-	50.3	111.7	53.3	160.8
	CACMW-007-110-71.75-090624-FM-R	66.75-71.75	-	71.8	175.0	71.8	210.0
	CACMW-007-110-77-090624-FM-R	72-77	14.9	103.0	243.1	96.6	315.1
	CACMW-007-110-82.25-090624-FM-R	77.25-82.25	-	44.2	105.6	39.3	136.5
	CACMW-007-110-87.5-081724-FM-R	82.5-87.5	4.9	33.5	81.9	33.5	102.6
	CACMW-007-110-92.75-081724-FM-R	87.75-92.75	4.9	34.3	82.8	32.2	102.8
	CACMW-007-110-98-081724-FM-R	93-98	4.1	25.6	61.6	26.5	77.2
	CACMW-007-110-103.25-081724-FM-R	98.25-103.25	4.1	22.7	54.7	21.0	57.4
	CACMW-007-110-108.5-081724-FM-R	103.5-108.5	-	17.6	45.6	19.7	53.1
MW-007-160	CACMW-007-160-116.5-090624-FM-R	111.5-116.5	-	7.8	14.4	5.8	14.7
	CACMW-007-160-121.75-090624-FM-R	116.75-121.75	-	9.4	17.0	6.7	16.0
	CACMW-007-160-127-090624-FM-R	122-127	-	34.1	73.5	25.1	91.1
	CACMW-007-160-132.25-090624-FM-R	127.25-132.25	-	38.9	75.6	28.6	95.7
	CACMW-007-160-137.5-081724-FM-R	132.5-137.5	-	6.5	11.8	4.7	13.9
	CACMW-007-160-142.75-081724-FM-R	137.75-142.75	-	-	13.4	6.5	14.9
	CACMW-007-160-148-081724-FM-R	143-148	-	8.2	15.0	5.8	15.9
	CACMW-007-160-153.25-081724-FM-R	148.25-153.25	-	4.5	7.6	2.4	10.8
	CACMW-007-160-158.5-081724-FM-R	153.5-158.5	-	-	5.6	-	5.0
MW-008-060	CACMW-008-060-16.5-090624-FM-R	11.5-16.5	-	26.9	34.3	14.3	26.5
	CACMW-008-060-21.75-090624-FM-R	16.75-21.75	-	69.6	104.2	53.5	149.2
	CACMW-008-060-27-090624-FM-R	22-27	-	53.7	94.5	46.0	104.4
	CACMW-008-060-32.25-090624-FM-R	27.25-32.25	-	63.6	147.1	57.2	176.6
	CACMW-008-060-37.5-081724-FM-R	32.5-37.5	6.0	41.4	97.4	41.4	115.4
	CACMW-008-060-42.75-081724-FM-R	37.75-42.75	10.1	48.8	123.3	68.3	174.6
	CACMW-008-060-48-081724-FM-R	43-48	7.0	78.6	173.2	81.3	232.3
	CACMW-008-060-53.25-081724-FM-R	48.25-53.25	9.9	83.2	210.9	86.4	255.0
	CACMW-008-060-58.5-081724-FM-R	53.5-58.5	-	19.5	42.9	20.4	59.3
MW-008-110	CACMW-008-110-66.5-090624-FM-R	61.5-66.5	-	55.5	123.4	51.0	154.9
	CACMW-008-110-71.75-090624-FM-R	66.75-71.75	15.1	90.6	250.3	103.2	323.0
	CACMW-008-110-77-090624-FM-R	72-77	10.3	95.1	236.6	103.4	337.7
	CACMW-008-110-82.25-090624-FM-R	77.25-82.25	46.9	158.1	348.2	128.8	429.7
	CACMW-008-110-87.5-081724-FM-R	82.5-87.5	4.5	29.7	76.4	30.0	96.6
	CACMW-008-110-92.75-081724-FM-R	87.75-92.75	5.0	35.4	84.6	32.2	97.9
	CACMW-008-110-98-081724-FM-R	93-98	4.9	36.2	93.5	36.7	114.8
	CACMW-008-110-103.25-081724-FM-R	98.25-103.25	-	28.1	79.1	30.9	96.8
	CACMW-008-110-108.5-081724-FM-R	103.5-108.5	-	19.4	43.6	17.6	51.5
MW-008-160	CACMW-008-160-116.5-090624-FM-R	111.5-116.5	-	16.5	31.9	13.6	31.7
	CACMW-008-160-121.75-090624-FM-R	116.75-121.75	-	13.2	29.4	7.4	25.6
	CACMW-008-160-127-090624-FM-R	122-127	-	150.7	319.0	132.6	323.9
	CACMW-008-160-132.25-090624-FM-R	127.25-132.25	-	41.5	74.1	30.6	69.4
	CACMW-008-160-137.5-081724-FM-R	132.5-137.5	-	7.8	18.5	6.4	23.8
	CACMW-008-160-142.75-081724-FM-R	137.75-142.75	-	9.8	23.9	9.8	25.6
	CACMW-008-160-148-081724-FM-R	143-148	-	-	19.3	7.9	22.7
	CACMW-008-160-153.25-081724-FM-R	148.25-153.25	-	-	14.0	5.7	14.3
	CACMW-008-160-158.5-081724-FM-R	153.5-158.5	-	-	7.0	2.4	5.5
Field Duplicate	FD-1-081624-FM-R		13.0	90.2	199.8	90.2	258.9
	FD-2-081724-FM-R		-	-	15.3	5.8	13.6
	FD-3-081724-FM-R		4.8	35.2	83.6	34.0	94.7
	FD-4-090424-FM-R		-	76.0	180.0	66.1	225.9
	FD-5-090424-FM-R		-	40.9	77.4	34.5	85.6
	FD-6-090524-FM-R		-	64.5	149.5	57.6	160.2
	FD-7-090524-FM-R		-	89.9	248.1	98.6	321.6
	FD-8-090524-FM-R		-	27.4	49.7	21.3	51.6
	FD-09-090624-FM-R		-	22.3	49.9	18.2	53.1
	FD-10-090624-FM-R		-	52.3	111.8	46.2	160.8

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorodecanoic acid (PFDA) (ng/L)	Perfluoroundecanoic acid (PFUdA) (ng/L)	Perfluorododecanoic acid (PFDoA) (ng/L)	Perfluorotridecanoic acid (PFTrDA) (ng/L)
MW-007-060	CACMW-007-060-16.5-090624-FM-R	11.5-16.5	17.6	4.2	-	-	-
	CACMW-007-060-21.75-090624-FM-R	16.75-21.75	22.2	-	-	-	-
	CACMW-007-060-27-090624-FM-R	22-27	46.4	14.5	-	-	-
	CACMW-007-060-32.25-090624-FM-R	27.25-32.25	23.7	-	-	-	-
	CACMW-007-060-37.5-081724-FM-R	32.5-37.5	7.2	3.4	-	-	-
	CACMW-007-060-42.75-081724-FM-R	37.75-42.75	22.0	5.2	-	-	-
	CACMW-007-060-48-081724-FM-R	43-48	28.4	7.0	-	-	-
	CACMW-007-060-53.25-081724-FM-R	48.25-53.25	7.5	2.1	-	-	-
	CACMW-007-060-58.5-081724-FM-R	53.5-58.5	6.5	-	-	-	-
MW-007-110	CACMW-007-110-66.5-090624-FM-R	61.5-66.5	25.1	4.8	-	-	-
	CACMW-007-110-71.75-090624-FM-R	66.75-71.75	24.6	-	-	-	-
	CACMW-007-110-77-090624-FM-R	72-77	36.6	9.6	-	-	-
	CACMW-007-110-82.25-090624-FM-R	77.25-82.25	12.7	4.7	-	-	-
	CACMW-007-110-87.5-081724-FM-R	82.5-87.5	10.8	4.0	-	-	-
	CACMW-007-110-92.75-081724-FM-R	87.75-92.75	11.3	3.3	-	-	-
	CACMW-007-110-98-081724-FM-R	93-98	7.2	3.0	-	-	-
	CACMW-007-110-103.25-081724-FM-R	98.25-103.25	5.3	-	-	-	-
	CACMW-007-110-108.5-081724-FM-R	103.5-108.5	5.7	2.6	-	-	-
MW-007-160	CACMW-007-160-116.5-090624-FM-R	111.5-116.5	1.7	1.3	-	-	-
	CACMW-007-160-121.75-090624-FM-R	116.75-121.75	2.0	1.5	-	-	-
	CACMW-007-160-127-090624-FM-R	122-127	2.7	-	-	-	-
	CACMW-007-160-132.25-090624-FM-R	127.25-132.25	7.2	-	-	-	-
	CACMW-007-160-137.5-081724-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-007-160-142.75-081724-FM-R	137.75-142.75	1.4	-	-	-	-
	CACMW-007-160-148-081724-FM-R	143-148	0.2	-	-	-	-
	CACMW-007-160-153.25-081724-FM-R	148.25-153.25	2.1	-	-	-	-
	CACMW-007-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-
MW-008-060	CACMW-008-060-16.5-090624-FM-R	11.5-16.5	5.2	-	-	-	-
	CACMW-008-060-21.75-090624-FM-R	16.75-21.75	14.7	-	-	-	-
	CACMW-008-060-27-090624-FM-R	22-27	12.1	4.0	-	-	-
	CACMW-008-060-32.25-090624-FM-R	27.25-32.25	18.5	6.4	-	-	-
	CACMW-008-060-37.5-081724-FM-R	32.5-37.5	14.5	3.3	-	-	-
	CACMW-008-060-42.75-081724-FM-R	37.75-42.75	23.3	5.9	-	-	-
	CACMW-008-060-48-081724-FM-R	43-48	28.1	6.5	-	-	-
	CACMW-008-060-53.25-081724-FM-R	48.25-53.25	36.3	8.6	-	-	-
	CACMW-008-060-58.5-081724-FM-R	53.5-58.5	8.0	8.7	-	-	-
MW-008-110	CACMW-008-110-66.5-090624-FM-R	61.5-66.5	19.8	5.5	-	-	-
	CACMW-008-110-71.75-090624-FM-R	66.75-71.75	42.1	8.1	-	-	-
	CACMW-008-110-77-090624-FM-R	72-77	28.4	8.4	-	-	-
	CACMW-008-110-82.25-090624-FM-R	77.25-82.25	45.4	16.4	-	-	-
	CACMW-008-110-87.5-081724-FM-R	82.5-87.5	10.3	3.3	-	-	-
	CACMW-008-110-92.75-081724-FM-R	87.75-92.75	11.1	-	-	-	-
	CACMW-008-110-98-081724-FM-R	93-98	17.2	-	-	-	-
	CACMW-008-110-103.25-081724-FM-R	98.25-103.25	10.1	2.9	-	-	-
	CACMW-008-110-108.5-081724-FM-R	103.5-108.5	6.0	2.3	-	-	-
MW-008-160	CACMW-008-160-116.5-090624-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-008-160-121.75-090624-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-008-160-127-090624-FM-R	122-127	33.1	-	-	-	-
	CACMW-008-160-132.25-090624-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-008-160-137.5-081724-FM-R	132.5-137.5	1.6	-	-	-	-
	CACMW-008-160-142.75-081724-FM-R	137.75-142.75	2.9	1.3	-	-	-
	CACMW-008-160-148-081724-FM-R	143-148	2.2	1.6	-	-	-
	CACMW-008-160-153.25-081724-FM-R	148.25-153.25	1.5	-	-	-	-
	CACMW-008-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-
Field Duplicate	FD-1-081624-FM-R		31.3	7.0	-	-	-
	FD-2-081724-FM-R		1.3	-	-	-	-
	FD-3-081724-FM-R		12.2	-	-	-	-
	FD-4-090424-FM-R		22.3	8.1	-	-	-
	FD-5-090424-FM-R		1.1	-	-	-	-
	FD-6-090524-FM-R		25.4	9.1	-	-	-
	FD-7-090524-FM-R		34.1	10.4	-	-	-
	FD-8-090524-FM-R		6.6	-	-	-	-
	FD-09-090624-FM-R		4.4	-	-	-	-
	FD-10-090624-FM-R		18.0	6.8	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorotetradecanoic acid (PFTeDA) (ng/L)	Perfluorobutane sulfonic acid (PFBS) (ng/L)	Perfluoropentane sulfonate (PFPeS) (ng/L)	Perfluorohexane sulfonic acid (PFHxS) (ng/L)	Perfluoroheptane sulfonic acid (PFHpS) (ng/L)
MW-007-060	CACMW-007-060-16.5-090624-FM-R	11.5-16.5	-	56.2	26.1	365.8	17.0
	CACMW-007-060-21.75-090624-FM-R	16.75-21.75	-	29.0	44.4	546.5	26.6
	CACMW-007-060-27-090624-FM-R	22-27	-	55.7	89.1	1188.5	59.4
	CACMW-007-060-32.25-090624-FM-R	27.25-32.25	-	24.8	43.8	511.2	28.5
	CACMW-007-060-37.5-081724-FM-R	32.5-37.5	-	11.9	14.9	242.6	12.9
	CACMW-007-060-42.75-081724-FM-R	37.75-42.75	-	27.4	38.7	566.6	31.2
	CACMW-007-060-48-081724-FM-R	43-48	-	29.0	45.6	704.6	39.8
	CACMW-007-060-53.25-081724-FM-R	48.25-53.25	-	10.4	12.9	180.8	11.8
	CACMW-007-060-58.5-081724-FM-R	53.5-58.5	-	9.3	10.1	167.6	9.3
MW-007-110	CACMW-007-110-66.5-090624-FM-R	61.5-66.5	-	20.5	34.9	420.5	29.7
	CACMW-007-110-71.75-090624-FM-R	66.75-71.75	-	34.0	47.9	642.4	49.1
	CACMW-007-110-77-090624-FM-R	72-77	-	46.7	72.2	923.7	64.8
	CACMW-007-110-82.25-090624-FM-R	77.25-82.25	-	21.3	36.0	499.5	30.3
	CACMW-007-110-87.5-081724-FM-R	82.5-87.5	-	18.6	23.2	335.1	20.4
	CACMW-007-110-92.75-081724-FM-R	87.75-92.75	-	17.3	26.3	329.1	18.7
	CACMW-007-110-98-081724-FM-R	93-98	-	13.7	21.1	281.3	16.5
	CACMW-007-110-103.25-081724-FM-R	98.25-103.25	-	11.7	12.7	178.9	11.0
	CACMW-007-110-108.5-081724-FM-R	103.5-108.5	-	9.6	13.0	167.5	10.0
MW-007-160	CACMW-007-160-116.5-090624-FM-R	111.5-116.5	-	5.4	6.6	58.3	5.1
	CACMW-007-160-121.75-090624-FM-R	116.75-121.75	-	5.8	6.7	62.7	4.9
	CACMW-007-160-127-090624-FM-R	122-127	-	25.1	39.5	323.1	21.5
	CACMW-007-160-132.25-090624-FM-R	127.25-132.25	-	24.6	34.8	306.9	20.5
	CACMW-007-160-137.5-081724-FM-R	132.5-137.5	-	4.7	6.5	53.9	2.0
	CACMW-007-160-142.75-081724-FM-R	137.75-142.75	-	5.7	5.3	61.0	2.8
	CACMW-007-160-148-081724-FM-R	143-148	-	5.3	6.8	67.8	3.6
	CACMW-007-160-153.25-081724-FM-R	148.25-153.25	-	2.8	3.5	31.5	-
	CACMW-007-160-158.5-081724-FM-R	153.5-158.5	-	2.0	-	16.0	-
MW-008-060	CACMW-008-060-16.5-090624-FM-R	11.5-16.5	-	5.8	6.9	95.6	5.7
	CACMW-008-060-21.75-090624-FM-R	16.75-21.75	-	18.5	26.8	348.0	21.1
	CACMW-008-060-27-090624-FM-R	22-27	-	16.6	21.7	281.1	17.9
	CACMW-008-060-32.25-090624-FM-R	27.25-32.25	-	21.2	28.6	444.9	28.6
	CACMW-008-060-37.5-081724-FM-R	32.5-37.5	-	16.2	19.9	330.9	17.7
	CACMW-008-060-42.75-081724-FM-R	37.75-42.75	-	21.5	35.8	520.6	29.6
	CACMW-008-060-48-081724-FM-R	43-48	-	29.8	43.4	623.5	38.0
	CACMW-008-060-53.25-081724-FM-R	48.25-53.25	-	35.2	48.0	736.1	44.8
	CACMW-008-060-58.5-081724-FM-R	53.5-58.5	-	6.9	10.0	147.3	9.1
MW-008-110	CACMW-008-110-66.5-090624-FM-R	61.5-66.5	-	21.5	29.4	430.3	29.4
	CACMW-008-110-71.75-090624-FM-R	66.75-71.75	-	45.3	73.0	1031.7	56.6
	CACMW-008-110-77-090624-FM-R	72-77	-	45.5	78.6	981.9	74.4
	CACMW-008-110-82.25-090624-FM-R	77.25-82.25	-	64.4	84.9	1171.3	73.2
	CACMW-008-110-87.5-081724-FM-R	82.5-87.5	-	14.0	22.0	303.6	20.2
	CACMW-008-110-92.75-081724-FM-R	87.75-92.75	-	15.2	21.2	272.5	19.8
	CACMW-008-110-98-081724-FM-R	93-98	-	17.0	26.4	353.4	21.5
	CACMW-008-110-103.25-081724-FM-R	98.25-103.25	-	12.6	23.0	304.4	15.5
	CACMW-008-110-108.5-081724-FM-R	103.5-108.5	-	8.8	12.8	149.9	9.7
MW-008-160	CACMW-008-160-116.5-090624-FM-R	111.5-116.5	-	10.6	13.6	125.8	11.6
	CACMW-008-160-121.75-090624-FM-R	116.75-121.75	-	8.8	9.6	110.4	8.1
	CACMW-008-160-127-090624-FM-R	122-127	-	108.5	144.6	1325.9	84.4
	CACMW-008-160-132.25-090624-FM-R	127.25-132.25	-	28.4	37.1	327.7	16.6
	CACMW-008-160-137.5-081724-FM-R	132.5-137.5	-	7.1	9.6	85.4	5.0
	CACMW-008-160-142.75-081724-FM-R	137.75-142.75	-	8.4	12.9	110.9	7.5
	CACMW-008-160-148-081724-FM-R	143-148	-	6.9	10.9	89.3	6.0
	CACMW-008-160-153.25-081724-FM-R	148.25-153.25	-	4.8	6.1	65.6	4.3
	CACMW-008-160-158.5-081724-FM-R	153.5-158.5	-	2.1	2.6	27.0	-
Field Duplicate	FD-1-081624-FM-R		-	28.6	45.6	701.3	39.6
	FD-2-081724-FM-R		-	4.9	8.4	73.9	4.0
	FD-3-081724-FM-R		-	14.8	22.4	276.1	19.2
	FD-4-090424-FM-R		-	31.4	47.9	660.9	46.3
	FD-5-090424-FM-R		-	28.0	36.6	323.2	17.9
	FD-6-090524-FM-R		-	23.3	37.1	603.9	37.1
	FD-7-090524-FM-R		-	44.4	65.0	975.3	75.9
	FD-8-090524-FM-R		-	8.3	12.2	152.4	8.0
	FD-09-090624-FM-R		-	10.1	15.5	168.7	12.8
	FD-10-090624-FM-R		-	24.6	31.8	482.3	32.8

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	Perfluorooctane sulfonic acid (PFOS) (ng/L)	Perfluorononane sulfonic acid (PFNS) (ng/L)	Perfluorodecane sulfonic acid (PFDS) (ng/L)	Perfluorododecane sulfonic acid (PFDOS) (ng/L)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ng/L)
MW-007-060	CACMW-007-060-16.5-090624-FM-R	11.5-16.5	1437.2	-	-	-	-
	CACMW-007-060-21.75-090624-FM-R	16.75-21.75	2356.9	-	-	-	-
	CACMW-007-060-27-090624-FM-R	22-27	5199.8	-	-	-	-
	CACMW-007-060-32.25-090624-FM-R	27.25-32.25	2154.3	-	-	-	-
	CACMW-007-060-37.5-081724-FM-R	32.5-37.5	1089.3	-	-	-	-
	CACMW-007-060-42.75-081724-FM-R	37.75-42.75	2691.3	3.2	-	-	-
	CACMW-007-060-48-081724-FM-R	43-48	3564.3	3.3	-	-	-
	CACMW-007-060-53.25-081724-FM-R	48.25-53.25	1008.1	-	-	-	-
	CACMW-007-060-58.5-081724-FM-R	53.5-58.5	856.7	-	-	-	-
MW-007-110	CACMW-007-110-66.5-090624-FM-R	61.5-66.5	2564.2	-	-	-	-
	CACMW-007-110-71.75-090624-FM-R	66.75-71.75	3526.8	5.4	-	-	-
	CACMW-007-110-77-090624-FM-R	72-77	4990.1	4.5	-	-	-
	CACMW-007-110-82.25-090624-FM-R	77.25-82.25	2292.7	2.3	-	-	-
	CACMW-007-110-87.5-081724-FM-R	82.5-87.5	1919.0	1.6	-	-	-
	CACMW-007-110-92.75-081724-FM-R	87.75-92.75	1870.8	1.6	-	-	-
	CACMW-007-110-98-081724-FM-R	93-98	1489.1	1.4	-	-	-
	CACMW-007-110-103.25-081724-FM-R	98.25-103.25	1100.6	-	-	-	-
	CACMW-007-110-108.5-081724-FM-R	103.5-108.5	962.9	-	-	-	-
MW-007-160	CACMW-007-160-116.5-090624-FM-R	111.5-116.5	252.6	-	-	-	-
	CACMW-007-160-121.75-090624-FM-R	116.75-121.75	304.4	-	-	-	-
	CACMW-007-160-127-090624-FM-R	122-127	1453.8	-	-	-	-
	CACMW-007-160-132.25-090624-FM-R	127.25-132.25	1104.9	-	-	-	-
	CACMW-007-160-137.5-081724-FM-R	132.5-137.5	187.0	-	-	-	-
	CACMW-007-160-142.75-081724-FM-R	137.75-142.75	199.2	-	-	-	-
	CACMW-007-160-148-081724-FM-R	143-148	208.2	-	-	-	-
	CACMW-007-160-153.25-081724-FM-R	148.25-153.25	85.8	-	-	-	-
	CACMW-007-160-158.5-081724-FM-R	153.5-158.5	49.9	-	-	-	-
MW-008-060	CACMW-008-060-16.5-090624-FM-R	11.5-16.5	433.3	-	-	-	-
	CACMW-008-060-21.75-090624-FM-R	16.75-21.75	1740.1	-	-	-	-
	CACMW-008-060-27-090624-FM-R	22-27	1533.2	-	-	-	-
	CACMW-008-060-32.25-090624-FM-R	27.25-32.25	2224.3	-	-	-	-
	CACMW-008-060-37.5-081724-FM-R	32.5-37.5	1466.7	1.3	-	-	-
	CACMW-008-060-42.75-081724-FM-R	37.75-42.75	2472.7	2.9	-	-	-
	CACMW-008-060-48-081724-FM-R	43-48	2981.9	2.7	-	-	-
	CACMW-008-060-53.25-081724-FM-R	48.25-53.25	3520.4	3.5	1.2	-	-
	CACMW-008-060-58.5-081724-FM-R	53.5-58.5	650.0	-	-	-	-
MW-008-110	CACMW-008-110-66.5-090624-FM-R	61.5-66.5	2491.4	-	-	-	-
	CACMW-008-110-71.75-090624-FM-R	66.75-71.75	5158.4	5.9	-	-	-
	CACMW-008-110-77-090624-FM-R	72-77	5581.5	4.0	-	-	-
	CACMW-008-110-82.25-090624-FM-R	77.25-82.25	6149.3	-	-	-	-
	CACMW-008-110-87.5-081724-FM-R	82.5-87.5	1709.7	1.7	-	-	-
	CACMW-008-110-92.75-081724-FM-R	87.75-92.75	1592.5	2.0	1.4	-	-
	CACMW-008-110-98-081724-FM-R	93-98	1923.4	1.9	-	-	-
	CACMW-008-110-103.25-081724-FM-R	98.25-103.25	1452.0	1.6	-	-	-
	CACMW-008-110-108.5-081724-FM-R	103.5-108.5	837.6	-	-	-	-
MW-008-160	CACMW-008-160-116.5-090624-FM-R	111.5-116.5	580.8	-	-	-	-
	CACMW-008-160-121.75-090624-FM-R	116.75-121.75	522.6	-	-	-	-
	CACMW-008-160-127-090624-FM-R	122-127	5484.3	-	-	-	-
	CACMW-008-160-132.25-090624-FM-R	127.25-132.25	1245.4	-	-	-	-
	CACMW-008-160-137.5-081724-FM-R	132.5-137.5	295.4	-	-	-	-
	CACMW-008-160-142.75-081724-FM-R	137.75-142.75	377.1	-	-	-	-
	CACMW-008-160-148-081724-FM-R	143-148	302.6	-	-	-	-
	CACMW-008-160-153.25-081724-FM-R	148.25-153.25	205.7	-	-	-	-
	CACMW-008-160-158.5-081724-FM-R	153.5-158.5	74.6	-	-	-	-
Field Duplicate	FD-1-081624-FM-R		3105.9	2.0	-	-	-
	FD-2-081724-FM-R		242.8	-	-	-	-
	FD-3-081724-FM-R		1640.8	1.2	-	-	-
	FD-4-090424-FM-R		3965.4	4.5	-	-	-
	FD-5-090424-FM-R		926.4	-	-	-	-
	FD-6-090524-FM-R		2745.2	-	-	-	-
	FD-7-090524-FM-R		5418.5	5.1	-	-	-
	FD-8-090524-FM-R		701.1	-	-	-	-
	FD-09-090624-FM-R		944.5	-	-	-	-
	FD-10-090624-FM-R		2668.0	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ng/L)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ng/L)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (ng/L)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ng/L)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ng/L)
MW-007-060	CACMW-007-060-16.5-090624-FM-R	11.5-16.5	3334.9	43.1	-	18.3	-
	CACMW-007-060-21.75-090624-FM-R	16.75-21.75	316.0	92.2	-	26.6	-
	CACMW-007-060-27-090624-FM-R	22-27	677.8	189.4	-	66.9	-
	CACMW-007-060-32.25-090624-FM-R	27.25-32.25	264.7	73.0	-	30.3	-
	CACMW-007-060-37.5-081724-FM-R	32.5-37.5	144.8	32.2	-	14.9	-
	CACMW-007-060-42.75-081724-FM-R	37.75-42.75	260.9	80.3	-	34.9	-
	CACMW-007-060-48-081724-FM-R	43-48	394.8	99.5	-	39.0	-
	CACMW-007-060-53.25-081724-FM-R	48.25-53.25	91.3	23.3	-	11.1	-
	CACMW-007-060-58.5-081724-FM-R	53.5-58.5	49.4	19.7	-	9.3	-
MW-007-110	CACMW-007-110-66.5-090624-FM-R	61.5-66.5	269.2	49.2	-	24.6	-
	CACMW-007-110-71.75-090624-FM-R	66.75-71.75	368.4	100.8	-	36.5	-
	CACMW-007-110-77-090624-FM-R	72-77	554.8	106.2	-	55.2	-
	CACMW-007-110-82.25-090624-FM-R	77.25-82.25	165.8	58.1	-	26.2	-
	CACMW-007-110-87.5-081724-FM-R	82.5-87.5	119.6	39.6	-	21.9	-
	CACMW-007-110-92.75-081724-FM-R	87.75-92.75	149.8	45.0	-	18.7	-
	CACMW-007-110-98-081724-FM-R	93-98	116.9	31.9	-	16.5	-
	CACMW-007-110-103.25-081724-FM-R	98.25-103.25	90.3	18.9	-	12.4	-
	CACMW-007-110-108.5-081724-FM-R	103.5-108.5	63.8	16.3	-	9.6	-
MW-007-160	CACMW-007-160-116.5-090624-FM-R	111.5-116.5	39.8	3.9	-	1.8	-
	CACMW-007-160-121.75-090624-FM-R	116.75-121.75	28.0	4.9	-	-	-
	CACMW-007-160-127-090624-FM-R	122-127	58.3	21.5	-	8.1	-
	CACMW-007-160-132.25-090624-FM-R	127.25-132.25	107.4	22.5	-	10.8	-
	CACMW-007-160-137.5-081724-FM-R	132.5-137.5	51.2	-	-	-	-
	CACMW-007-160-142.75-081724-FM-R	137.75-142.75	37.6	6.5	-	-	-
	CACMW-007-160-148-081724-FM-R	143-148	49.6	5.8	-	-	-
	CACMW-007-160-153.25-081724-FM-R	148.25-153.25	44.1	-	-	-	-
	CACMW-007-160-158.5-081724-FM-R	153.5-158.5	40.0	-	-	-	-
MW-008-060	CACMW-008-060-16.5-090624-FM-R	11.5-16.5	18.7	12.3	-	-	-
	CACMW-008-060-21.75-090624-FM-R	16.75-21.75	167.3	42.8	-	22.8	-
	CACMW-008-060-27-090624-FM-R	22-27	169.3	46.0	-	15.3	-
	CACMW-008-060-32.25-090624-FM-R	27.25-32.25	172.1	75.2	-	23.3	-
	CACMW-008-060-37.5-081724-FM-R	32.5-37.5	158.9	37.6	-	18.8	-
	CACMW-008-060-42.75-081724-FM-R	37.75-42.75	244.8	78.1	-	31.9	-
	CACMW-008-060-48-081724-FM-R	43-48	339.5	103.0	-	43.4	-
	CACMW-008-060-53.25-081724-FM-R	48.25-53.25	400.8	102.4	-	41.6	-
	CACMW-008-060-58.5-081724-FM-R	53.5-58.5	157.1	24.7	-	7.4	-
MW-008-110	CACMW-008-110-66.5-090624-FM-R	61.5-66.5	127.4	39.6	-	31.7	-
	CACMW-008-110-71.75-090624-FM-R	66.75-71.75	468.7	101.9	-	55.4	-
	CACMW-008-110-77-090624-FM-R	72-77	436.7	124.0	-	56.8	-
	CACMW-008-110-82.25-090624-FM-R	77.25-82.25	358.7	161.1	-	70.3	-
	CACMW-008-110-87.5-081724-FM-R	82.5-87.5	95.1	32.8	-	17.8	-
	CACMW-008-110-92.75-081724-FM-R	87.75-92.75	131.8	42.5	-	17.0	-
	CACMW-008-110-98-081724-FM-R	93-98	193.5	44.3	-	21.9	-
	CACMW-008-110-103.25-081724-FM-R	98.25-103.25	174.5	35.1	-	16.9	-
	CACMW-008-110-108.5-081724-FM-R	103.5-108.5	54.0	25.6	-	7.5	-
MW-008-160	CACMW-008-160-116.5-090624-FM-R	111.5-116.5	79.9	9.0	-	4.6	-
	CACMW-008-160-121.75-090624-FM-R	116.75-121.75	-	-	-	3.3	-
	CACMW-008-160-127-090624-FM-R	122-127	1160.1	-	-	44.0	-
	CACMW-008-160-132.25-090624-FM-R	127.25-132.25	202.1	-	-	-	-
	CACMW-008-160-137.5-081724-FM-R	132.5-137.5	64.9	6.4	-	2.1	-
	CACMW-008-160-142.75-081724-FM-R	137.75-142.75	120.9	11.1	-	2.8	-
	CACMW-008-160-148-081724-FM-R	143-148	65.7	6.9	-	2.3	-
	CACMW-008-160-153.25-081724-FM-R	148.25-153.25	84.2	5.7	-	-	-
	CACMW-008-160-158.5-081724-FM-R	153.5-158.5	19.8	-	-	-	-
Field Duplicate	FD-1-081624-FM-R		427.1	120.2	-	41.6	-
	FD-2-081724-FM-R		80.5	4.8	-	10.6	-
	FD-3-081724-FM-R		157.1	40.0	-	18.0	-
	FD-4-090424-FM-R		218.9	85.9	-	36.3	-
	FD-5-090424-FM-R		199.3	32.3	-	15.5	-
	FD-6-090524-FM-R		236.8	76.9	-	30.2	-
	FD-7-090524-FM-R		414.5	119.2	-	56.4	-
	FD-8-090524-FM-R		-	20.3	-	9.0	-
	FD-09-090624-FM-R		163.6	22.3	-	10.8	-
	FD-10-090624-FM-R		248.8	55.4	-	25.7	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ng/L)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ng/L)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ng/L)	Perfluorooctane sulfonamide (PFOSA) (ng/L)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ng/L)
MW-007-060	CACMW-007-060-16.5-090624-FM-R	11.5-16.5	-	14.4	-	12.5	-
	CACMW-007-060-21.75-090624-FM-R	16.75-21.75	-	18.1	-	22.2	-
	CACMW-007-060-27-090624-FM-R	22-27	-	59.4	-	44.6	-
	CACMW-007-060-32.25-090624-FM-R	27.25-32.25	-	18.6	-	23.4	-
	CACMW-007-060-37.5-081724-FM-R	32.5-37.5	-	15.8	-	9.9	-
	CACMW-007-060-42.75-081724-FM-R	37.75-42.75	-	37.8	-	24.1	-
	CACMW-007-060-48-081724-FM-R	43-48	-	49.7	-	30.3	-
	CACMW-007-060-53.25-081724-FM-R	48.25-53.25	-	13.2	-	7.6	-
	CACMW-007-060-58.5-081724-FM-R	53.5-58.5	-	10.1	-	5.6	-
MW-007-110	CACMW-007-110-66.5-090624-FM-R	61.5-66.5	-	32.8	-	17.4	-
	CACMW-007-110-71.75-090624-FM-R	66.75-71.75	-	50.4	-	25.2	-
	CACMW-007-110-77-090624-FM-R	72-77	-	47.8	-	35.0	-
	CACMW-007-110-82.25-090624-FM-R	77.25-82.25	-	30.3	-	14.7	-
	CACMW-007-110-87.5-081724-FM-R	82.5-87.5	-	18.9	-	11.6	-
	CACMW-007-110-92.75-081724-FM-R	87.75-92.75	-	20.1	-	12.1	-
	CACMW-007-110-98-081724-FM-R	93-98	-	16.1	-	9.9	-
	CACMW-007-110-103.25-081724-FM-R	98.25-103.25	-	12.0	-	6.2	-
	CACMW-007-110-108.5-081724-FM-R	103.5-108.5	-	11.3	-	5.9	-
MW-007-160	CACMW-007-160-116.5-090624-FM-R	111.5-116.5	-	2.3	-	1.3	-
	CACMW-007-160-121.75-090624-FM-R	116.75-121.75	-	-	-	1.9	-
	CACMW-007-160-127-090624-FM-R	122-127	-	8.4	-	-	-
	CACMW-007-160-132.25-090624-FM-R	127.25-132.25	-	9.8	-	5.1	-
	CACMW-007-160-137.5-081724-FM-R	132.5-137.5	-	-	-	1.3	-
	CACMW-007-160-142.75-081724-FM-R	137.75-142.75	-	-	-	1.4	-
	CACMW-007-160-148-081724-FM-R	143-148	-	-	-	-	-
	CACMW-007-160-153.25-081724-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-007-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-
MW-008-060	CACMW-008-060-16.5-090624-FM-R	11.5-16.5	-	6.9	-	-	-
	CACMW-008-060-21.75-090624-FM-R	16.75-21.75	-	-	-	13.7	-
	CACMW-008-060-27-090624-FM-R	22-27	-	12.8	-	12.5	-
	CACMW-008-060-32.25-090624-FM-R	27.25-32.25	-	24.4	-	19.1	-
	CACMW-008-060-37.5-081724-FM-R	32.5-37.5	-	22.2	-	13.5	-
	CACMW-008-060-42.75-081724-FM-R	37.75-42.75	-	32.2	-	22.4	-
	CACMW-008-060-48-081724-FM-R	43-48	0.9	46.1	6.2	29.8	-
	CACMW-008-060-53.25-081724-FM-R	48.25-53.25	1.5	48.0	8.0	31.0	-
	CACMW-008-060-58.5-081724-FM-R	53.5-58.5	-	8.2	-	6.9	-
MW-008-110	CACMW-008-110-66.5-090624-FM-R	61.5-66.5	-	18.1	-	17.0	-
	CACMW-008-110-71.75-090624-FM-R	66.75-71.75	-	55.4	-	36.5	-
	CACMW-008-110-77-090624-FM-R	72-77	-	61.0	-	40.3	-
	CACMW-008-110-82.25-090624-FM-R	77.25-82.25	-	67.3	-	46.9	-
	CACMW-008-110-87.5-081724-FM-R	82.5-87.5	-	16.1	-	11.2	-
	CACMW-008-110-92.75-081724-FM-R	87.75-92.75	-	17.3	-	10.3	-
	CACMW-008-110-98-081724-FM-R	93-98	-	21.9	-	12.1	-
	CACMW-008-110-103.25-081724-FM-R	98.25-103.25	-	18.7	-	9.8	-
	CACMW-008-110-108.5-081724-FM-R	103.5-108.5	-	9.3	-	5.7	-
MW-008-160	CACMW-008-160-116.5-090624-FM-R	111.5-116.5	-	-	-	2.6	-
	CACMW-008-160-121.75-090624-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-008-160-127-090624-FM-R	122-127	-	-	-	34.4	-
	CACMW-008-160-132.25-090624-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-008-160-137.5-081724-FM-R	132.5-137.5	-	1.7	-	2.1	-
	CACMW-008-160-142.75-081724-FM-R	137.75-142.75	-	-	-	2.5	-
	CACMW-008-160-148-081724-FM-R	143-148	-	2.2	-	2.1	-
	CACMW-008-160-153.25-081724-FM-R	148.25-153.25	-	-	-	1.6	-
	CACMW-008-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-
Field Duplicate	FD-1-081624-FM-R		-	46.1	-	31.6	-
	FD-2-081724-FM-R		-	-	-	-	-
	FD-3-081724-FM-R		-	18.4	-	10.8	-
	FD-4-090424-FM-R		-	51.2	-	23.1	-
	FD-5-090424-FM-R		-	-	-	8.8	-
	FD-6-090524-FM-R		-	31.6	-	19.2	-
	FD-7-090524-FM-R		-	60.7	-	39.0	-
	FD-8-090524-FM-R		-	8.5	-	5.2	-
	FD-09-090624-FM-R		-	7.4	-	5.3	-
	FD-10-090624-FM-R		1.5	27.7	-	16.4	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy) propanoic acid (HFPO-DA) (ng/L)	Nonafluoro-3,6-Dioxaheptonic acid (NFDHA) (ng/L)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ng/L)	Perfluoro-3-methoxypropanoic acid (PFMPA) (ng/L)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ng/L)
MW-007-060	CACMW-007-060-16.5-090624-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-007-060-21.75-090624-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-007-060-27-090624-FM-R	22-27	-	-	-	-	-
	CACMW-007-060-32.25-090624-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-007-060-37.5-081724-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-007-060-42.75-081724-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-007-060-48-081724-FM-R	43-48	-	-	-	-	-
	CACMW-007-060-53.25-081724-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-007-060-58.5-081724-FM-R	53.5-58.5	-	-	-	-	-
MW-007-110	CACMW-007-110-66.5-090624-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-007-110-71.75-090624-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-007-110-77-090624-FM-R	72-77	-	-	-	-	-
	CACMW-007-110-82.25-090624-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-007-110-87.5-081724-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-007-110-92.75-081724-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-007-110-98-081724-FM-R	93-98	-	-	-	-	-
	CACMW-007-110-103.25-081724-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-007-110-108.5-081724-FM-R	103.5-108.5	-	-	-	-	-
MW-007-160	CACMW-007-160-116.5-090624-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-007-160-121.75-090624-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-007-160-127-090624-FM-R	122-127	-	-	-	-	-
	CACMW-007-160-132.25-090624-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-007-160-137.5-081724-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-007-160-142.75-081724-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-007-160-148-081724-FM-R	143-148	-	-	-	-	-
	CACMW-007-160-153.25-081724-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-007-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-
MW-008-060	CACMW-008-060-16.5-090624-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-008-060-21.75-090624-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-008-060-27-090624-FM-R	22-27	-	-	-	-	-
	CACMW-008-060-32.25-090624-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-008-060-37.5-081724-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-008-060-42.75-081724-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-008-060-48-081724-FM-R	43-48	-	-	-	-	-
	CACMW-008-060-53.25-081724-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-008-060-58.5-081724-FM-R	53.5-58.5	-	-	-	-	-
MW-008-110	CACMW-008-110-66.5-090624-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-008-110-71.75-090624-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-008-110-77-090624-FM-R	72-77	-	-	-	-	-
	CACMW-008-110-82.25-090624-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-008-110-87.5-081724-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-008-110-92.75-081724-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-008-110-98-081724-FM-R	93-98	-	-	-	-	-
	CACMW-008-110-103.25-081724-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-008-110-108.5-081724-FM-R	103.5-108.5	-	-	-	-	-
MW-008-160	CACMW-008-160-116.5-090624-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-008-160-121.75-090624-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-008-160-127-090624-FM-R	122-127	-	-	-	-	-
	CACMW-008-160-132.25-090624-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-008-160-137.5-081724-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-008-160-142.75-081724-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-008-160-148-081724-FM-R	143-148	-	-	-	-	-
	CACMW-008-160-153.25-081724-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-008-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-
Field Duplicate	FD-1-081624-FM-R		-	-	-	-	-
	FD-2-081724-FM-R		-	-	-	-	-
	FD-3-081724-FM-R		-	-	-	-	-
	FD-4-090424-FM-R		-	-	-	-	-
	FD-5-090424-FM-R		-	-	-	-	-
	FD-6-090524-FM-R		-	-	-	-	-
	FD-7-090524-FM-R		-	-	-	-	-
	FD-8-090524-FM-R		-	-	-	-	-
	FD-09-090624-FM-R		-	-	-	-	-
	FD-10-090624-FM-R		-	-	-	-	-

Table2. Summary of flux average contaminant concentration (continued)

Well ID	SAMPLE_ID for PFAS	Depth intervals for PFAS (ft)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ng/L)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ng/L)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ng/L)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ng/L)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ng/L)
MW-007-060	CACMW-007-060-16.5-090624-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-007-060-21.75-090624-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-007-060-27-090624-FM-R	22-27	-	-	-	-	-
	CACMW-007-060-32.25-090624-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-007-060-37.5-081724-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-007-060-42.75-081724-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-007-060-48-081724-FM-R	43-48	-	-	-	-	-
	CACMW-007-060-53.25-081724-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-007-060-58.5-081724-FM-R	53.5-58.5	-	-	-	-	-
MW-007-110	CACMW-007-110-66.5-090624-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-007-110-71.75-090624-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-007-110-77-090624-FM-R	72-77	-	-	-	-	-
	CACMW-007-110-82.25-090624-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-007-110-87.5-081724-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-007-110-92.75-081724-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-007-110-98-081724-FM-R	93-98	-	-	-	-	-
	CACMW-007-110-103.25-081724-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-007-110-108.5-081724-FM-R	103.5-108.5	-	-	-	-	-
MW-007-160	CACMW-007-160-116.5-090624-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-007-160-121.75-090624-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-007-160-127-090624-FM-R	122-127	-	-	-	-	-
	CACMW-007-160-132.25-090624-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-007-160-137.5-081724-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-007-160-142.75-081724-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-007-160-148-081724-FM-R	143-148	-	-	-	-	-
	CACMW-007-160-153.25-081724-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-007-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-
MW-008-060	CACMW-008-060-16.5-090624-FM-R	11.5-16.5	-	-	-	-	-
	CACMW-008-060-21.75-090624-FM-R	16.75-21.75	-	-	-	-	-
	CACMW-008-060-27-090624-FM-R	22-27	-	-	-	-	-
	CACMW-008-060-32.25-090624-FM-R	27.25-32.25	-	-	-	-	-
	CACMW-008-060-37.5-081724-FM-R	32.5-37.5	-	-	-	-	-
	CACMW-008-060-42.75-081724-FM-R	37.75-42.75	-	-	-	-	-
	CACMW-008-060-48-081724-FM-R	43-48	-	-	-	-	-
	CACMW-008-060-53.25-081724-FM-R	48.25-53.25	-	-	-	-	-
	CACMW-008-060-58.5-081724-FM-R	53.5-58.5	-	-	-	-	-
MW-008-110	CACMW-008-110-66.5-090624-FM-R	61.5-66.5	-	-	-	-	-
	CACMW-008-110-71.75-090624-FM-R	66.75-71.75	-	-	-	-	-
	CACMW-008-110-77-090624-FM-R	72-77	-	-	-	-	-
	CACMW-008-110-82.25-090624-FM-R	77.25-82.25	-	-	-	-	-
	CACMW-008-110-87.5-081724-FM-R	82.5-87.5	-	-	-	-	-
	CACMW-008-110-92.75-081724-FM-R	87.75-92.75	-	-	-	-	-
	CACMW-008-110-98-081724-FM-R	93-98	-	-	-	-	-
	CACMW-008-110-103.25-081724-FM-R	98.25-103.25	-	-	-	-	-
	CACMW-008-110-108.5-081724-FM-R	103.5-108.5	-	-	-	-	-
MW-008-160	CACMW-008-160-116.5-090624-FM-R	111.5-116.5	-	-	-	-	-
	CACMW-008-160-121.75-090624-FM-R	116.75-121.75	-	-	-	-	-
	CACMW-008-160-127-090624-FM-R	122-127	-	-	-	-	-
	CACMW-008-160-132.25-090624-FM-R	127.25-132.25	-	-	-	-	-
	CACMW-008-160-137.5-081724-FM-R	132.5-137.5	-	-	-	-	-
	CACMW-008-160-142.75-081724-FM-R	137.75-142.75	-	-	-	-	-
	CACMW-008-160-148-081724-FM-R	143-148	-	-	-	-	-
	CACMW-008-160-153.25-081724-FM-R	148.25-153.25	-	-	-	-	-
	CACMW-008-160-158.5-081724-FM-R	153.5-158.5	-	-	-	-	-
Field Duplicate	FD-1-081624-FM-R		-	-	-	-	-
	FD-2-081724-FM-R		-	-	-	-	-
	FD-3-081724-FM-R		-	-	-	-	-
	FD-4-090424-FM-R		-	-	-	-	-
	FD-5-090424-FM-R		-	-	-	-	-
	FD-6-090524-FM-R		-	-	-	-	-
	FD-7-090524-FM-R		-	-	-	-	-
	FD-8-090524-FM-R		-	-	-	-	-
	FD-09-090624-FM-R		-	-	-	-	-
	FD-10-090624-FM-R		-	-	-	-	-

Table 3. Mass discharge per unit width for aquifer of each well

Well	Darcy Velocity (cm/day)	Perfluorobutanoic acid (PFBA) (ug/m/day)	Perfluoropentanoic acid (PFPeA) (ug/m/day)	Perfluorohexanoic acid (PFHxA) (ug/m/day)	Perfluoroheptanoic acid (PFHpA) (ug/m/day)	Perfluorooctanoic acid (PFOA) (ug/m/day)
MW-001-060	5.3	2.2	50.2	117.9	50.1	132.8
MW-001-110	6.4	6.5	71.1	178.5	73.4	212.8
MW-001-160	13.2	3.8	50.8	119.0	56.6	176.2
MW-002-060	9.5	4.7	51.2	121.1	50.5	147.2
MW-002-110	6.0	2.5	38.3	92.5	37.2	116.9
MW-002-160	8.8	2.3	33.5	75.6	30.9	89.8
MW-003-060	7.5	6.3	60.0	133.9	60.7	160.0
MW-003-110	7.0	5.0	49.6	121.7	50.6	154.5
MW-003-160	6.9	1.4	19.8	37.7	17.6	44.9
MW-004-060	7.3	4.4	59.1	134.0	61.3	169.6
MW-004-110	7.7	74.1	68.8	182.0	70.2	134.9
MW-004-160	6.9	-	27.6	60.1	23.4	67.7
MW-005-060	10.6	4.8	60.4	147.2	61.8	184.2
MW-005-110	13.5	9.3	92.1	248.6	102.4	343.9
MW-005-160	8.1	-	12.7	27.2	10.9	29.1
MW-006-060	11.9	9.9	91.5	217.3	103.1	274.7
MW-006-110	13.1	5.7	67.1	162.6	66.5	196.9
MW-006-160	10.0	-	14.1	32.8	14.0	34.5
MW-007-060	10.0	8.1	60.1	140.5	63.6	176.8
MW-007-110	13.1	6.7	65.0	156.2	63.6	194.2
MW-007-160	12.4	-	12.8	28.2	10.7	31.8
MW-008-060	12.9	10.3	100.1	230.5	105.4	294.8
MW-008-110	11.2	7.8	64.7	161.5	64.6	203.4
MW-008-160	10.6	-	12.7	35.8	13.7	37.4

Table 3. Mass discharge per unit width for aquifer of each well (continued)

Well	Darcy Velocity (cm/day)	Perfluorononanoic acid (PFNA) (ug/m/day)	Perfluorodecanoic acid (PFDA) (ug/m/day)	Perfluoroundecanoic acid (PFUdA) (ug/m/day)	Perfluorododecanoic acid (PFDoA) (ug/m/day)	Perfluorotridecanoic acid (PFTrDA) (ug/m/day)
MW-001-060	5.3	16.6	3.6	-	-	-
MW-001-110	6.4	26.7	6.9	-	-	-
MW-001-160	13.2	12.7	3.5	-	-	-
MW-002-060	9.5	17.1	4.3	-	-	-
MW-002-110	6.0	10.4	3.1	-	0.14	-
MW-002-160	8.8	6.4	1.2	-	0.43	-
MW-003-060	7.5	20.7	5.2	-	0.44	-
MW-003-110	7.0	18.4	4.8	-	0.46	-
MW-003-160	6.9	2.3	0.8	-	0.35	-
MW-004-060	7.3	21.7	4.7	-	-	-
MW-004-110	7.7	15.8	3.6	-	-	-
MW-004-160	6.9	5.4	0.7	-	-	-
MW-005-060	10.6	22.6	6.0	-	-	-
MW-005-110	13.5	39.9	11.0	-	-	-
MW-005-160	8.1	1.6	-	-	-	-
MW-006-060	11.9	31.8	8.1	-	-	-
MW-006-110	13.1	21.1	7.0	-	-	-
MW-006-160	10.0	2.0	0.4	-	-	-
MW-007-060	10.0	20.9	4.8	-	-	-
MW-007-110	13.1	21.4	5.7	-	-	-
MW-007-160	12.4	2.3	0.7	-	-	-
MW-008-060	12.9	38.0	8.7	-	-	-
MW-008-110	11.2	23.2	4.7	-	-	-
MW-008-160	10.6	2.5	0.6	-	-	-

Table 3. Mass discharge per unit width for aquifer of each well(continued)

Well	Darcy Velocity (cm/day)	Perfluorotetradecanoic acid (PFTeDA) (ug/m/day)	Perfluorobutane sulfonic acid (PFBS) (ug/m/day)	Perfluoropentane sulfonate (PFPeS) (ug/m/day)	Perfluorohexane sulfonic acid (PFHxS) (ug/m/day)	Perfluoroheptane sulfonic acid (PFHpS) (ug/m/day)
MW-001-060	5.3	-	20.2	29.1	406.2	24.1
MW-001-110	6.4	-	33.8	53.3	672.4	44.5
MW-001-160	13.2	-	42.1	66.4	664.0	48.0
MW-002-060	9.5	-	20.0	32.3	414.5	27.2
MW-002-110	6.0	-	19.5	28.1	360.3	25.0
MW-002-160	8.8	0.1	27.2	40.1	378.6	26.3
MW-003-060	7.5	0.1	22.5	33.4	496.6	32.7
MW-003-110	7.0	0.1	22.8	36.0	476.1	38.0
MW-003-160	6.9	0.1	13.3	20.3	180.8	10.1
MW-004-060	7.3	-	23.8	36.4	518.2	31.7
MW-004-110	7.7	-	291.6	47.1	1813.6	27.4
MW-004-160	6.9	-	20.4	29.7	286.8	19.6
MW-005-060	10.6	-	25.8	41.2	579.1	36.5
MW-005-110	13.5	-	41.4	69.4	1011.1	66.8
MW-005-160	8.1	-	10.0	13.2	121.5	6.9
MW-006-060	11.9	-	36.7	52.8	804.5	45.6
MW-006-110	13.1	-	32.3	44.5	624.9	39.2
MW-006-160	10.0	-	13.2	16.1	141.8	7.5
MW-007-060	10.0	-	28.3	35.7	528.0	29.2
MW-007-110	13.1	-	32.4	46.5	617.6	39.2
MW-007-160	12.4	-	10.3	12.7	118.2	6.8
MW-008-060	12.9	-	38.8	55.3	822.8	49.0
MW-008-110	11.2	-	29.4	45.6	606.7	39.1
MW-008-160	10.6	-	12.5	16.8	155.4	9.9

Table 3. Mass discharge per unit width for aquifer of each well(continued)

Well	Darcy Velocity (cm/day)	Perfluorooctane sulfonic acid (PFOS) (ug/m/day)	Perfluorononane sulfonic acid (PFNS) (ug/m/day)	Perfluorodecane sulfonic acid (PFDS) (ug/m/day)	Perfluorododecane sulfonic acid (PFDOS) (ug/m/day)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ug/m/day)
MW-001-060	5.3	1974.1	0.6	-	-	-
MW-001-110	6.4	3563.4	3.3	0.8	-	-
MW-001-160	13.2	2378.7	-	-	-	2.3
MW-002-060	9.5	2245.6	1.4	0.4	-	0.8
MW-002-110	6.0	2059.4	0.7	-	-	0.7
MW-002-160	8.8	1312.5	0.2	-	-	1.7
MW-003-060	7.5	2318.1	2.0	0.1	-	0.8
MW-003-110	7.0	2509.0	2.6	0.2	-	1.3
MW-003-160	6.9	539.6	0.1	-	-	0.9
MW-004-060	7.3	2568.8	1.4	-	-	-
MW-004-110	7.7	2207.6	2.2	100.4	-	-
MW-004-160	6.9	992.4	-	-	-	-
MW-005-060	10.6	2985.8	2.3	-	-	-
MW-005-110	13.5	5382.7	5.0	-	-	-
MW-005-160	8.1	419.6	-	-	-	-
MW-006-060	11.9	3871.7	3.3	-	-	-
MW-006-110	13.1	3370.6	2.9	-	-	-
MW-006-160	10.0	464.1	-	-	-	-
MW-007-060	10.0	2553.3	1.5	-	-	-
MW-007-110	13.1	3426.9	2.5	-	-	-
MW-007-160	12.4	451.8	-	-	-	-
MW-008-060	12.9	3913.3	3.3	0.4	-	-
MW-008-110	11.2	3302.1	2.7	0.4	-	-
MW-008-160	10.6	583.2	-	-	-	-

Table 3. Mass discharge per unit width for aquifer of each well(continued)

Well	Darcy Velocity (cm/day)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ug/m/day)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ug/m/day)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (ug/m/day)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ug/m/day)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ug/m/day)
MW-001-060	5.3	229.5	56.2	-	23.6	-
MW-001-110	6.4	339.6	85.5	-	39.7	-
MW-001-160	13.2	424.9	62.2	-	21.2	-
MW-002-060	9.5	190.9	56.0	-	23.7	-
MW-002-110	6.0	135.4	46.3	-	19.1	-
MW-002-160	8.8	147.5	33.4	-	11.3	-
MW-003-060	7.5	199.5	71.2	-	26.2	-
MW-003-110	7.0	186.2	62.0	-	28.9	-
MW-003-160	6.9	109.0	14.5	-	5.7	-
MW-004-060	7.3	248.6	70.8	-	29.7	-
MW-004-110	7.7	224.3	50.7	-	39.1	-
MW-004-160	6.9	189.5	25.8	-	7.3	-
MW-005-060	10.6	286.6	73.9	-	33.5	-
MW-005-110	13.5	460.1	126.6	-	65.8	-
MW-005-160	8.1	54.2	9.0	-	0.9	-
MW-006-060	11.9	397.6	101.2	-	45.5	-
MW-006-110	13.1	262.8	74.3	-	36.0	-
MW-006-160	10.0	88.6	8.5	-	1.2	-
MW-007-060	10.0	525.6	72.9	-	30.4	-
MW-007-110	13.1	287.1	74.6	-	36.9	-
MW-007-160	12.4	75.2	7.4	-	1.5	-
MW-008-060	12.9	439.3	122.5	-	49.5	-
MW-008-110	11.2	263.9	74.7	-	35.8	-
MW-008-160	10.6	120.1	7.9	-	3.4	-

Table 3. Mass discharge per unit width for aquifer of each well(continued)

Well	Darcy Velocity (cm/day)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ug/m/day)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ug/m/day)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ug/m/day)	Perfluorooctane sulfonamide (PFOSA) (ug/m/day)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ug/m/day)
MW-001-060	5.3	-	21.6	-	17.2	-
MW-001-110	6.4	-	35.8	-	27.9	-
MW-001-160	13.2	-	14.1	-	22.3	-
MW-002-060	9.5	0.1	25.7	-	17.9	-
MW-002-110	6.0	-	17.7	-	12.6	-
MW-002-160	8.8	-	6.4	-	7.0	-
MW-003-060	7.5	0.1	25.2	-	19.3	-
MW-003-110	7.0	0.1	24.9	-	17.0	-
MW-003-160	6.9	-	3.3	-	5.2	-
MW-004-060	7.3	0.2	30.1	-	21.3	-
MW-004-110	7.7	-	33.8	-	14.4	-
MW-004-160	6.9	-	6.7	-	6.7	-
MW-005-060	10.6	-	33.9	-	21.2	-
MW-005-110	13.5	-	65.2	-	39.9	-
MW-005-160	8.1	-	0.4	-	2.3	-
MW-006-060	11.9	0.2	49.6	2.1	34.5	-
MW-006-110	13.1	-	35.2	-	23.0	-
MW-006-160	10.0	-	-	-	2.7	-
MW-007-060	10.0	-	33.4	-	21.6	-
MW-007-110	13.1	-	38.3	-	22.2	-
MW-007-160	12.4	-	1.6	-	1.8	-
MW-008-060	12.9	0.8	53.2	4.8	36.0	-
MW-008-110	11.2	-	35.2	-	22.5	-
MW-008-160	10.6	-	0.9	-	2.8	-

Table 3. Mass discharge per unit width for aquifer of each well(continued)

Well	Darcy Velocity (cm/day)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA) (ug/m/day)	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA) (ug/m/day)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ug/m/day)	Perfluoro-3-methoxypropanoic aci (PFMPA) (ug/m/day)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ug/m/day)
MW-001-060	5.3	-	-	-	-	-
MW-001-110	6.4	-	-	-	-	-
MW-001-160	13.2	-	-	-	-	-
MW-002-060	9.5	-	-	-	-	-
MW-002-110	6.0	-	-	-	-	-
MW-002-160	8.8	-	-	-	-	-
MW-003-060	7.5	-	-	-	-	-
MW-003-110	7.0	-	-	-	-	-
MW-003-160	6.9	-	-	-	-	-
MW-004-060	7.3	-	-	-	-	-
MW-004-110	7.7	-	-	-	-	-
MW-004-160	6.9	-	-	-	-	-
MW-005-060	10.6	-	-	-	-	-
MW-005-110	13.5	-	-	-	-	-
MW-005-160	8.1	-	-	-	-	-
MW-006-060	11.9	-	-	-	-	-
MW-006-110	13.1	-	-	-	-	-
MW-006-160	10.0	-	-	-	-	-
MW-007-060	10.0	-	-	-	-	-
MW-007-110	13.1	-	-	-	-	-
MW-007-160	12.4	-	-	-	-	-
MW-008-060	12.9	-	-	-	-	-
MW-008-110	11.2	-	-	-	-	-
MW-008-160	10.6	-	-	-	-	-

Table 3. Mass discharge per unit width for aquifer of each well(continued)

Well	Darcy Velocity (cm/day)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ug/m/day)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ug/m/day)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ug/m/day)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ug/m/day)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ug/m/day)
MW-001-060	5.3	-	-	-	-	-
MW-001-110	6.4	-	-	-	-	-
MW-001-160	13.2	-	-	-	-	-
MW-002-060	9.5	-	-	-	6.9	-
MW-002-110	6.0	-	-	-	-	-
MW-002-160	8.8	-	-	-	-	-
MW-003-060	7.5	-	-	-	5.3	-
MW-003-110	7.0	-	-	-	7.6	-
MW-003-160	6.9	-	-	-	-	-
MW-004-060	7.3	-	-	-	-	-
MW-004-110	7.7	-	-	-	-	-
MW-004-160	6.9	-	-	-	-	-
MW-005-060	10.6	-	-	-	-	-
MW-005-110	13.5	-	-	-	-	-
MW-005-160	8.1	-	-	-	-	-
MW-006-060	11.9	-	-	-	-	-
MW-006-110	13.1	-	-	-	-	-
MW-006-160	10.0	-	-	-	-	-
MW-007-060	10.0	-	-	-	-	-
MW-007-110	13.1	-	-	-	-	-
MW-007-160	12.4	-	-	-	-	-
MW-008-060	12.9	-	-	-	-	-
MW-008-110	11.2	-	-	-	-	-
MW-008-160	10.6	-	-	-	-	-

Table 4. Well average values of mass flux based on PFMs

Well	Darcy Velocity (cm/day)	Perfluorobutanoic acid (PFBA) (ug/m^2/day)	Perfluoropentanoic acid (PFPeA) (ug/m^2/day)	Perfluorohexanoic acid (PFHxA) (ug/m^2/day)	Perfluoroheptanoic acid (PFHpA) (ug/m^2/day)	Perfluorooctanoic acid (PFOA) (ug/m^2/day)
MW-001-060	5.3	0.16	3.66	8.59	3.65	9.68
MW-001-110	6.4	0.47	5.18	13.02	5.35	15.52
MW-001-160	13.2	0.28	3.70	8.68	4.12	12.84
MW-002-060	9.5	0.34	3.74	8.83	3.68	10.73
MW-002-110	6.0	0.19	2.79	6.74	2.71	8.52
MW-002-160	8.8	0.17	2.45	5.51	2.25	6.55
MW-003-060	7.5	0.46	4.38	9.76	4.42	11.66
MW-003-110	7.0	0.36	3.62	8.87	3.69	11.26
MW-003-160	6.9	0.10	1.44	2.75	1.28	3.27
MW-004-060	7.3	0.32	4.31	9.77	4.47	12.37
MW-004-110	7.7	5.40	5.02	13.27	3.85	9.83
MW-004-160	6.9	<2.1	2.02	4.38	1.71	4.94
MW-005-060	10.6	0.35	4.40	10.73	4.50	13.43
MW-005-110	13.5	0.68	6.71	18.13	7.47	25.08
MW-005-160	8.1	<2.1	0.93	1.99	0.80	2.12
MW-006-060	11.9	0.72	6.67	15.84	7.52	20.03
MW-006-110	13.1	0.42	4.89	11.86	4.85	14.35
MW-006-160	10.0	<2.2	1.03	2.39	1.02	2.52
MW-007-060	10.0	0.59	4.38	10.25	4.64	12.89
MW-007-110	13.1	0.49	4.74	11.39	4.64	14.16
MW-007-160	12.4	<2.1	0.93	2.06	0.78	2.32
MW-008-060	12.9	0.75	7.30	16.80	7.69	21.49
MW-008-110	11.2	0.57	4.72	11.77	4.71	14.83
MW-008-160	10.6	<2.1	0.93	2.61	1.00	2.73

Table 4. Well average values of mass flux based on PFMs (continued)

Well	Darcy Velocity (cm/day)	Perfluorononanoic acid (PFNA) (ug/m^2/day)	Perfluorodecanoic acid (PFDA) (ug/m^2/day)	Perfluoroundecanoic acid (PFUdA) (ug/m^2/day)	Perfluorododecanoic acid (PFDoA) (ug/m^2/day)	Perfluorotridecanoic acid (PFTrDA) (ug/m^2/day)
MW-001-060	5.3	1.21	0.26	<3.1	<0.6	<1.8
MW-001-110	6.4	1.94	0.50	<3.2	<0.6	<1.8
MW-001-160	13.2	0.93	0.26	<3.1	<0.5	<1.8
MW-002-060	9.5	1.24	0.31	<3.0	<0.5	<1.7
MW-002-110	6.0	0.76	0.22	<3.1	0.01	<1.8
MW-002-160	8.8	0.46	0.09	<3.1	0.03	<1.8
MW-003-060	7.5	1.51	0.38	<3.0	0.03	<1.7
MW-003-110	7.0	1.34	0.35	<3.0	0.03	<1.7
MW-003-160	6.9	0.17	0.06	<3.1	0.03	<1.8
MW-004-060	7.3	1.58	0.34	<3.1	<0.5	<1.8
MW-004-110	7.7	1.15	0.26	<3.0	<0.5	<1.7
MW-004-160	6.9	0.39	0.05	<3.1	<0.5	<1.8
MW-005-060	10.6	1.65	0.44	<3.0	<0.5	<1.7
MW-005-110	13.5	2.91	0.80	<3.0	<0.5	<1.7
MW-005-160	8.1	0.12	<0.5	<3.0	<0.5	<1.7
MW-006-060	11.9	2.32	0.59	<3.0	<0.5	<1.7
MW-006-110	13.1	1.54	0.51	<3.1	<0.5	<1.8
MW-006-160	10.0	0.15	0.03	<3.2	<0.5	<1.8
MW-007-060	10.0	1.52	0.35	<3.3	<0.5	<1.8
MW-007-110	13.1	1.56	0.41	<3.4	<0.5	<1.8
MW-007-160	12.4	0.17	0.05	<3.5	<0.5	<1.8
MW-008-060	12.9	2.77	0.63	<2.8	<0.5	<1.7
MW-008-110	11.2	1.69	0.34	<3.0	<0.5	<1.7
MW-008-160	10.6	0.18	0.04	<3.0	<0.5	<1.7

Table 4. Well average values of mass flux based on PFMs(continued)

Well	Darcy Velocity (cm/day)	Perfluorotetradecanoic acid (PFTeDA) (ug/m^2/day)	Perfluorobutane sulfonic acid (PFBS) (ug/m^2/day)	Perfluoropentane sulfonate (PFPeS) (ug/m^2/day)	Perfluorohexane sulfonic acid (PFHxS) (ug/m^2/day)	Perfluoroheptane sulfonic acid (PFHpS) (ug/m^2/day)
MW-001-060	5.3	<0.6	1.47	2.12	29.62	1.76
MW-001-110	6.4	<0.6	2.47	3.89	49.02	3.25
MW-001-160	13.2	<0.5	3.07	4.84	48.41	3.50
MW-002-060	9.5	<0.4	1.46	2.36	30.22	1.98
MW-002-110	6.0	<0.3	1.42	2.05	26.27	1.82
MW-002-160	8.8	0.01	1.98	2.92	27.60	1.92
MW-003-060	7.5	0.01	1.64	2.44	36.21	2.38
MW-003-110	7.0	0.01	1.66	2.62	34.71	2.77
MW-003-160	6.9	0.01	0.97	1.48	13.18	0.74
MW-004-060	7.3	<0.5	1.74	2.65	37.78	2.31
MW-004-110	7.7	<0.5	21.26	3.44	132.22	2.00
MW-004-160	6.9	<0.5	1.49	2.16	20.91	1.43
MW-005-060	10.6	<0.5	1.88	3.00	42.22	2.66
MW-005-110	13.5	<0.5	3.02	5.06	73.72	4.87
MW-005-160	8.1	<0.5	0.73	0.96	8.86	0.50
MW-006-060	11.9	<0.5	2.68	3.85	58.66	3.32
MW-006-110	13.1	<0.5	2.36	3.24	45.56	2.86
MW-006-160	10.0	<0.5	0.97	1.17	10.34	0.55
MW-007-060	10.0	<0.5	2.06	2.60	38.49	2.13
MW-007-110	13.1	<0.5	2.36	3.39	45.03	2.86
MW-007-160	12.4	<0.5	0.75	0.93	8.62	0.50
MW-008-060	12.9	<0.5	2.83	4.03	59.99	3.57
MW-008-110	11.2	<0.5	2.14	3.33	44.23	2.85
MW-008-160	10.6	<0.5	0.91	1.23	11.33	0.72

Table 4. Well average values of mass flux based on PFMs (continued)

Well	Darcy Velocity (cm/day)	Perfluorooctane sulfonic acid (PFOS) (ug/m^2/day)	Perfluorononane sulfonic acid (PFNS) (ug/m^2/day)	Perfluorodecane sulfonic acid (PFDS) (ug/m^2/day)	Perfluorododecane sulfonic acid (PFDOS) (ug/m^2/day)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ug/m^2/day)
MW-001-060	5.3	143.93	0.04	<0.5	<0.5	<2.1
MW-001-110	6.4	259.80	0.24	0.06	<0.5	<2.1
MW-001-160	13.2	173.42	<0.5	<0.5	<0.5	0.17
MW-002-060	9.5	163.72	0.10	0.03	<0.5	0.06
MW-002-110	6.0	150.14	0.05	<0.5	<0.4	0.05
MW-002-160	8.8	95.69	0.01	<0.3	<0.3	0.12
MW-003-060	7.5	169.00	0.15	0.01	<0.3	0.06
MW-003-110	7.0	182.93	0.19	0.01	<0.3	0.10
MW-003-160	6.9	39.34	0.01	<0.3	<0.3	0.07
MW-004-060	7.3	187.29	0.10	<0.5	<0.5	<2.0
MW-004-110	7.7	160.95	0.16	7.32	<0.5	<2.0
MW-004-160	6.9	72.35	<0.5	<0.5	<0.5	<2.0
MW-005-060	10.6	217.69	0.17	<0.5	<0.5	<2.0
MW-005-110	13.5	392.44	0.36	<0.5	<0.5	<2.0
MW-005-160	8.1	30.59	<0.5	<0.5	<0.5	<2.0
MW-006-060	11.9	282.28	0.24	<0.5	<0.5	<2.0
MW-006-110	13.1	245.74	0.21	<0.5	<0.5	<2.0
MW-006-160	10.0	33.83	<0.5	<0.5	<0.5	<2.0
MW-007-060	10.0	186.16	0.11	<0.5	<0.5	<2.0
MW-007-110	13.1	249.85	0.18	<0.5	<0.5	<2.0
MW-007-160	12.4	32.94	<0.5	<0.5	<0.5	<2.0
MW-008-060	12.9	285.31	0.24	0.03	<0.5	<2.0
MW-008-110	11.2	240.75	0.20	0.03	<0.5	<2.0
MW-008-160	10.6	42.52	<0.5	<0.5	<0.5	<2.0

Table 4. Well average values of mass flux based on PFMs(continued)

Well	Darcy Velocity (cm/day)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ug/m^2/day)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ug/m^2/day)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ug/m^2/day)
MW-001-060	5.3	16.73	4.10	<0.6	1.72	<5.5
MW-001-110	6.4	24.76	6.23	<0.6	2.89	<5.6
MW-001-160	13.2	30.98	4.54	<0.5	1.54	<5.4
MW-002-060	9.5	13.92	4.09	<0.5	1.72	<5.3
MW-002-110	6.0	9.87	3.37	<0.5	1.39	<5.4
MW-002-160	8.8	10.75	2.43	<0.5	0.82	<5.4
MW-003-060	7.5	14.55	5.19	<0.5	1.91	<5.2
MW-003-110	7.0	13.57	4.52	<0.5	2.11	<5.3
MW-003-160	6.9	7.95	1.06	<0.5	0.42	<5.5
MW-004-060	7.3	18.12	5.16	<0.5	2.17	<5.4
MW-004-110	7.7	16.36	3.69	<0.5	2.85	<5.3
MW-004-160	6.9	13.82	1.88	<0.5	0.53	<5.4
MW-005-060	10.6	20.89	5.39	<0.5	2.44	<5.3
MW-005-110	13.5	33.55	9.23	<0.5	4.80	<5.3
MW-005-160	8.1	3.95	0.66	<0.5	0.07	<5.3
MW-006-060	11.9	28.99	7.38	<0.5	3.32	<5.2
MW-006-110	13.1	19.16	5.42	<0.5	2.62	<5.4
MW-006-160	10.0	6.46	0.62	<0.5	0.09	<5.4
MW-007-060	10.0	38.32	5.32	<0.5	2.22	<5.4
MW-007-110	13.1	20.93	5.44	<0.5	2.69	<5.3
MW-007-160	12.4	5.48	0.54	<0.5	0.11	<5.4
MW-008-060	12.9	32.03	8.93	<0.5	3.61	<5.3
MW-008-110	11.2	19.24	5.45	<0.5	2.61	<5.3
MW-008-160	10.6	8.76	0.58	<0.5	0.25	<5.3

Table 4. Well average values of mass flux based on PFMs (continued)

Well	Darcy Velocity (cm/day)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ug/m^2/day)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ug/m^2/day)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ug/m^2/day)	Perfluorooctane sulfonamide (PFOSA) (ug/m^2/day)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ug/m^2/day)
MW-001-060	5.3	<0.3	1.58	<5.5	1.26	<5.2
MW-001-110	6.4	<0.3	2.61	<5.6	2.04	<5.3
MW-001-160	13.2	<0.3	1.03	<5.4	1.62	<5.1
MW-002-060	9.5	0.01	1.87	<5.3	1.31	<3.6
MW-002-110	6.0	<0.2	1.29	<5.4	0.92	<3.1
MW-002-160	8.8	<0.1	0.47	<5.4	0.51	<2.6
MW-003-060	7.5	0.01	1.84	<5.2	1.41	<2.6
MW-003-110	7.0	0.00	1.81	<5.3	1.24	<2.6
MW-003-160	6.9	<0.2	0.24	<5.0	0.38	<3.1
MW-004-060	7.3	0.01	2.19	<5.4	1.55	<5.1
MW-004-110	7.7	<0.3	2.46	<5.3	1.05	<5.1
MW-004-160	6.9	<0.3	0.49	<5.4	0.49	<5.1
MW-005-060	10.6	<0.3	2.47	<5.3	1.54	<5.1
MW-005-110	13.5	<0.3	4.75	<5.3	2.91	<5.1
MW-005-160	8.1	<0.3	0.03	<5.3	0.17	<5.1
MW-006-060	11.9	0.01	3.62	0.15	2.52	<5.0
MW-006-110	13.1	<0.3	2.56	<5.4	1.68	<5.1
MW-006-160	10.0	<0.3	0.54	<5.4	0.20	<5.1
MW-007-060	10.0	<0.3	2.44	<5.4	1.58	<5.1
MW-007-110	13.1	<0.3	2.79	<5.3	1.62	<5.1
MW-007-160	12.4	<0.3	0.12	<5.4	0.13	<5.1
MW-008-060	12.9	0.06	3.88	0.35	2.62	<5.0
MW-008-110	11.2	<0.3	2.57	<5.3	1.64	<5.1
MW-008-160	10.6	<0.3	0.07	<5.3	0.21	<5.1

Table 4. Well average values of mass flux based on PFMs(continued)

Well	Darcy Velocity (cm/day)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA) (ug/m^2/day)	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA) (ug/m^2/day)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ug/m^2/day)	Perfluoro-3-methoxypropanoic aci (PFMPA) (ug/m^2/day)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ug/m^2/day)
MW-001-060	5.3	<5.5	<5.5	<2.2	<2.2	<5.2
MW-001-110	6.4	<5.6	<5.6	<2.2	<2.2	<5.3
MW-001-160	13.2	<5.4	<5.4	<2.2	<2.2	<5.1
MW-002-060	9.5	<3.8	<3.8	<1.5	<1.5	<3.6
MW-002-110	6.0	<3.3	<3.3	<1.3	<1.3	<3.1
MW-002-160	8.8	<2.8	<2.8	<1.1	<1.1	<2.6
MW-003-060	7.5	<2.7	<2.7	<1.1	<1.1	<2.6
MW-003-110	7.0	<2.8	<2.8	<1.1	<1.1	<2.6
MW-003-160	6.9	<3.3	<3.3	<1.3	<1.3	<3.1
MW-004-060	7.3	<5.3	<5.3	<2.1	<2.1	<5.1
MW-004-110	7.7	<5.3	<5.3	<2.1	<2.1	<5.1
MW-004-160	6.9	<5.4	<5.4	<2.1	<2.1	<5.1
MW-005-060	10.6	<5.3	<5.3	<2.1	<2.1	<5.1
MW-005-110	13.5	<5.3	<5.3	<2.1	<2.1	<5.1
MW-005-160	8.1	<5.3	<5.3	<2.1	<2.1	<5.1
MW-006-060	11.9	<5.2	<5.2	<2.1	<2.1	<5.0
MW-006-110	13.1	<5.4	<5.4	<2.1	<2.1	<5.1
MW-006-160	10.0	<5.4	<5.4	<2.2	<2.2	<5.1
MW-007-060	10.0	<5.3	<5.3	<2.1	<2.1	<5.1
MW-007-110	13.1	<5.3	<5.3	<2.1	<2.1	<5.1
MW-007-160	12.4	<5.3	<5.3	<2.1	<2.1	<5.1
MW-008-060	12.9	<5.3	<5.3	<2.1	<2.1	<5.0
MW-008-110	11.2	<5.3	<5.3	<2.1	<2.1	<5.1
MW-008-160	10.6	<5.3	<5.3	<2.1	<2.1	<5.1

Table 4. Well average values of mass flux based on PFMs (continued)

Well	Darcy Velocity (cm/day)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ug/m^2/day)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ug/m^2/day)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ug/m^2/day)
MW-001-060	5.3	<5.2	<1.9	<5.5	<27.6	<27.6
MW-001-110	6.4	<5.2	<1.9	<5.6	<27.8	<27.8
MW-001-160	13.2	<5.1	<1.9	<5.4	<27.0	<27.0
MW-002-060	9.5	<3.5	<1.3	<3.8	0.50	<18.8
MW-002-110	6.0	<3.1	<1.1	<3.3	<16.4	<16.4
MW-002-160	8.8	<2.6	<1.0	<2.8	<13.8	<13.8
MW-003-060	7.5	<2.6	<1.0	<2.7	0.39	<13.7
MW-003-110	7.0	<2.6	<1.0	<2.8	0.56	<13.8
MW-003-160	6.9	<3.1	<1.2	<3.3	<16.6	<16.6
MW-004-060	7.3	<5.0	<1.9	<5.3	<26.8	<26.8
MW-004-110	7.7	<5.0	<1.9	<5.3	<26.6	<26.6
MW-004-160	6.9	<5.0	<1.9	<5.4	<26.8	<26.8
MW-005-060	10.6	<5.0	<1.9	<5.3	<26.7	<26.7
MW-005-110	13.5	<5.0	<1.9	<5.3	<26.6	<26.6
MW-005-160	8.1	<5.0	<1.9	<5.3	<26.7	<26.7
MW-006-060	11.9	<4.9	<1.8	<5.2	<26.1	<26.1
MW-006-110	13.1	<5.0	<1.9	<5.4	<26.8	<26.8
MW-006-160	10.0	<5.0	<1.9	<5.4	<26.8	<26.8
MW-007-060	10.0	<5.0	<1.9	<5.3	<26.6	<26.6
MW-007-110	13.1	<5.0	<1.9	<5.3	<26.6	<26.6
MW-007-160	12.4	<5.0	<1.9	<5.3	<26.7	<26.7
MW-008-060	12.9	<4.9	<1.9	<5.3	<26.2	<26.2
MW-008-110	11.2	<5.0	<1.9	<5.3	<26.6	<26.6
MW-008-160	10.6	<5.0	<1.9	<5.3	<26.7	<26.7

Table 5. Well flux average PFAS concentrations based on PFMs

Well	Darcy Velocity (cm/day)	Perfluorobutanoic acid (PFBA) (ng/L)	Perfluoropentanoic acid (PFPeA) (ng/L)	Perfluorohexanoic acid (PFHxA) (ng/L)	Perfluoroheptanoic acid (PFHpA) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MW-001-060	5.3	4.2	80.1	190.5	80.0	214.4
MW-001-110	6.4	6.0	89.4	222.8	90.7	266.3
MW-001-160	13.2	1.7	22.7	62.2	29.0	85.8
MW-002-060	9.5	2.8	37.5	88.6	37.4	107.8
MW-002-110	6.0	2.1	60.5	149.4	60.4	182.0
MW-002-160	8.8	1.8	33.4	74.7	30.5	85.8
MW-003-060	7.5	6.1	65.2	143.1	66.8	169.1
MW-003-110	7.0	4.1	53.4	128.3	53.7	166.1
MW-003-160	6.9	1.2	24.0	44.9	21.6	51.8
MW-004-060	7.3	3.4	63.5	136.1	61.3	162.2
MW-004-110	7.7	90.2	71.8	188.4	51.7	123.5
MW-004-160	6.9	-	32.3	69.6	27.1	78.7
MW-005-060	10.6	2.3	48.8	114.9	47.8	144.4
MW-005-110	13.5	4.4	46.9	124.8	51.3	170.3
MW-005-160	8.1	-	12.0	25.8	10.2	27.2
MW-006-060	11.9	5.3	52.3	123.3	58.7	154.3
MW-006-110	13.1	3.4	39.6	94.4	39.0	116.5
MW-006-160	10.0	-	10.0	29.4	12.6	30.1
MW-007-060	10.0	7.0	66.0	137.9	62.2	181.9
MW-007-110	13.1	3.7	44.8	106.9	43.8	135.1
MW-007-160	12.4	-	12.2	26.0	9.5	30.9
MW-008-060	12.9	3.7	53.9	114.2	52.1	143.7
MW-008-110	11.2	9.6	60.9	148.4	59.3	189.2
MW-008-160	10.6	-	26.6	59.7	24.0	60.3

Table 5. Well flux average PFAS concentrations based on PFMs(continued)

Well	Darcy Velocity (cm/day)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorodecanoic acid (PFDA) (ng/L)	Perfluoroundecanoic acid (PFUdA) (ng/L)	Perfluorododecanoic acid (PFDoA) (ng/L)	Perfluorotridecanoic acid (PFTrDA) (ng/L)
MW-001-060	5.3	27.0	5.2	-	-	-
MW-001-110	6.4	33.5	8.3	-	-	-
MW-001-160	13.2	6.3	1.9	-	-	-
MW-002-060	9.5	12.7	3.3	-	-	-
MW-002-110	6.0	18.7	3.6	-	0.1	-
MW-002-160	8.8	6.8	0.9	-	0.3	-
MW-003-060	7.5	22.9	5.9	-	0.4	-
MW-003-110	7.0	19.3	5.4	-	0.4	-
MW-003-160	6.9	3.2	0.6	-	0.3	-
MW-004-060	7.3	21.8	3.7	-	-	-
MW-004-110	7.7	14.8	2.8	-	-	-
MW-004-160	6.9	6.4	1.2	-	-	-
MW-005-060	10.6	17.1	4.9	-	-	-
MW-005-110	13.5	19.6	5.4	-	-	-
MW-005-160	8.1	1.4	-	-	-	-
MW-006-060	11.9	17.8	4.5	-	-	-
MW-006-110	13.1	12.3	4.2	-	-	-
MW-006-160	10.0	1.5	0.3	-	-	-
MW-007-060	10.0	20.2	4.0	-	-	-
MW-007-110	13.1	15.5	3.6	-	-	-
MW-007-160	12.4	1.9	0.3	-	-	-
MW-008-060	12.9	17.9	3.8	-	-	-
MW-008-110	11.2	21.2	5.2	-	-	-
MW-008-160	10.6	4.6	0.3	-	-	-

Table 5. Well flux average PFAS concentrations based on PFMs(continued)

Well	Darcy Velocity (cm/day)	Perfluorotetradecanoic acid (PFTeDA) (ng/L)	Perfluorobutane sulfonic acid (PFBS) (ng/L)	Perfluoropentane sulfonate (PFPeS) (ng/L)	Perfluorohexane sulfonic acid (PFHxS) (ng/L)	Perfluoroheptane sulfonic acid (PFHpS) (ng/L)
MW-001-060	5.3	-	32.9	47.1	659.2	39.0
MW-001-110	6.4	-	42.3	65.6	832.4	55.9
MW-001-160	13.2	-	21.5	32.9	328.6	22.4
MW-002-060	9.5	-	14.8	23.6	305.2	19.9
MW-002-110	6.0	-	30.0	41.6	566.5	38.2
MW-002-160	8.8	0.1	26.7	39.3	367.9	25.7
MW-003-060	7.5	0.1	24.1	34.8	518.2	34.0
MW-003-110	7.0	0.1	24.3	38.1	505.4	38.1
MW-003-160	6.9	0.1	15.9	24.2	214.5	11.8
MW-004-060	7.3	-	24.3	36.8	506.5	29.0
MW-004-110	7.7	-	353.7	48.3	2100.5	24.8
MW-004-160	6.9	-	23.4	33.9	328.7	22.8
MW-005-060	10.6	-	20.5	32.4	456.4	29.0
MW-005-110	13.5	-	20.8	34.6	503.4	33.0
MW-005-160	8.1	-	9.3	12.3	112.6	6.9
MW-006-060	11.9	-	20.8	30.1	453.0	25.5
MW-006-110	13.1	-	18.8	26.0	367.3	23.2
MW-006-160	10.0	-	11.7	14.1	122.5	7.2
MW-007-060	10.0	-	28.2	36.2	497.1	26.3
MW-007-110	13.1	-	21.5	31.9	419.8	27.8
MW-007-160	12.4	-	9.0	12.2	109.0	6.7
MW-008-060	12.9	-	19.1	26.8	392.0	23.6
MW-008-110	11.2	-	27.1	41.2	555.4	35.6
MW-008-160	10.6	-	20.6	27.4	252.0	15.9

Table 5. Well flux average PFAS concentrations based on PFMs(continued)

Well	Darcy Velocity (cm/day)	Perfluorooctane sulfonic acid (PFOS) (ng/L)	Perfluorononane sulfonic acid (PFNS) (ng/L)	Perfluorodecane sulfonic acid (PFDS) (ng/L)	Perfluorododecane sulfonic acid (PFDOS) (ng/L)	4:2 Fluorotelomer sulfonate (4:2 FTS) (ng/L)
MW-001-060	5.3	3202.8	0.9	-	-	-
MW-001-110	6.4	4424.8	3.9	0.9	-	-
MW-001-160	13.2	1148.8	-	-	-	1.0
MW-002-060	9.5	1642.3	1.0	0.3	-	0.5
MW-002-110	6.0	3167.8	0.8	-	-	0.5
MW-002-160	8.8	1286.0	0.1	-	-	1.3
MW-003-060	7.5	2430.2	1.8	0.1	-	0.7
MW-003-110	7.0	2630.8	2.5	0.1	-	1.1
MW-003-160	6.9	623.2	0.1	-	-	0.8
MW-004-060	7.3	2447.5	1.1	-	-	-
MW-004-110	7.7	1979.0	1.7	119.1	-	-
MW-004-160	6.9	1160.3	-	-	-	-
MW-005-060	10.6	2348.3	1.3	-	-	-
MW-005-110	13.5	2669.0	2.4	-	-	-
MW-005-160	8.1	397.1	-	-	-	-
MW-006-060	11.9	2157.8	1.8	-	-	-
MW-006-110	13.1	1984.5	1.7	-	-	-
MW-006-160	10.0	409.6	-	-	-	-
MW-007-060	10.0	2262.0	0.7	-	-	-
MW-007-110	13.1	2301.8	1.9	-	-	-
MW-007-160	12.4	427.3	-	-	-	-
MW-008-060	12.9	1891.4	1.2	0.1	-	-
MW-008-110	11.2	2988.4	1.9	0.2	-	-
MW-008-160	10.6	1009.8	-	-	-	-

Table 5. Well flux average PFAS concentrations based on PFMs(continued)

Well	Darcy Velocity (cm/day)	6:2 Fluorotelomer sulfonic acid (6:2 FTSA) (ng/L)	8:2 Fluorotelomer sulfonic acid (8:2 FTSA) (ng/L)	N-Ethyl perfluorooctane sulfonamide (N-EtFOSA) (ng/L)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) (ng/L)	N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE) (ng/L)
MW-001-060	5.3	383.1	89.5	-	39.4	-
MW-001-110	6.4	426.6	104.2	-	47.6	-
MW-001-160	13.2	206.1	30.5	-	9.0	-
MW-002-060	9.5	137.1	40.4	-	17.3	-
MW-002-110	6.0	250.1	77.4	-	31.6	-
MW-002-160	8.8	145.6	32.7	-	11.0	-
MW-003-060	7.5	227.0	77.2	-	26.7	-
MW-003-110	7.0	216.5	65.4	-	30.1	-
MW-003-160	6.9	139.5	14.5	-	6.3	-
MW-004-060	7.3	200.9	65.9	-	29.6	-
MW-004-110	7.7	203.4	46.4	-	40.2	-
MW-004-160	6.9	217.1	29.4	-	8.4	-
MW-005-060	10.6	237.6	55.4	-	26.4	-
MW-005-110	13.5	230.6	62.7	-	32.7	-
MW-005-160	8.1	49.1	7.9	-	0.9	-
MW-006-060	11.9	220.2	57.1	-	25.3	-
MW-006-110	13.1	144.9	43.2	-	20.9	-
MW-006-160	10.0	72.5	5.0	-	0.6	-
MW-007-060	10.0	614.9	72.5	-	27.9	-
MW-007-110	13.1	211.0	51.8	-	24.6	-
MW-007-160	12.4	50.7	7.2	-	2.3	-
MW-008-060	12.9	203.2	58.0	-	22.7	-
MW-008-110	11.2	226.7	67.4	-	32.8	-
MW-008-160	10.6	199.7	4.3	-	6.6	-

Table 5. Well flux average PFAS concentrations based on PFMs(continued)

Well	Darcy Velocity (cm/day)	N-Methyl perfluorooctane sulfonamide (N-MeFOSA) (ng/L)	N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA) (ng/L)	N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE) (ng/L)	Perfluorooctane sulfonamide (PFOSA) (ng/L)	4,8-Dioxa-3H-perfluorononanoic acid (DONA) (ng/L)
MW-001-060	5.3	-	35.0	-	27.7	-
MW-001-110	6.4	-	43.1	-	34.5	-
MW-001-160	13.2	-	5.9	-	11.2	-
MW-002-060	9.5	0.1	18.5	-	13.2	-
MW-002-110	6.0	-	27.8	-	20.7	-
MW-002-160	8.8	-	6.5	-	5.8	-
MW-003-060	7.5	0.1	25.7	-	20.4	-
MW-003-110	7.0	0.0	25.9	-	18.2	-
MW-003-160	6.9	-	3.9	-	6.3	-
MW-004-060	7.3	0.1	28.8	-	20.5	-
MW-004-110	7.7	-	33.5	-	13.0	-
MW-004-160	6.9	-	7.9	-	7.5	-
MW-005-060	10.6	-	26.3	-	16.3	-
MW-005-110	13.5	-	32.3	-	19.7	-
MW-005-160	8.1	-	0.5	-	2.0	-
MW-006-060	11.9	0.1	27.1	1.2	19.3	-
MW-006-110	13.1	-	20.4	-	13.4	-
MW-006-160	10.0	-	-	-	2.8	-
MW-007-060	10.0	-	26.3	-	20.0	-
MW-007-110	13.1	-	26.6	-	15.3	-
MW-007-160	12.4	-	2.3	-	1.2	-
MW-008-060	12.9	0.3	22.3	1.6	16.6	-
MW-008-110	11.2	-	31.7	-	21.1	-
MW-008-160	10.6	-	0.4	-	5.0	-

Table 5. Well flux average PFAS concentrations based on PFMs(continued)

Well	Darcy Velocity (cm/day)	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA) (ng/L)	Nonafluoro-3,6-Dioxaheptonic Acid (NFDHA) (ng/L)	Perfluoro-4-Methoxybutanic acid (PFMBA) (ng/L)	Perfluoro-3-methoxypropanoic aci (PFMPA) (ng/L)	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor) (ng/L)
MW-001-060	5.3	-	-	-	-	-
MW-001-110	6.4	-	-	-	-	-
MW-001-160	13.2	-	-	-	-	-
MW-002-060	9.5	-	-	-	-	-
MW-002-110	6.0	-	-	-	-	-
MW-002-160	8.8	-	-	-	-	-
MW-003-060	7.5	-	-	-	-	-
MW-003-110	7.0	-	-	-	-	-
MW-003-160	6.9	-	-	-	-	-
MW-004-060	7.3	-	-	-	-	-
MW-004-110	7.7	-	-	-	-	-
MW-004-160	6.9	-	-	-	-	-
MW-005-060	10.6	-	-	-	-	-
MW-005-110	13.5	-	-	-	-	-
MW-005-160	8.1	-	-	-	-	-
MW-006-060	11.9	-	-	-	-	-
MW-006-110	13.1	-	-	-	-	-
MW-006-160	10.0	-	-	-	-	-
MW-007-060	10.0	-	-	-	-	-
MW-007-110	13.1	-	-	-	-	-
MW-007-160	12.4	-	-	-	-	-
MW-008-060	12.9	-	-	-	-	-
MW-008-110	11.2	-	-	-	-	-
MW-008-160	10.6	-	-	-	-	-

Table 5. Well flux average PFAS concentrations based on PFMs(continued)

Well	Darcy Velocity (cm/day)	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CL-PF3ONS) (ng/L)	Perfluoro (2-Ethoxyethane) Sulfonic Acid (PFEESA) (ng/L)	2H, 2H, 3H, 3H-perfluorohexanoic acid (3:3 FTCA) (ng/L)	2H, 2H, 3H, 3H-perfluorooctanoic acid (5:3 FTCA) (ng/L)	2H, 2H, 3H, 3H-perfluorodecanoic acid (7:3 FTCA) (ng/L)
MW-001-060	5.3	-	-	-	-	-
MW-001-110	6.4	-	-	-	-	-
MW-001-160	13.2	-	-	-	-	-
MW-002-060	9.5	-	-	-	4.6	-
MW-002-110	6.0	-	-	-	-	-
MW-002-160	8.8	-	-	-	-	-
MW-003-060	7.5	-	-	-	3.9	-
MW-003-110	7.0	-	-	-	5.5	-
MW-003-160	6.9	-	-	-	-	-
MW-004-060	7.3	-	-	-	-	-
MW-004-110	7.7	-	-	-	-	-
MW-004-160	6.9	-	-	-	-	-
MW-005-060	10.6	-	-	-	-	-
MW-005-110	13.5	-	-	-	-	-
MW-005-160	8.1	-	-	-	-	-
MW-006-060	11.9	-	-	-	-	-
MW-006-110	13.1	-	-	-	-	-
MW-006-160	10.0	-	-	-	-	-
MW-007-060	10.0	-	-	-	-	-
MW-007-110	13.1	-	-	-	-	-
MW-007-160	12.4	-	-	-	-	-
MW-008-060	12.9	-	-	-	-	-
MW-008-110	11.2	-	-	-	-	-
MW-008-160	10.6	-	-	-	-	-

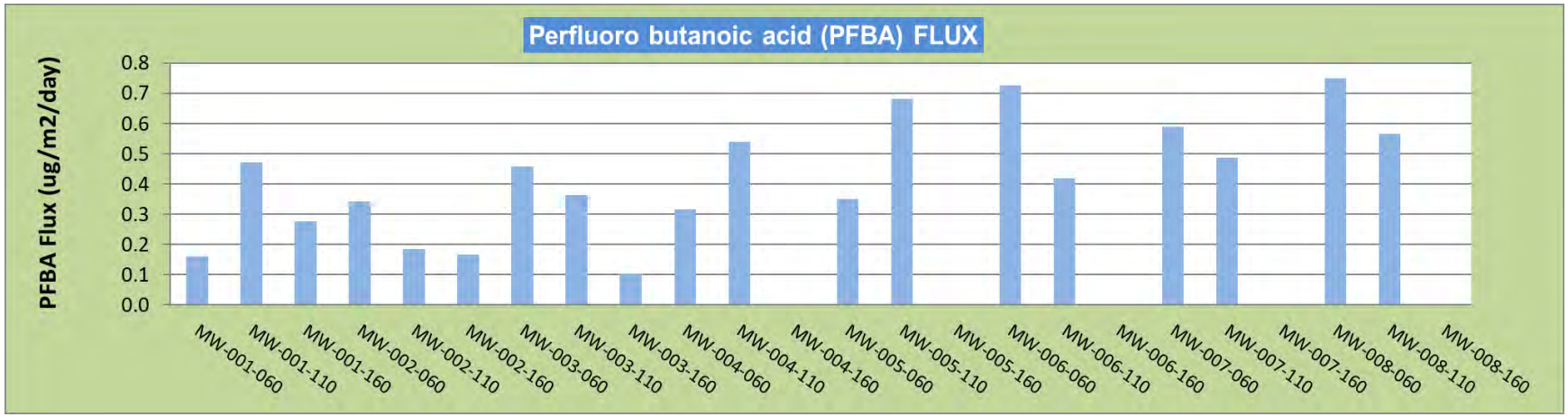

Figure 34. PFBA flux at each well

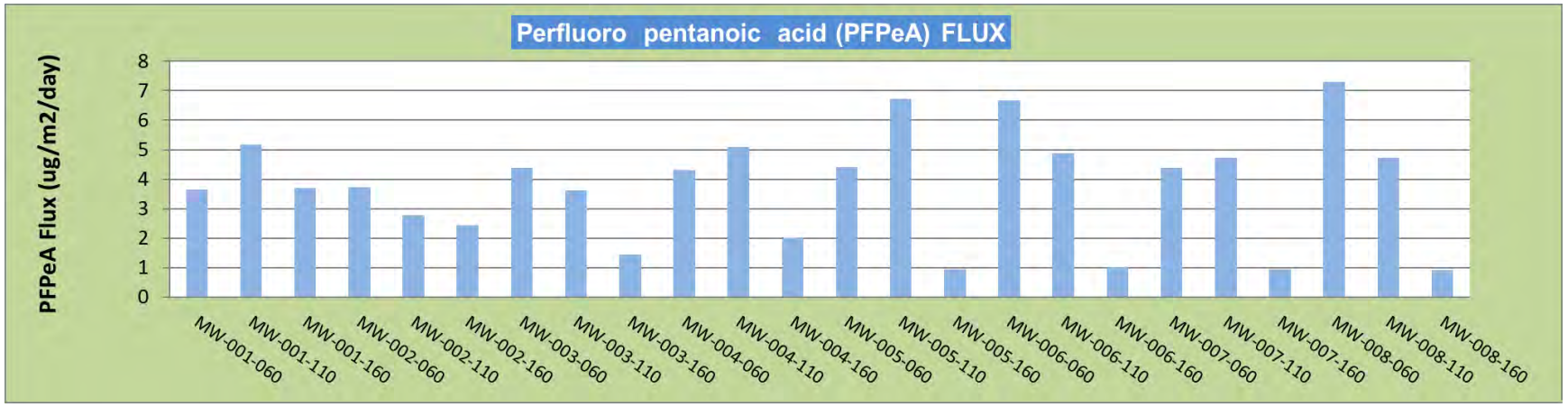

Figure 35. PFPeA flux at each well

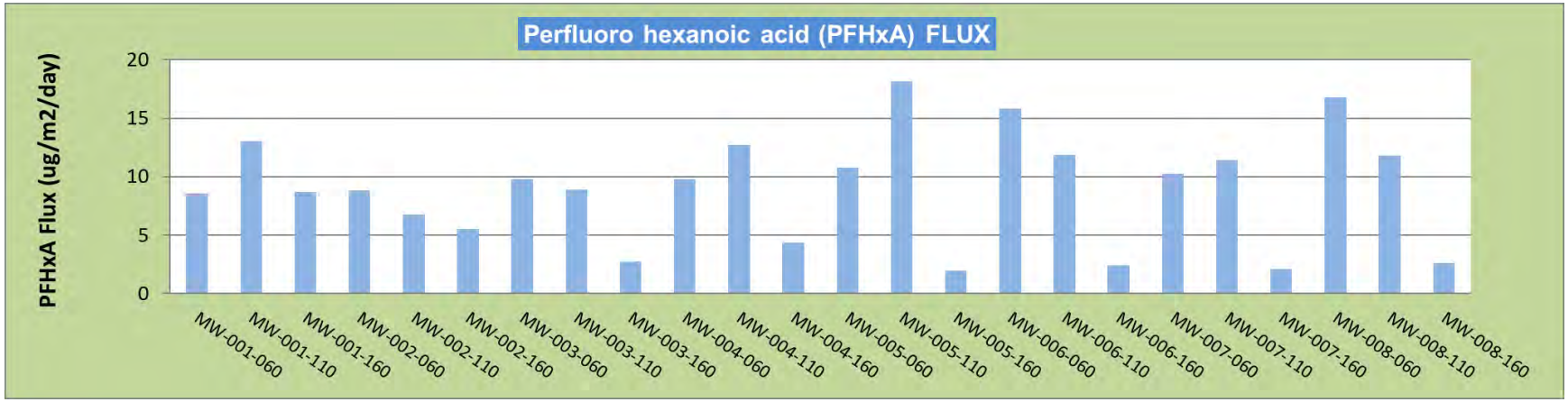

Figure 36. PFHxA flux at each well

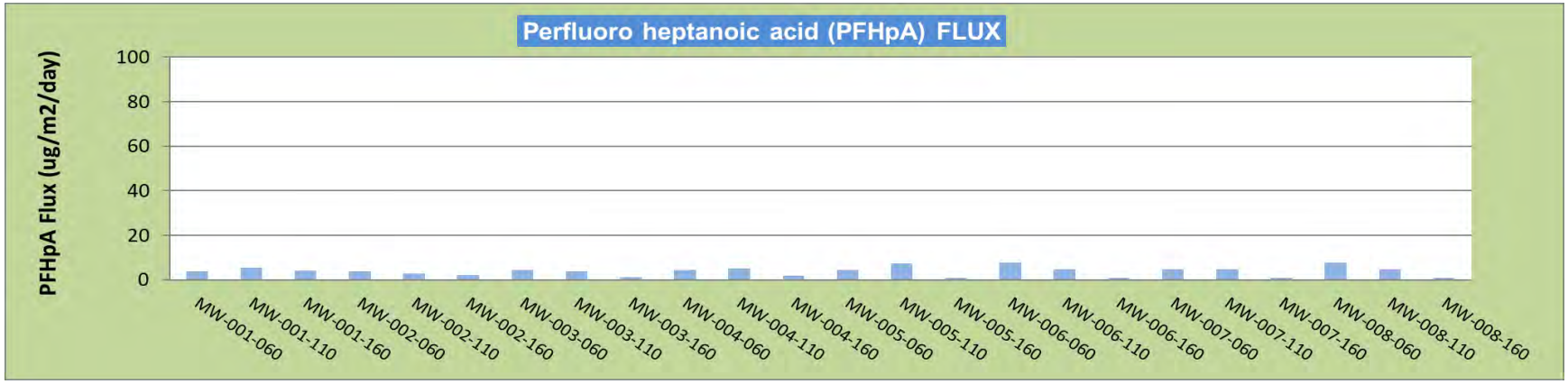

Figure 37. PFHpA flux at each well

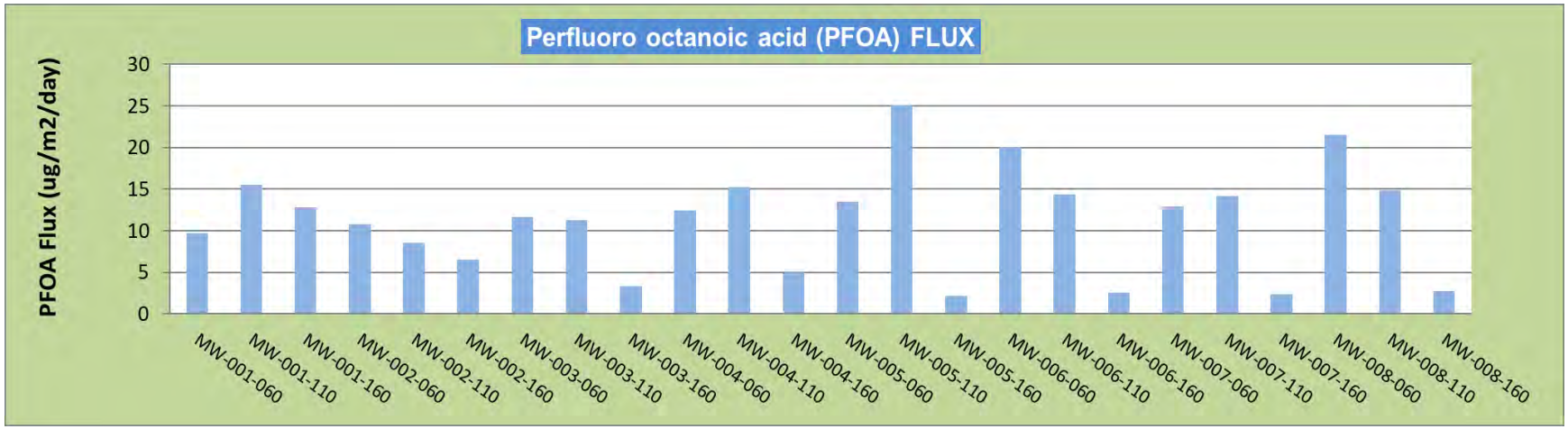

Figure 38. PFOA flux at each well

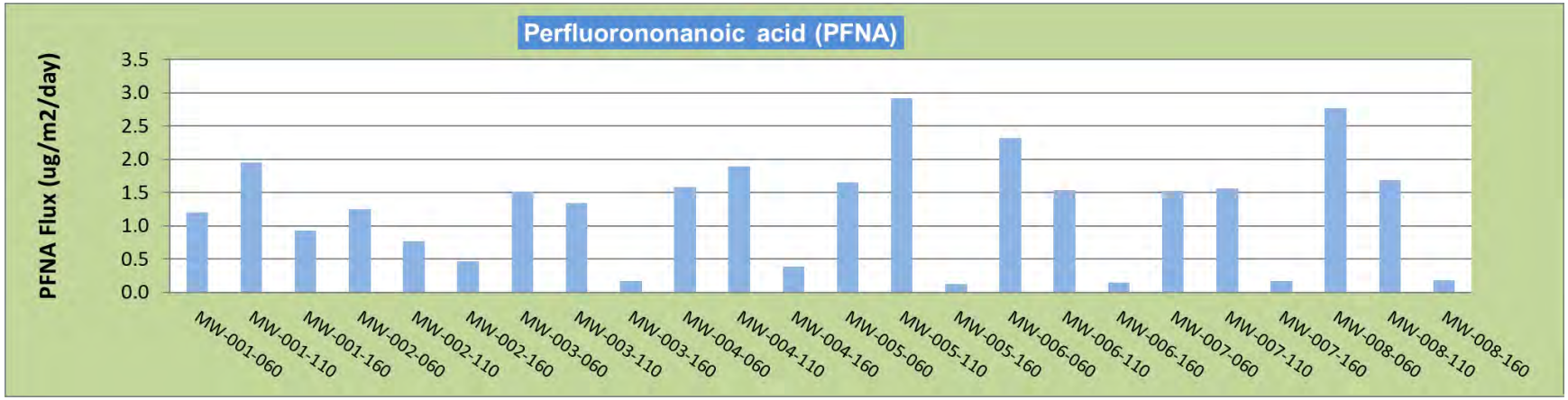

Figure 39. PFNA flux at each well

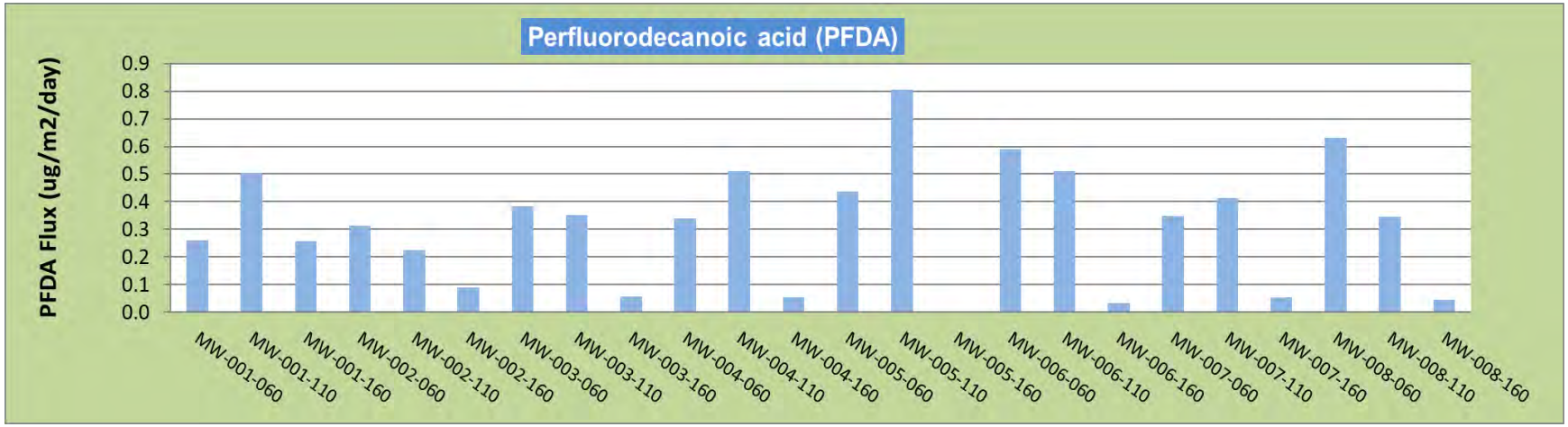

Figure 40. PFDA flux at each well

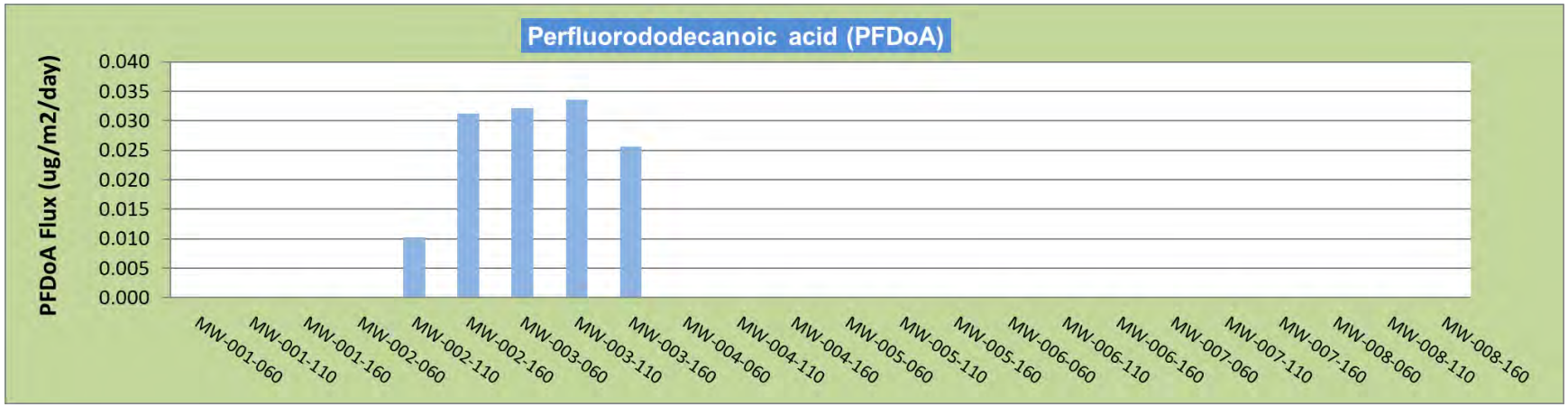

Figure 41. PFDoA flux at each well

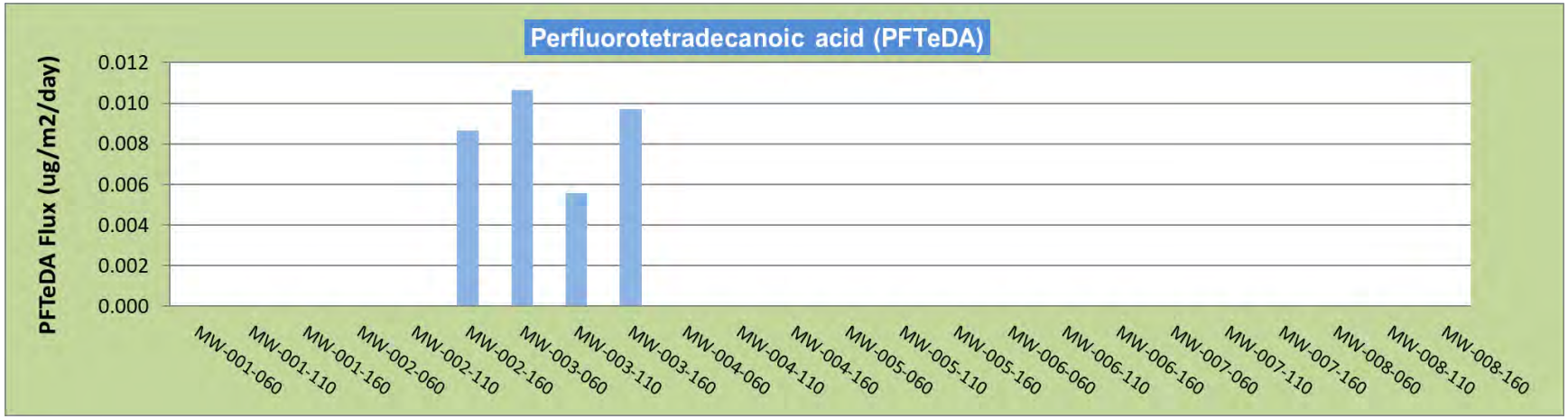

Figure 42. PFTeDA flux at each well

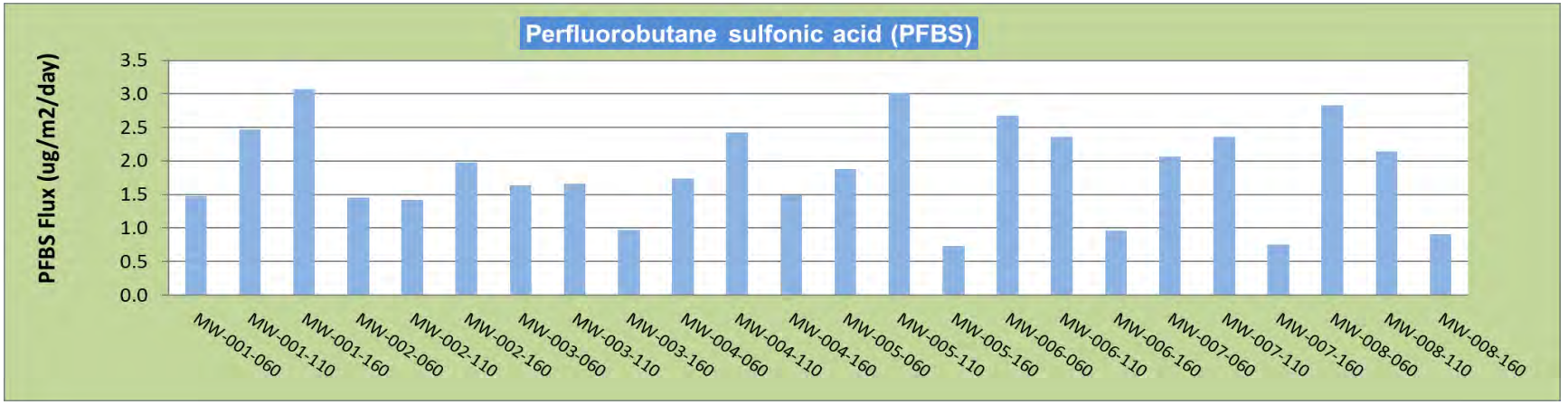

Figure 43. PFBS flux at each well

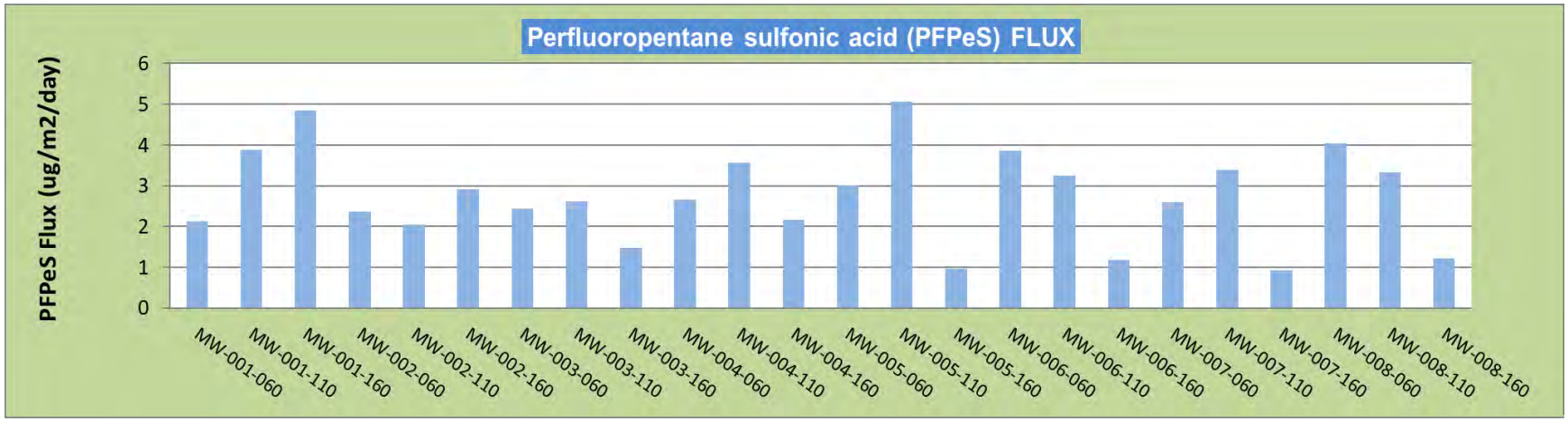

Figure 44. PFPeS flux at each well

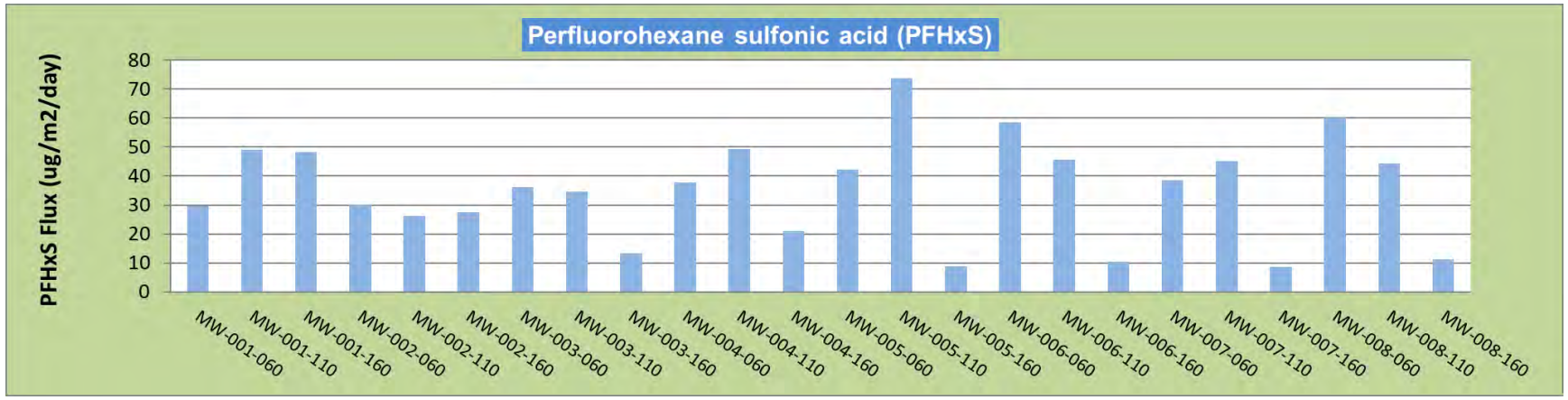

Figure 45. PFHxS flux at each well

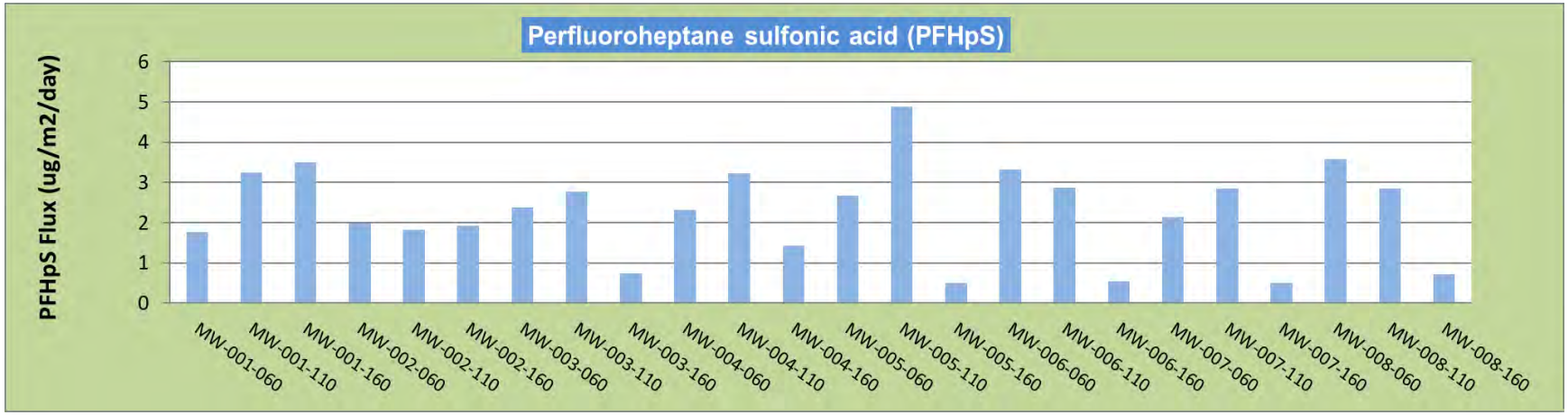

Figure 46. PFHpS flux at each well

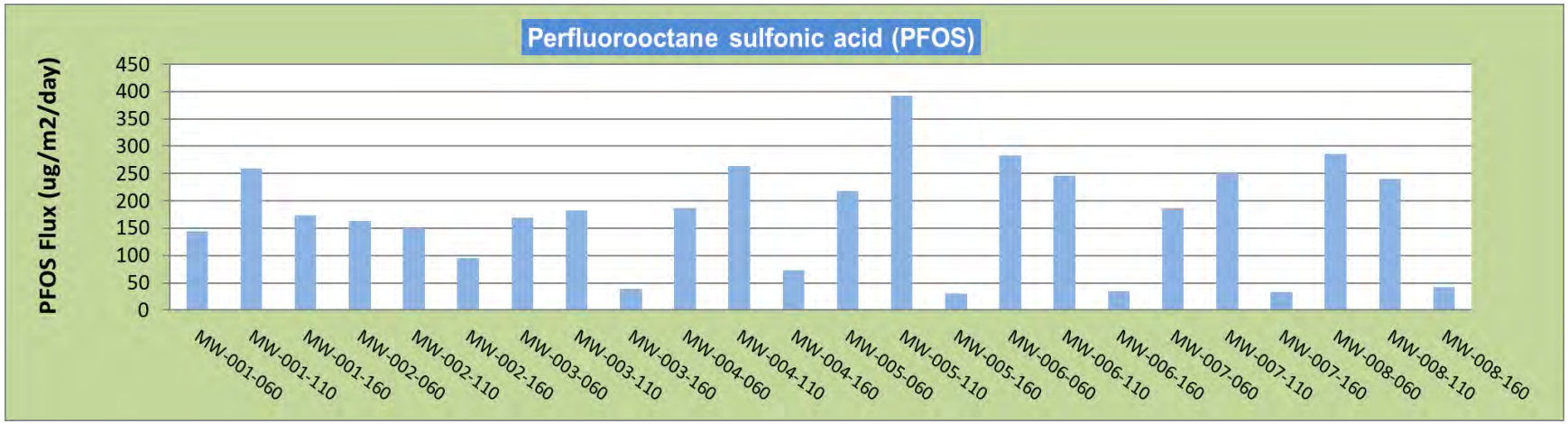

Figure 47. PFOS flux at each well

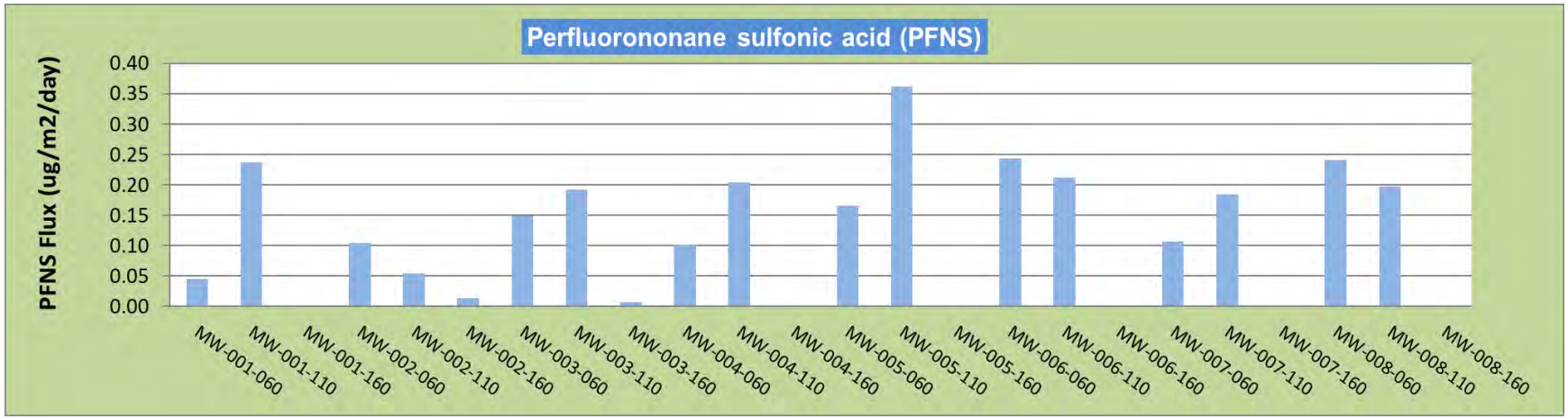

Figure 48. PFNS flux at each well

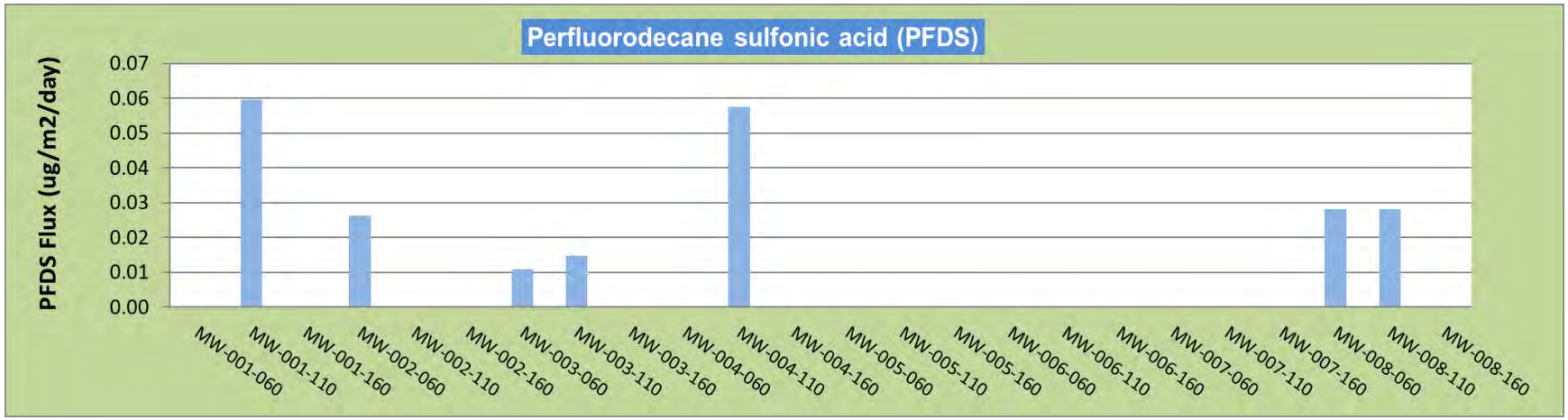

Figure 49. PFDS flux at each well

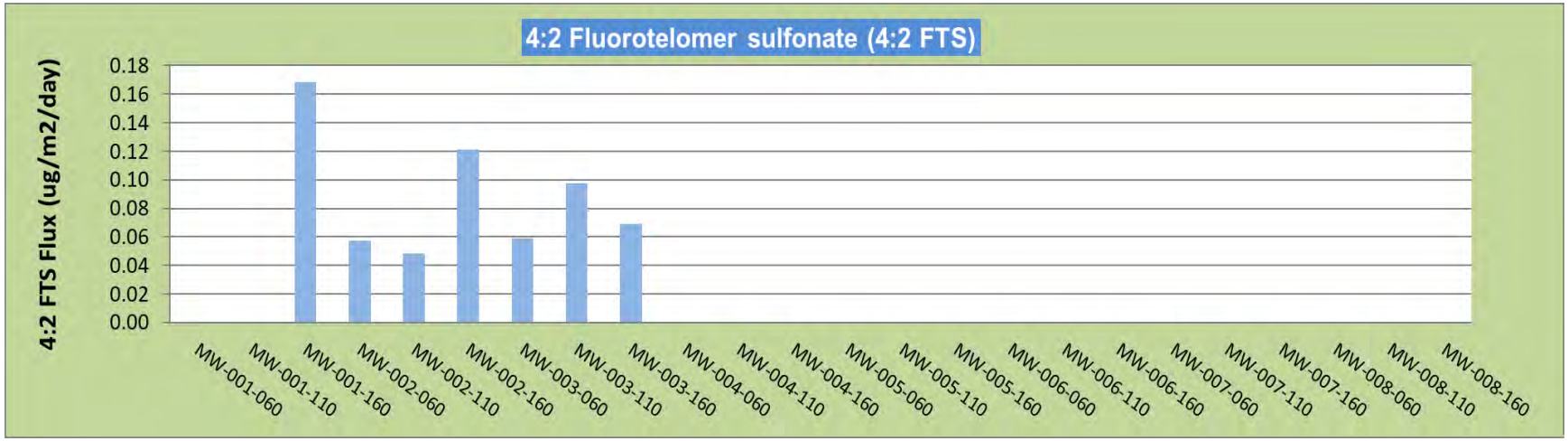

Figure 50. 4:2 FTS flux at each well

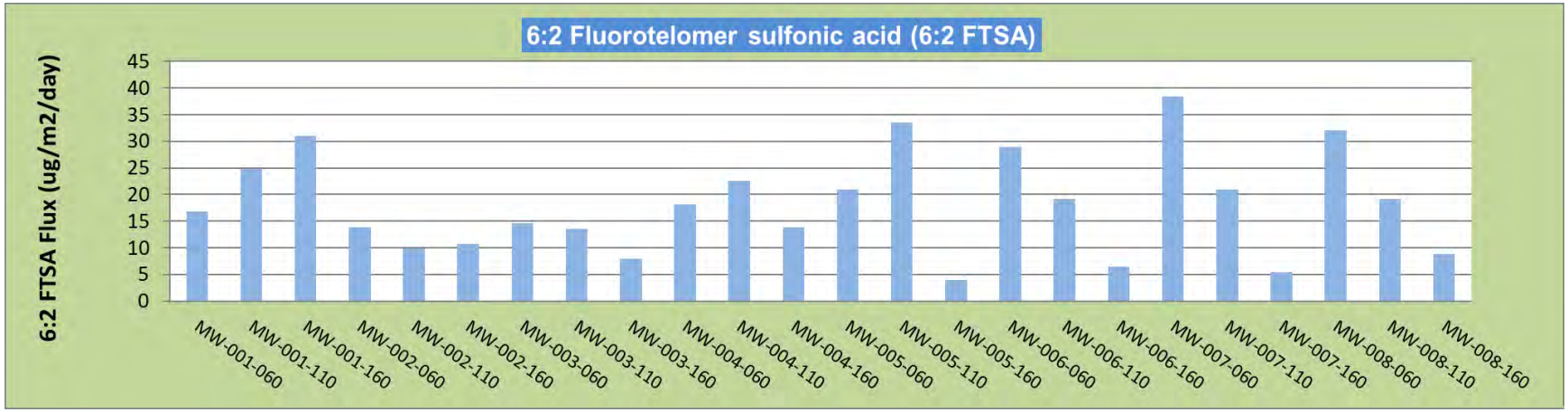

Figure 51. 6:2 FTSA flux at each well

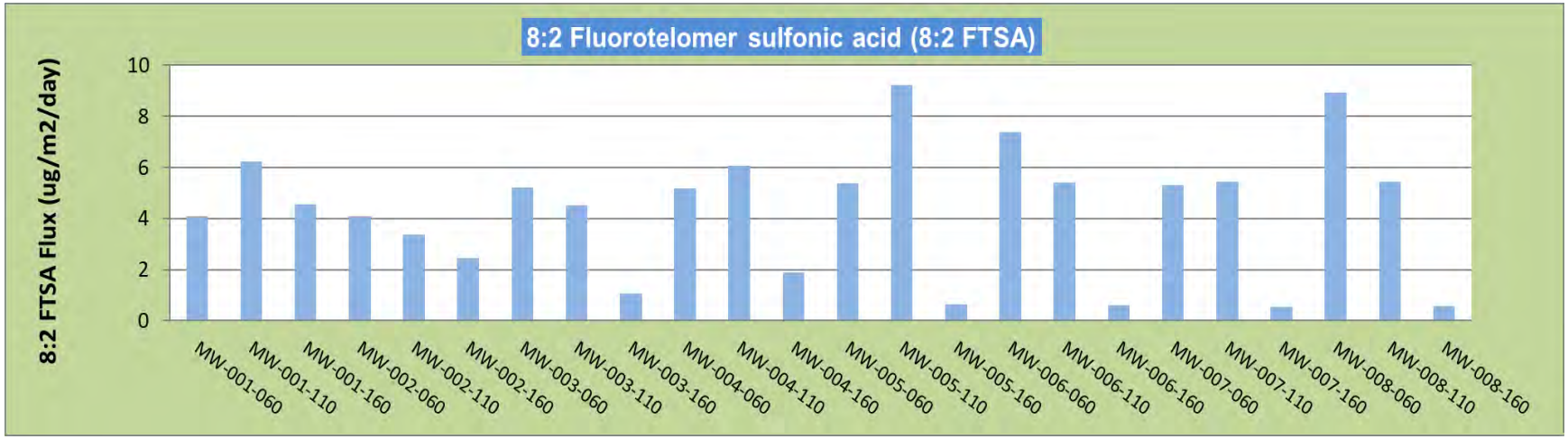

Figure 52. 8:2 FTSA flux at each well

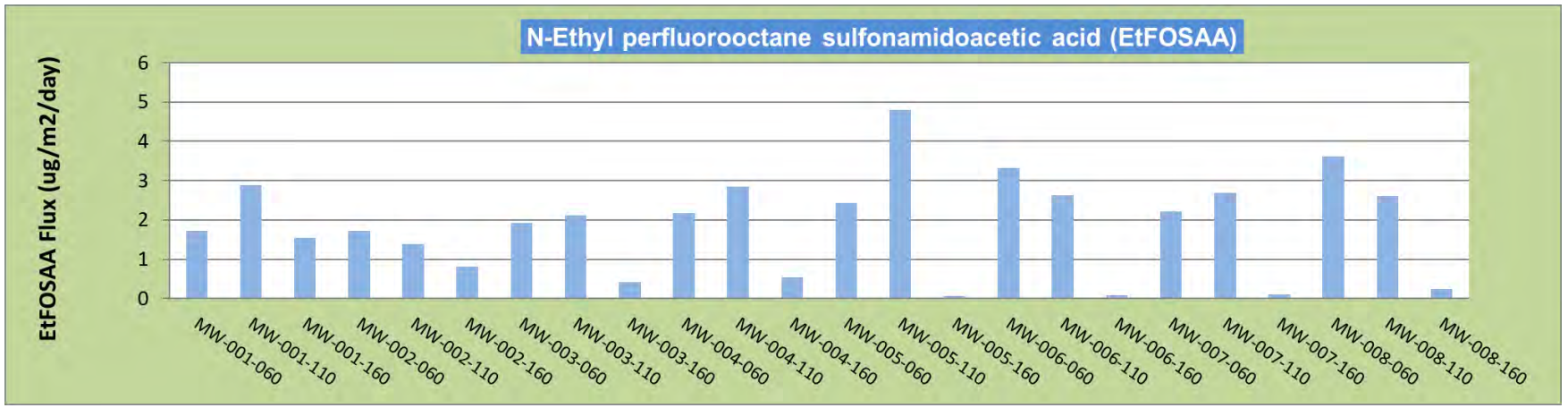

Figure 53. EtFOSAA flux at each well

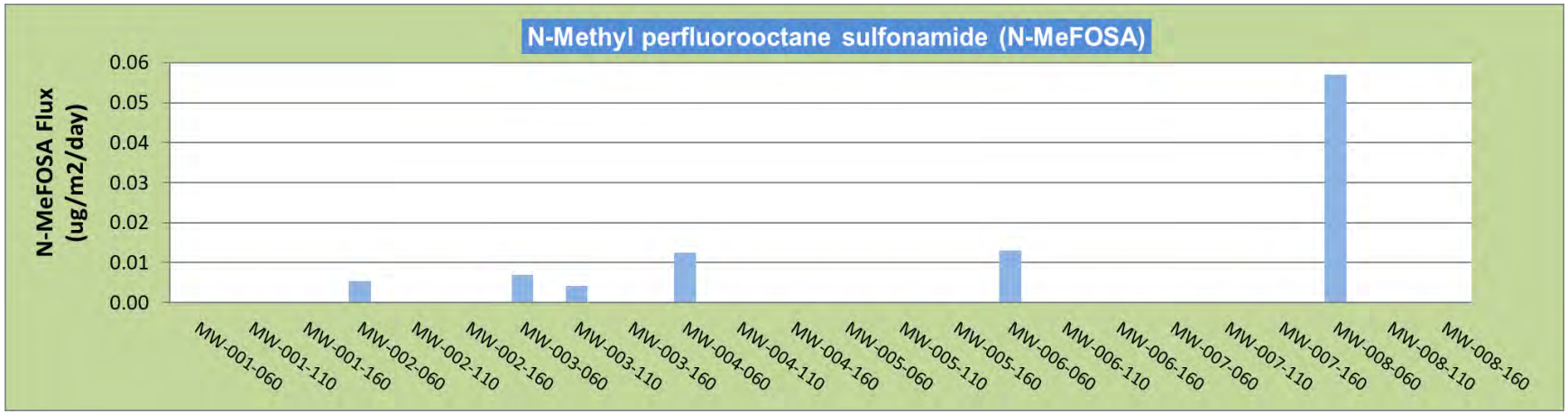

Figure 54. N-MeFOSA flux at each well

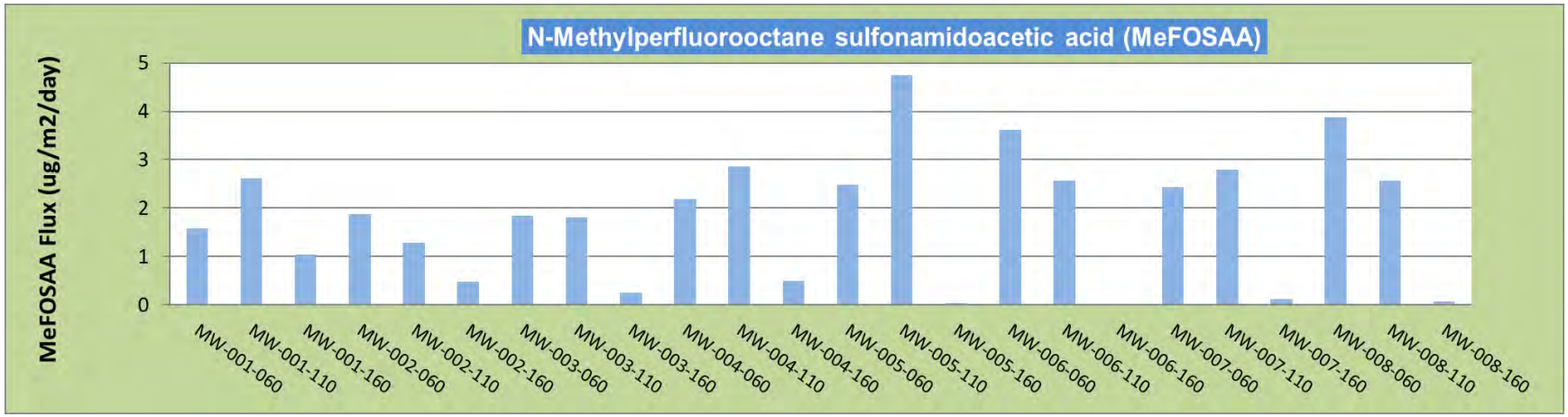

Figure 55. MeFOSAA flux at each well

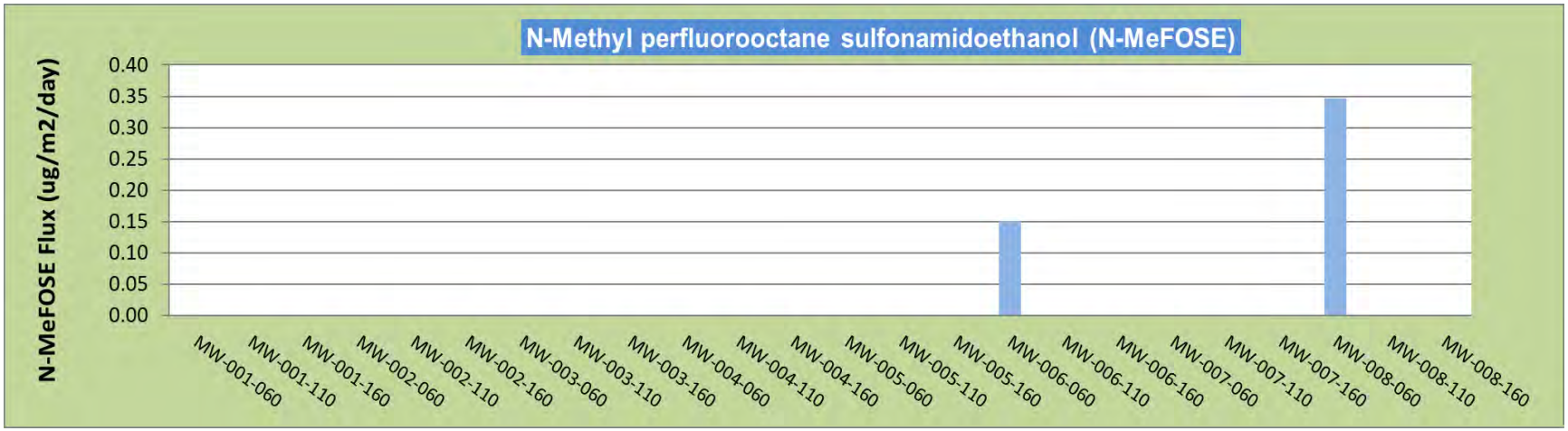

Figure 56. N-MeFOSE flux at each well

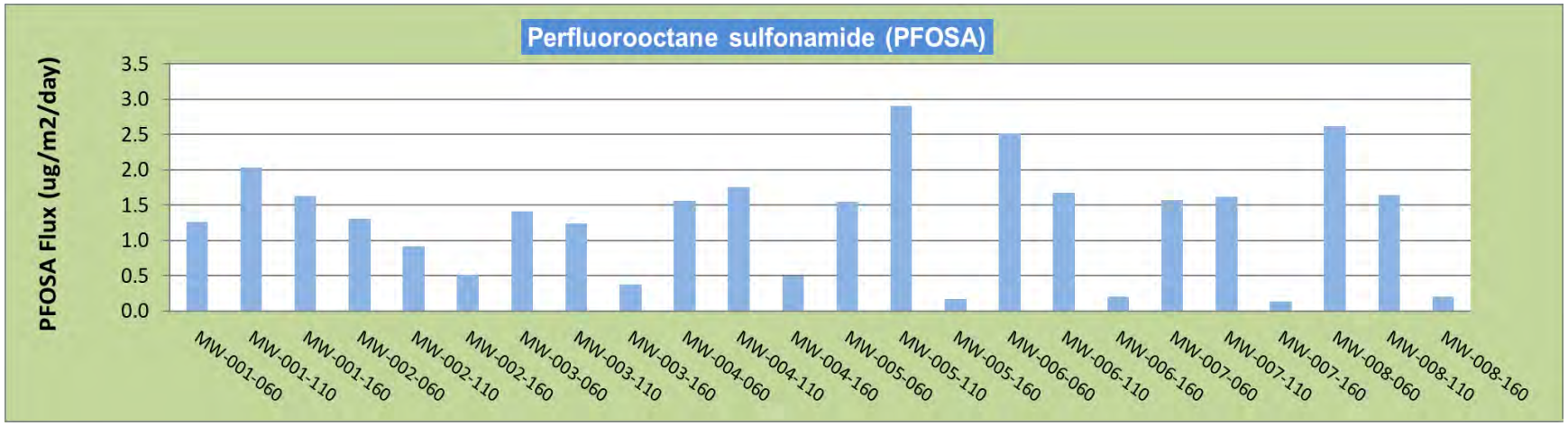

Figure 57. PFOSA flux at each well

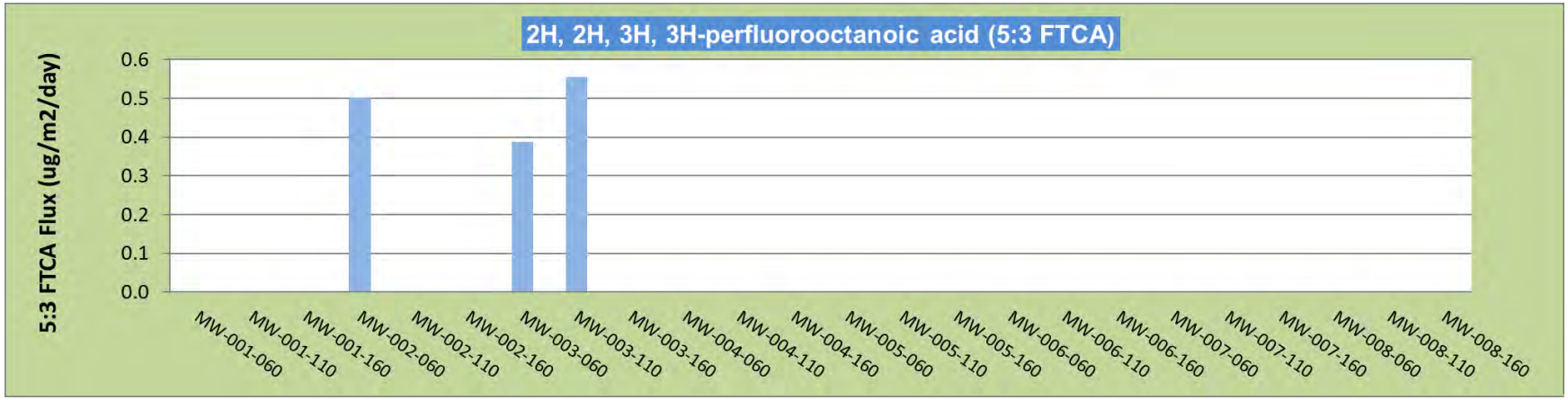

Figure 58. 5:3 FTCA flux at each well

Appendix I

Analytical Results Figure for Monitoring Well 51MB1

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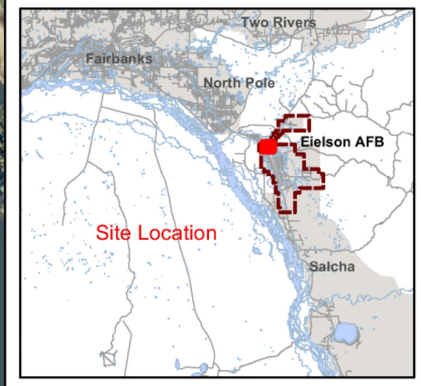
Analyte	PAL
bis(2-Ethylhexyl)phthalate	0.0056
Naphthalene	0.00012
Arsenic	0.000052
Cobalt	0.006
Iron	14
Manganese	0.43
Thallium	0.0002

Well ID	Analyte	2015 A Spring	2015 Fall	2016 A Spring	2016 Fall	2017 A Spring	2017 Fall	2018 A Spring	2019 A Spring	2020 A Spring	2021 Fall
51MB1	Arsenic	**0.00094 J**	**0.0013**	**0.00105**	**0.00173**	--	**0.00148**	**0.00108**	**0.000777 J**	**0.000555 J**	**0.0028**
	bis(2-Ethylhexyl)phthalate	ND [0.0049]	ND [0.0051]	ND [0.0054]	**0.02**	--	ND [0.0054]	ND [0.0062] E	ND [0.0057]	ND [0.0068] E	ND [0.0041]
	Manganese	**1.52**	**1.93**	**1.71**	**1.62**	--	**2.09**	**1.9**	**1.07**	0.262	**2.9**
	Naphthalene	**0.00018 J,JS-**	**0.00012 J,JD**	0.00011 J	ND [0.00011] JS-	--	ND [0.00011]	ND [0.00012] JS-	ND [0.00012]	ND [0.00011]	ND [0.0002]
	Thallium	ND [0.0002]	ND [0.0002]	ND [0.0002]	ND [0.0002]	--	ND [0.0002]	ND [0.0002]	ND [0.0002]	ND [0.0002]	ND [0.0004]
51MB2B	Arsenic	**0.0158**	**0.0203**	**0.0122**	**0.021**	**0.00413**	--	**0.00253**	**0.00626**	**0.00485**	**0.025**
	Manganese	**1.96**	**2.16**	**2.22**	**2.11**	**2.12**	--	**1.72**	**1.52**	**0.887**	**2.3**
	Thallium	ND [0.0002]	ND [0.0002]	ND [0.0002]	ND [0.0002]	ND [0.0002]	--	ND [0.0002]	ND [0.0002]	ND [0.0002]	**0.0002 J**
51MB5	Arsenic	**0.0296**	**0.0331**	**0.0295**	**0.0381**	**0.0221**	--	**0.0213**	**0.0254**	**0.0111**	**0.019**
	Cobalt	**0.00628**	**0.00719**	**0.00696**	**0.00806**	0.00583	--	**0.00645**	**0.0103**	**0.0076**	ND [0.0004]
	Iron	11.3	12.7	11.9	12.8	9.68	--	9.82	**18.3**	4.8	12
	Manganese	**3.76**	**3.8**	**4.26**	**4.2**	**3.43**	--	**3.15**	**4.35**	**2.29**	**3.6**
	Naphthalene	**0.00063**	ND [0.0001]	ND [0.00011] JM-,JD	ND [0.00011]	ND [0.00011]	--	**0.00012 J,JS-**	ND [0.00011]	ND [0.00012]	ND [0.0002]
GSSW01	Arsenic	--	**0.00577**	**0.00682**	**0.00481**	**0.0116**	--	**0.00582**	**0.00782**	**0.0157**	**0.013**
	bis(2-Ethylhexyl)phthalate	--	ND [0.0057]	ND [0.0051]	**0.017 JD**	ND [0.0051]	--	ND [0.011] E	ND [0.0056]	ND [0.0068] E	ND [0.0045]
	Manganese	--	**0.828**	**0.995**	**0.704**	**1.52**	--	**0.449**	**0.8**	**1.38**	**1.4**
	Naphthalene	--	**0.0002 J,JD**	ND [0.0001]	ND [0.000098]	ND [0.0001]	--	ND [0.00022]	ND [0.00011]	ND [0.00011]	ND [0.0002]



Eielson Air Force Base Boundary

Surface water sample

Wells Proposed 2021

Stream/Slough

Buildings

Approximate Groundwater flow direction

Results in mg/L
Red Indicates exceedance above PALs.

N

Figure A-31 Source Area North Boundary

2021 IWMP Eielson AFB

0 200 400 600 800 Feet

Document Path: C:\Users\jnewberry\Documents\Eielson_IWMP_2021\GIS\MXD\Figure_A31.mxd

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Appendix J

Eielson RI Transect 02 Mass Flux Data

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Location ID	Depth (ft bgs)	Date Sampled	PFOS Result (ug/m^3)	K (m/day)	i	Mass Flux ($\mu g/m^2/day$)
TR02-VAP03	20 - 23	08/16/2021	420	95.04	0.0012	47.90
TR02-VAP03	29 - 32	08/16/2021	730	233.28	0.0012	204.35
TR02-VAP03	41 - 44	08/16/2021	530	116.64	0.0012	74.18
TR02-VAP03	52 - 55	08/16/2021	1000	8.29	0.0012	9.95
TR02-VAP03	61 - 64	08/16/2021	1300	13.82	0.0012	21.57
TR02-VAP03	71 - 74	08/16/2021	1600	39.74	0.0012	76.31
TR02-VAP03	84 - 87	08/16/2021	1800	31.54	0.0012	68.12
TR02-VAP03	96 - 99	08/16/2021	2200	39.74	0.0012	104.92
TR02-VAP03A	104 - 107	09/12/2021	520	76.90	0.0012	47.98
TR02-VAP03A	114 - 117	09/11/2021	690	108.00	0.0012	89.42
TR02-VAP03A	129 - 132	09/11/2021	26	18.14	0.0012	0.57
TR02-VAP03A	144 - 147	09/11/2021	66	95.04	0.0012	7.53
TR02-VAP04	114 - 117	09/07/2021	160	93.31	0.0012	17.92
TR02-VAP04	124 - 127	09/07/2021	170	103.68	0.0012	21.15
TR02-VAP04	134 - 137	09/06/2021	13	35.42	0.0012	0.55
TR02-VAP04	144 - 147	09/06/2021	13	69.12	0.0012	1.08
TR02-VAP05	99 - 102	08/13/2021	1900	125.28	0.0012	285.64
TR02-VAP05	111 - 114	08/13/2021	170	112.32	0.0012	22.91
TR02-VAP05	123 - 126	08/15/2021	130	90.72	0.0012	14.15
TR02-VAP05	135 - 138	08/16/2021	170	15.98	0.0012	3.26
TR02-VAP05	147 - 150	08/17/2021	37	61.34	0.0012	2.72
TR02-VAP05A	122 - 124	08/18/2023	160	15.98	0.0012	3.07
TR02-VAP05A	154 - 156	08/18/2023	14	46.66	0.0012	0.78
TR02-VAP05A	163 - 165	08/20/2023	27	6.87	0.0012	0.22
					Average	46.93
					Minimum	0.22
					Maximum	285.64

Notes:

PFOS results are shown in $\mu g/m^3$ as used in the mass flux calculation, which is equivalent to nanograms per liter.

$\mu g/m^3$ = micrograms per meter cubed

$\mu g/m^2/day$ = micrograms per meter cubed per day

i = hydraulic gradient in the vicinity of Eielson TR02

ft bgs = feet below ground surface

K = hydraulic conductivity

m/day = meters per day

PFOS = Perfluorooctanesulfonic acid

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Appendix K

Regulator Comments

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation

SPILL PREVENTION & RESPONSE
Contaminated Sites Program

555 Cordova Street
Anchorage, AK 99501
Main: 907.451.2143
Fax: 907.451.2155
www.dec.alaska.gov

File #: 107.38.006, 107.38.031, 107.38.171, 107.38.150

July 21, 2025

Electronic Delivery Only
Kristina Smith
Installation Restoration Program
AFCEC CZOP, 2310 Central Avenue, Suite 213
Eielson AFB, AK 99702

RE: DEC review of the *Draft Final Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P, Eielson Air Force Base, Fairbanks North Star Borough, Alaska, March 2025*

Dear Ms. Smith:

The Alaska Department of Environmental Conservation (DEC) received the above document on June 20, 2025. The report summarizes the data gap investigation (DGI) and groundwater pilot study construction (PSC) in support of the groundwater response action for per- and polyfluoroalkyl substances (PFAS) treatment at site FT009P at Eielson Air Force Base (EAFB), Alaska. This report presents a brief project background, data quality objectives, field activities and methods, results, discussion of results, and summary and conclusions related to the DGI effort conducted during the 2024 field season. DEC has reviewed the above referenced document and all comments have been resolved (see enclosure). Please attach the final comment matrix and finalize the document and provide a copy for DEC records. Please contact me with any further comments or questions at sarah.bernhardt@alaska.gov or (907) 269-7527.

Sincerely,
Sarah P. Bernhardt
Digitally signed by Sarah P. Bernhardt
Date: 2025.07.22 10:09:37 -08'00'
Sarah P. Bernhardt
Remedial Project Manager

cc via email:

- Joe Price, AFCEC
- Mike Boese, AFCEC
- Nicole Drenning, AFCEC
- Matthew Fleetwood, DEC
- Erin Gleason, EPA
- Amy Tegethoff, AFCEC

Enclosure: DEC Comment Table

DEC Comments on Draft Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P, Eielson Air Force Base, March 2025, Alaska.
April 24, 2025
July 21, 2025 – DEC Backcheck

Reviewer: Alaska Department of Environmental Conservation (DEC)

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1.		General	DEC requests that a deviations section be included to capture all the changes that occurred from the approved work plan. Examples are listed below: "Section 2.2, pg. 12 - After installing several wells, "pre-development surging" was deemed unnecessary for settling the sand filter pack because the sonic vibration from the drill rig during casing removal appeared to accomplish this adequately." "Section 2.5, pg. 14 – The uppermost PFM was recovered within several hours, but the two lower PFMs remained stuck in the well until their retrieval times on 15 August 2024 (Appendix A7), this may have a modest impact on the results by exposing these PFMs to different, shallower intervals in the well, but only for approximately one day compared to their two-week deployment period."	Section 2.7 QAPP Deviations has been added to the report. DEC: Accept.
2.		General	**Concerns for the overall approach and likely smear zone downgradient**. A concern noted in previous phases of this overall project is the use of 50-foot screens for the injection of CAC. There have been discussions regarding the use of packers to isolate zones. It is outside the scope of this report, so it is unclear if the intention is to use packers for the	Yes, use of packers during injection at the injection wells with 50-ft screens is under consideration and will be addressed in a future CAC injection work plan. The specific target zones and number of injection intervals within each injection well will depend on the lithology present at the injection wells, which

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			injections. However, we note that the use of the packers for slug testing provided for this report observed biased results that underestimated the aquifer hydraulic gradient. The contractor noted this was due to the inability to isolate the sand pack that extends the full 50-foot section of the screen. The straddle packers were able to isolate 3 feet of the screened interval only. We have concerns there will be similar issues with parking the CAC at specified depths using the 50-foot screen injection wells. Parking the material will be extremely important for the depths where higher flux was observed.	will be better understood once the injection wells are installed later in the 2025 field season and/or in 2026. We recognize that packers may not provide a perfect seal or direct 100 percent of the injection fluid into the target zone as there may be some fluid that moves within the filter pack, however, using packers should help direct the majority of the injection fluid into the target zone. We also recognize that more CAC injection fluid will preferentially go into the high K zones over lower K zones, given the inherent heterogeneity of aquifer materials. This is true of any injection-based remedy. As higher K zones are where the higher mass flux occurs, this can be considered a benefit rather than a limitation,, as long as the CAC material can be "parked" in these zones. Depending on the vendor and CAC materials used, a strategy for parking the CAC will be developed during preparation of the CAC injection QAPP. During discussions with two vendors, neither of the vendors were concerned about being able to adequately park the CAC. The vendors apply the parking differently and this will be discussed during the planning for the injection phase and detailed in the CAC injection QAPP.

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				Injection wells need to be screened starting at approximately 10 feet bgs, to ensure there is an adequate well seal during well construction, to limit surfacing during injection. Screening higher would reduce the amount of well seal and may be problematic during injection. However, it is also expected that some mounding will occur during injection, dispersing CAC in the saturated zone above the well screen and treating the "smear zone". DEC: Noted.
3.	**General (Installation wells, monitoring well geometry)**		Absence of monitoring wells along the perimeter of the injection transect limits the ability to accurately determine the treatment's radius of influence. There is a lack of monitoring wells on the edges of the transect to identify the radius of influence for the treatment. We understand that this is a pilot study, so that may not be as big of a factor, but we believe it would provide useful information long term. Since it is a pilot study, we want to collect sufficient data to assess whether it is effective. Data collection should be the primary objective.	Monitoring well installation along the perimeter of the injection transect limits, immediately east and west of the easternmost/westernmost injection well clusters, was discussed at length internally and with stakeholders during the DGI planning process. The consensus was that the upgradient wells could effectively provide baseline or influent concentration data and that perimeter wells would be redundant for this purpose given the understanding of PFAS concentrations collected upgradient at Transect 02 during the Phase I RI. It was decided that available funding could be better utilized to supplement the downgradient performance monitoring well network and in-barrier monitoring wells would be installed to assess ROI and carbon distribution. In addition, post-injection soil borings will be

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				advanced to aid in ROI assessment and CAC distribution. Note in DEC's "Review of Response to Comments for the Draft-Final Data Gap Investigation & Groundwater Pilot Study Construction in Support of the Groundwater Response Action for PFAS Treatment at Site FT009P, Eielson Air Force Base, Alaska, January 2024", DEC accepted the response to comment #18 "with note: At the 5/1/2024 RPM meeting DEC discussed the potential limitations on information gathered at the vertical and lateral edges of the CAC curtain but agreed that the proposed well placement is likely best suited to the desired data collection. Consideration for an in CAC plume monitoring well was also discussed and should be brought forward in the addendum or future contracts." DEC: Noted.
4.	General		Will zones of greater flux be loaded more with CAC, such as CACMW-001 between 130 and 155 feet bgs? Given this depth is generally low concentration for the other wells. Or will averages be used as presented in Exhibit 9? This question is specifically asked given the conclusion provided in the report that groundwater velocity is the driving force of PFAS flux through the transect. How are you anticipating handling these sub-zones of flux that you see? Are you treating the different zones with	Varied CAC dosing will be considered along the transect and/or within different intervals based on the distribution of measured mass flux. However, varied CAC loading will need to be balanced with field implementation needs. CAC loading design will likely be based on maximum flux observed but will be specified in the QAPP for the CAC injection phase.

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			different concentrations of CAC or will you be giving an overall uniform amount and focusing on loading the zones with higher PFAS flux?	DEC: Noted.
5.	General – Passive Flux Meter (PFMs)		Suggestion - use the PFM Darcy velocity provided for each zone when designing the CAC and not the average which may not take into account the faster aquifer recorded for the intermediate and deeper zones. Based on DEC contractor experience with CAC injection in the FNSB, aquifer speed is likely to be a major factor in effectively parking the CAC in the desired zones. PFMs are a widely accepted tool for the assessment of contaminant flux and Darcy velocity information. They are cost-effective and relatively green technology compared to other options. The contractor in this report has provided sufficient information and backup for their reason for selecting to use PFM data for both contaminant flux monitoring and groundwater gradient calculations. We agree with the overall findings of using the PFM information for CAC design.	Agreed, Darcy velocity will be a major factor in CAC loading and the ability to effectively park the CAC in the desired zones. Design specifications for parking of CAC will be included in the QAPP for the injection phase. DEC: Noted.
6.	7	1: Introduction	"PFAS could have a potential impact on human health and the environment." Although research is still ongoing, research suggests that exposure to certain PFAS may lead to adverse health outcomes. DEC requests that the language in this sentence be adjusted to better represent the impact of PFAS on human health and the environment.	The sentence has been revised to state: "Because of their persistence, bioaccumulation potential, mobility, and toxicity, PFAS can negatively impact human health and the environment." DEC: Accept
7.	15	2.6: Investigative-	For the Liquid IDW, it is stated in the approved UFP-QAPP that wastewater characterization will be conducted.	To clarify, the approved UFP-QAPP does not state that wastewater characterization will be

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		Derived Waste (IDW) Management and Sampling	In the report it is not mentioned that the Liquid IDW was analyzed for contaminants. The text states, "The liquid was treated in accordance with the 2024 Operation and Maintenance Work Plan, Eielson Air Force Base, Alaska (AFCEC, 2024b) and discharged in accordance with DEC Division of Water Authorization Number AKG003059 under the AKG0030000 Hydrostatic and Aquifer Pump Testing General Permit." DEC requests more information be provided in the report to detail what occurred with the liquid IDW prior to being discharged. Also, DEC requests that the referenced permits be included in report, possibly in Appendix C: IDW Documentation.	conducted for liquid IDW, as the intent was to process liquid IDW at the EAFB IDW treatment plant. The QAPP states that the (primary) plan is to utilize the EAFB IDW treatment plant for T&D of liquid IDW. It included a contingency, if the IDW treatment plant became unavailable, then characterization samples would have been collected for transport, treatment, and disposal off of EAFB. During field work the IDW treatment plant was available to receive liquid IDW, analysis of liquid IDW for offsite disposal was not required. Generator knowledge was used for the waste profiling required for treatment at the IDW plant. Added detail: The EAFB Wastewater Treatment System consists of three 10,000-gallon uninsulated influent holding tanks, a pretreatment system, a treatment system, and a 14,000-gallon uninsulated effluent holding tank. The pretreatment system consists of an oil/water separator, an ozone generator and injector to disinfect and precipitate dissolved metals, a 3-cubic foot vessel containing adsorbent cellulose, a 3-cubic foot vessel containing filter sand, a 3-cubic ft vessel containing organoclay, and a 3-cubic foot vessel containing GAC. The treatment system contains a bag filter, two 4.5-cubic foot vessels containing GAC, two 5-cubic foot vessels containing PT1 ion exchange resin

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				primarily for metals removal, four cartridge filters, two 3-cubic foot vessels containing A3F ion exchange resin, and two 3- cubic foot vessels containing LC1 ion exchange polishing resin. Flow diagrams of the pretreatment and treatment modules are attached to authorization AKG003059. Prior to treatment and discharge, an Eielson AFB Wastewater Profile was developed for the liquid IDW using generator knowledge. The highest PFAS concentrations observed during the Eielson PFAS Remedial Investigation at Transect 02, approximately 600 feet upgradient of the DGI project location, were used as a conservative proxy for treatment and disposal. The wastewater profiling documents are included in the Permit Authorization AKG003059 - 2024 Annual Discharge Report (AFCEC, 2025). Referenced permit (AKG003059) was added to App C: IDW Documentation DEC: Accept.
8.	22 and 23	4.2.3.1: Geochemical Results	- Arsenic (total): 2.45 to 69.8 µg/L - Lead (total): all results ND except for CACMW-001-060 and CACMW-007-110 (532 and 515 µg/L respectively). Both the Arsenic and Lead levels in the groundwater greatly exceed the 18 AAC 75 Table C Groundwater Human Health Cleanup Levels. DEC understands that the	For this investigation, the groundwater analytical data were collected to provide baseline groundwater geochemistry and will inform the future CAC injection design for the purpose of mitigating potential interferences of non-PFAS analytes with PFAS CAC adsorption.

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			purpose of this report is for a PFAS Treatment Pilot Study at FT009P. There are also high levels of dissolved Iron and Manganese, both are indicators oxidation of POL by microorganisms. Are there plans to investigate this area for potential contamination in a future effort?	Naturally occurring metal concentrations frequently exceed the DEC cleanup levels in groundwater of the Tanana Valley. Metals results in groundwater can be compared to background threshold values (BTVs) presented in the *Development of Background Threshold Values for Metals in Soil and Groundwater at Eielson Air Force Base, Alaska*, prepared for the Air Force in March, 2023. In consideration of this study: The BTV for arsenic is 43 µg/L. At the DGI project location the BTV was exceeded in shallow wells only (screened 10 to 60 ft bgs) with an average concentration of 58.5 µg/L. Naturally occurring arsenic concentrations can vary widely in groundwater in the Tanana valley and because concentrations observed at the project location marginally exceed the BTV, it is unlikely that the concentrations represent an anthropogenic source. The lead range reported in the text was in error with omitted decimals – it has been revised to "...except for CACMW-001-060 and CACMW-007-110 (0.532 and 0.515 µg/L respectively). These values are below the DEC cleanup level. DEC: Thank you for this correction. Accept.

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				Dissolved Iron and Manganese concentrations at the project location, in all cases, are below BTV's of 34,100 µg/L and 4,520 µg/L for Fe and Mn, respectively. At this time, the AF does not plan to investigate the DGI project location for potential contamination based on metals concentrations presented in the DGI report. DEC: Noted.
9.	30	4.2.4	**Section 4.2.4** outlines two methods used to calculate mass flux, which were then compared to the PFM (Passive Flux Meter) data provided by EnviroFlux: **Method 1:** Mass flux was calculated using low-flow analytical results combined with the PFM-derived Darcy velocity for the specific depth interval. This method was preferred due to its consistency with previous site studies. However, it appears that a uniform Darcy velocity of **0.00084 ft/ft** was applied across all depths rather than using depth-specific values of 0.00043 ft/ft for the shallow zone, 0.0011 ft/ft for the intermediate zone and 0.0010 ft/ft for the deep zone. Is this a deviation from the work plan? If so, please add to a deviations section. Will you be using an average velocity for design or specific velocity for each zone?	For the calculation of mass flux using low-flow data, the Darcy velocity from the PFM at the corresponding low-flow sample interval was used. Although the text stated that a uniform hydraulic gradient of 0.00084 ft/ft, rather than depth specific hydraulic gradient, was applied in the calculation of mass flux, this statement was revised in the report text as the Darcy velocity term already includes the gradient and is not needed in the calculation. $$Darcy\ Velocity\ (V) = Ki$$ Where: K = hydraulic conductivity and i = hydraulic gradient The calculation of mass flux using low-flow data was calculated as

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				$$Mass\ Flux\ (J) = V\ C$$ Where: V = PFM Darcy velocity and C = low-flow sample concentration Low-flow mass flux values have been corrected in Exhibit 6. The interpretation of the results did not change because of this correction and this calculation approach is not a deviation from the work plan. DEC: Accept. Regarding design, varied CAC loading will be considered along the transect and/or within different intervals based on the distribution of measured mass flux. However, varied CAC loading will need to be balanced with field implementation needs and CAC dosing design will likely be based on maximum flux observed. Design details will be specified in a future QAPP for the injection phase. DEC: Noted.
10.	29	4.2.4	Please follow the requirements for data reporting in the DEC Technical Memo "Guidelines for Data Reporting". DEC would prefer the more conservative LOD.	In accordance with the DEC Technical Memo "Guidelines for Data Reporting" several components of the report have been updated as follows: • **Tables 4, 10, and 11** – these tables previously showed non-detects as less than the LOQ. In the revised tables,

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				non-detects are reported as less than the LOD. • **Table 12** – this table previously showed PFM mass flux where mass flux for non-detects was represented as zero. In the revised table, mass flux for non-detects was calculated using the LOD. The calculated mass flux values for PFAS constituents with non-detect results are shown with a less than ("<") symbol. • **Figures 4, 5, and 6** – Data boxes on these figures showed the result for total PFAS. The calculation of total PFAS previously included non-detects at the LOQ. In the revised figures, total PFAS values were calculated using LODs to represent non-detects. • **Figures 9 and 10** – The second charts on each of these figures previously used total PFAS calculated with non-detects as the LOQ for low-flow results and as zero for PFM results. Total PFAS mass flux estimates using the LOD to represent for non-detects incorporates a significant calculated contribution (20 to 44%) from PFAS constituents that have been rarely detected (or not at all) in the DGI dataset (Exhibit 7). As

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				we don't believe this to be representative data for comparison to the low-flow results, the chart for total PFAS has been replaced with charts for PFHxS, which was detected in all PFM samples and represents the second-most prevalent PFAS constituent in the DGI dataset and is a better dataset for a direct comparison to low-flow data. • **Exhibits 3, 4, and 5 -** These exhibits previously used LOQs to represent non-detects in their calculations. They have been updated to use LODs to represent non-detect values. • **Exhibit 7** – This exhibit previously showed the percentage of total PFAS mass flux by analyte where total PFAS was calculated with non-detects as zero. The revised exhibit shows the percentage of total PFAS for each analyte with total PFAS calculated with non-detects at the LOD. • **Previous Exhibit 8** - This exhibit previously showed the average total mass flux by depth zone when flux was calculated with non-detects equal to zero and at the LOQ. Since a revision to the PFM results has been made to equate non-detects to the

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				LOD for the calculation of mass flux, this exhibit and the associated text are no longer applicable and have been removed from the text. • **Exhibit 8 (formerly Exhibit 9)** – This exhibit previously showed the average mass flux for the top five PFAS at the site by depth interval where mass flux for non-detects was calculated using zero. The revised exhibit now shows the average mass flux where mass flux for non-detects is calculated using the LOD. • **Exhibit 9 (formerly Exhibit 10)** - This exhibit previously showed the total PFAS mass discharge where mass flux was calculated with non-detects as zero values. The revised exhibit shows total PFAS mass discharge where flux is calculated with non-detects at the LOD. DEC: Accept.
11.	Figures and Tables		In the Figures section of the report, the y-axis for Figure 8, 11, and 12 is designated as Elevation (feet above mean sea level). In the Tables section the main value that is reported in a similar was is Feet Below Ground Surface (bgs). DEC would recommend utilizing the same measurement for each, and would prefer Feet BGS.	A secondary axis for approximate feet below ground surface has been added to Figures 8, 11, and 12. It should be noted that while the ground surface across the site varies little in elevation, the axis is approximate as the feet below ground surface at a given depth is slightly different between monitoring wells based on the actual elevation of the surface at each monitoring well. DEC: Accept.

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12.	25	Exhibit 4	Exhibit 4 lists PFHxS as a long-chain PFAS; however, it is typically referred to as a short-chain compound. Will the formulation of the CAC account for the lower affinity to CAC given the short-chain status?	PFHxS is classified as a long-chain PFAS by the USEPA, but is commonly referred to as a short-chain PFAS based on its behavior, particularly in terms of solubility, mobility, and dispersion. PFHxS and other short-chain PFAS will be considered in the CAC loading and will be specified in a future QAPP for the injection phase. DEC: Noted.
End of comments				

From:	Gleason, Erin
To:	BOESE, MICHAEL L CIV USAF AFMC PACAF/AFCEC CZOP; SMITH, KRISTINA A CIV USAF PACAF 354 CES/CZOP
Cc:	Matthew Fleetwood (matthew.fleetwood@alaska.gov); Sarah Bernhardt (sarah.bernhardt@alaska.gov); TEGETHOFF, AMY L CIV USAF AFMC PACAF/AFCEC CZOP; DRENNING, NICOLE K CIV USAF PACAF 354 CES/CZOP; PRICE, JOSEPH E CIV USAF AFCEC 354 CES/CZOP
Subject:	[Non-DoD Source] Eielson CAC PRB Data Gap Report-EPA Comments Resolved
Date:	Monday, August 18, 2025 1:22:52 PM
Attachments:	2025.8.18 CAC Report_EPA Comments_RTC.docx

Hello Mike,

EPA has reviewed the USAF response to EPA comments on the Eielson CAC PRB data gap report and all EPA comments have been resolved. Pending any concerns from ADEC, EPA concurs with this report being finalized. Please see attached comment table for details.

Thank you,

Erin Gleason
Remedial Project Manager
SEMD, U.S. EPA Region 10
Alaska Operations Office
Phone: 206-608-1674

Document: Draft Data Gap Investigation Report for PFAS Treatment Pilot Study at FT009P, dated March 2025
Date Received: March 6th, 2025
Reviewer(s): Erin Gleason, Don Clabaugh, Chunming Su

Comment #	Page	Section	EPA Comment (April 11th, 2025)	USAF Response (June 20, 2025)
1	19	4.1.1	In the last paragraph on page 19, the statement that "..soil does not appear to be an ongoing source of PFAS or to be storing significant PFAS mass given the limited detection of PFAS in soil during this investigation and limited distributions of finer, higher organic content soils where the highest soil detections were encountered" needs to be backed up by data to show the amount of PFAS sorbed onto soil and the amount of PFAS in the groundwater and their relative contribution towards the total PFAS mass in the aquifer system.	The text in Section 4.1.1 has been revised to add an evaluation of soil and groundwater PFAS concentrations to determine if they are in equilibrium. Observed PFOS soil concentrations are significantly less than the predicted equilibrium concentrations based on groundwater data, suggesting that soil concentrations have not yet equilibrated with groundwater and that soil is not an ongoing source of PFAS in the DGI study area. The text has also been updated to specify that: "PFAS concentrations in soil and the potential for PFAS to desorb from soil and partition back into the dissolved phase will be accounted for during injection design." **EPA Response (August 18, 2025): Accept**
2	76	Table 10	Total and dissolved metals of sodium and	Total and dissolved sodium and potassium were not included in the analyte list for groundwater samples in the Final QAPP. As such, analysis of these

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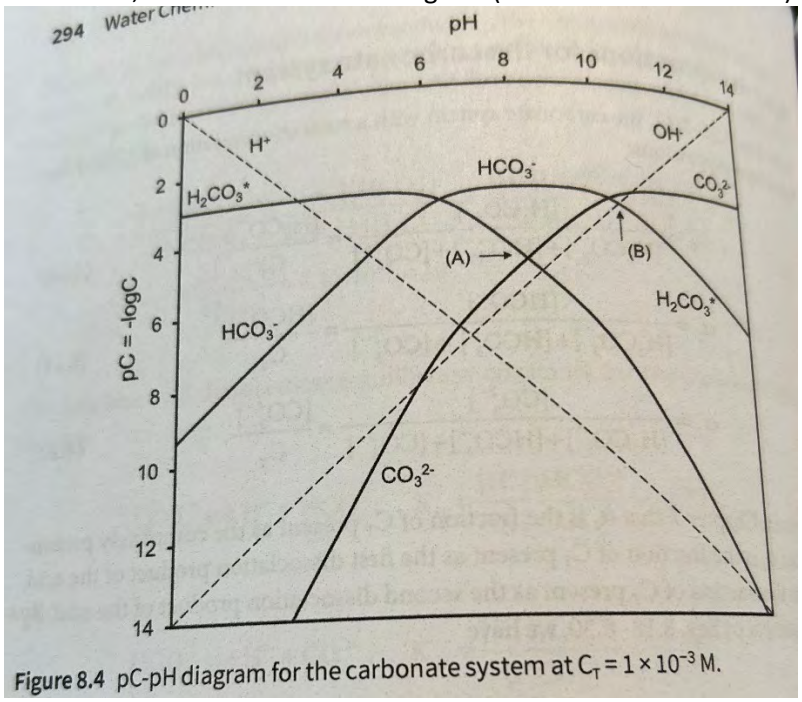
			potassium should be included in the analyte list, and dissolved bicarbonate concentrations should be calculated using measured values of groundwater pH and alkalinity, and charge balance of cations and anions in groundwater samples should be evaluated.	metals was not requested for the samples collected during the implementation of the DGI. In the absence of analytical results for dissolved sodium and potassium, the charge balance of cations and anions will not be evaluated. The alkalinity results presented in Table 10 are reported on a mass per volume basis (µg/L), which includes the mass of all carbonate species in the sample. Carbonate speciation by pH at the circumneutral pH of the groundwater at the site (7.24 to 8.44, Appendix A5) suggest that the dominant species within the sample is generally greater than 90% bicarbonate, based on the below diagram (Brezonik & Arnold 2022).  Figure 8.4 pC-pH diagram for the carbonate system at $C_T = 1 \times 10^{-3}$ M. Bicarbonate concentrations were not added to Table 10, as they are very similar to total alkalinity concentrations and don't provide significant

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				additional information. This keeps Table 10 consistent in presenting laboratory-provided analytical data. **EPA Response (August 18, 2025): Accept**
3	9	Section 1	"PFAS could have a potential impact on human health and the environment"- PFAS has known human health and environmental impacts. Please revise sentence to clarify the intent here.	The sentence has been revised to state: "Because of their persistence, bioaccumulation potential, mobility, and toxicity, PFAS can negatively impact human health and the environment." **EPA Response (August 18, 2025): Accept**
4	11	Section 1.3	What are the OSD risk screening levels? Are those the same as EPA RSLs?	The Department of Defense (Office of the Undersecretary of Defense, OUSD) has reviewed EPA's RSLs and MCLs and has identified the screening levels to be used in DoD cleanup projects over several iterations, with the version cited in the Draft document dating to 2024. There is now a more recent OUSD PFAS screening level memo dating from January 2025, so Section 1.3 of the text has been revised to reflect this update. This has added a screening level for perfluorodecanoic acid (PFDA), so that has been added to Exhibit 1 and the Table 11 PFAS results have been re-screened against the new screening level for PFDA. The 2025 update also included screening levels for TFSI and PFPrA, but these compounds were not included in the Draft Method 1633 analysis used for the Data Gap Investigation and so they have been added to Exhibit 1 for reference but are not otherwise discussed in this report. The project analytical laboratory is now running final Method 1633 and reporting these two additional compounds as of 2025. **EPA Response (August 18, 2025): Thank you for the explanation. Accept**

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5	16	Section 2.5	Why did the PFMs get stuck? Do you have any suggestions on how to prevent this from happening in the future?	It is not entirely evident how the third PFM in a string of five PFMs became stuck in CACMW-001-060 upon retrieval. Presumably the wire rope/ferrule connection between the second and third PFMs in the string caught on an imperfection in the wire-wrapped stainless-steel well screen where it joined the PVC riser. This occurred with the first string of PFMs retrieved, in the first well of the PFM deployment/retrieval task. This was the only PFM to become stuck out of 216 (1/216 = 0.46%) PFMs retrieved during this task. Since 215 out of 216 PFMs were retrieved seamlessly, we consider the single stuck PFM an anomaly and attribute it to bad luck. The field team followed the manufacturers' recommendation and SOP for installing and retrieving PFMs, which was generally quite successful, and had no suggestions on how to improve the procedure. **EPA Response (August 18, 2025): Thanks for sharing some more details about the stuck PFM. Glad that it was only 1/216! Comment resolved.**
6	16	Section 2.5	Why Kevlar rope?	Kevlar rope was used upon recommendation from the manufacturer, EnviroFlux. It is favorable for this application because it is lightweight, flexible, strong, sinks in water, and has very low stretch. **EPA Response (August 18, 2025): Interesting. Thanks for sharing. Comment resolved.**

References:

Brezonik, P. L., & Arnold, W. A. 2022. *Water Chemistry: The Chemical Processes and Composition of Natural and Engineered Aquatic Systems* (2nd ed.). Oxford University Press.

United States Environmental Protection Agency (EPA). 1994. Soil Screening Guidance: Technical Background Document. Second Edition. Office of Emergency and Remedial Response. May 1994.

EPA. 2024. Chemical Specific Parameters Table. Accessed 16 June 2025. https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables.

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